

THE GENERALIZED EFFECTS OF UPGRADE YOUR PERFORMANCE ON
EMPLOYMENT SOFT SKILLS OF STUDENTS WITH INTELLECTUAL AND
DEVELOPMENTAL DISABILITIES: A STUDY OF GENERALIZATION

By

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ABSTRACT

KELLY ALLEN CLARK. The generalized effects of *UPGRADE your performance* instruction on employment soft skills of students with intellectual and developmental disabilities: A study of generalization. (Under the direction of DR. DAVID W. TEST)

This was the third study investigating the effects of *UPGRADE Your Performance* on soft skills (e.g., attitude, cooperation, reliability, productivity, on-task behavior, quality of work, and teamwork) of students with disabilities. *UPGRADE Your Performance* instruction is a multicomponent intervention that includes self-monitoring, goal setting, self-graphing, and technology-aided instruction. Previous studies (Clark, Konrad, & Test, in press; Clark, Test, & Konrad, in press) found students were able to improve their performance on self-selected soft skills while participating in work based learning opportunities (e.g., school job sites, community job sites) and generalized their soft skills from a self-selected soft skill area to other non-targeted soft skill areas measured by the job performance rubric (JPR). However, despite this generalization, students did not always meet the mastery criteria in all of the non-targeted soft skill areas. Therefore, this study focused on generalized effects of *UPGRADE Your Performance* on the acquisition of soft skills of young adults with intellectual and developmental disabilities (IDD) working at community job sites located on a university campus. Participants included two young adults with IDD (i.e., autism spectrum disorder, mild/moderate intellectual disability) participating in an age 18-21 transition program. Students were evaluated on their performance while working to determine if they were able to increase their skills in two self-selected soft skill area; as well as, the effect on non-targeted soft skills measured by the JPR. Results indicated participants mastered the two self-selected soft skill areas, as well as each of the non-targeted (generalization)

skills. Additionally, students were able to generalize their skills to the Vocational Rehabilitation Work Adjustment Rubric used by Vocational Rehabilitation counselors. Findings from this study provide strategies for practitioners to use when providing soft skill instruction to students with IDD.

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“Let us not grow weary in doing good, for at the proper time we will reap a harvest if we do not give up.”
Galatians 6:9

“Speak up for those who cannot speak for themselves, for the rights of all who are destitute. Speak up and judge fairly; defend the rights of the poor and needy.”
Proverbs 31:8-9

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CHAPTER 1: INTRODUCTION

Employment status has been identified as a factor strongly predicting the quality of life of individuals with intellectual and other developmental disabilities (IDD; Simões & Santos, 2016). The term IDD includes individuals diagnosed with intellectual disabilities and/or other developmental disabilities such as autism spectrum disorders (ASD), multiple disabilities, and other disorders diagnosed during the developmental period (i.e., birth to age 18). For individuals with IDD, post-school employment outcomes are lower than their same age peers without disabilities (Newman et al., 2011). Anderson, Larson, and Wuorio (2011) found only 15% of adults with IDD reported being employed. Newman et al. (2011) found young adults with IDD were less likely to obtain employment compared to young adults with other disabilities (39 % vs. 67%). The National Longitudinal Transition Study (2012) found students with IDD were less likely to have paid employment during high school compared to their peers in other disability categories (25% vs. 40%; Libscomb et al., 2017). Unfortunately, the gap in employment outcomes can grow wider as individuals with IDD age, only 32% of adults between the ages of 20 and 30 were employed compared to 74% of people without disabilities (Sulewski, Zalewska, Butterworth, & Migliore, 2013).

Barriers to Employment

Researchers have made efforts to determine what barriers to employment youth and young adults with IDD experience. Luecking and Luecking (2015) identified a lack of support during career preparatory and work experiences as one explanation for poorer outcomes for students with intellectual, emotional, and multiple disabilities. Additionally, Riesen, Schultz, Morgan, and Kupferman, (2014) found a lack of employment skills (e.g.,

work completion, task accuracy, punctuality, social skills, self-regulation) could be a major factor impeding employment for individuals with disabilities. Elksnin and Elksnin (2001) estimated that a lack of occupational social skills has been responsible for almost 90% of job loss; while, Chadsey (2007) and Storey and Miner (2001) found employees did not lose their jobs because they could not perform job tasks, but because they struggled to interact appropriately with their co-workers, supervisors, and others in the workplace. Lastly, Fornes, Rocco, and Rosenberg (2008) suggested the attainment of job performance skills for individuals with IDD could affect job retention. Together these barriers indicate that individuals with disabilities have a clear need for instruction on job performance skills such as soft skills in order to assist them in gaining and maintaining employment.

Job Performance and Soft Skills

Job performance includes both job responsibility and task production. Job responsibility involves work endurance, work motivation, work initiative, and work attitude. Task production is the ability to perform specific work tasks that require a certain quality of work and productivity. Quality of work refers to an employee's ability to work at the accepted standard for accuracy; productivity includes an employee's ability to work at an accepted rate and pace (Roessler, 2002; Rosenberg & Brady, 2000). For adult workers with IDD, soft skills or work-related social behaviors can also contribute to their job performance, including: (a) appropriate interactions with supervisors and coworkers, offering assistance to others, and understanding the work environment; (b) ability to deal with the pressures and stress of the job; (c) self-control; and (d) personal appearance and hygiene (Brady & Rosenberg, 2002). In addition, Rosenberg and Brady

(2000) described additional soft skills including the ability to (a) cooperate, (b) accept constructive criticism, (c) manage their time, (d) express appreciation and gratitude, and (e) show honesty and integrity. In this study, soft skills will be defined as: (a) having a good attitude and being cooperative by showing initiative, accepting feedback, and interacting respectfully with people in the workplace; b) demonstrating reliability by being on time, having good attendance, in the appropriate attire, and prepared for work; (c) being productive and on task by staying focused, working independently, and at a consistent pace comparable to other employees; (d) showing quality of work by completing their job task, identifying their own mistakes and correcting them, and checking over their work before they finish; and (e) communicating and working with a team by interacting and communicating with others appropriately, asking for help, offering to help others, being polite, and conforming to the rules and regulations of the job (Clark, Konrad, & Test, in press).

Employers view soft skills as highly important. For example, a survey of 461 business leaders found employers viewed soft skills as more important for employability than reading, writing, and mathematics even though those skills were still considered fundamental for employees (Casner-Lotto & Barrington, 2006). The report also indicated younger workers frequently lacked soft skills particularly in the areas of communication, teamwork, cooperation, problem solving, and work ethic. Additionally, Ju, Zhang, and Pacha (2012) found employers valued soft skills including integrity, honesty, following instructions, showing respect for others, cooperation, and being on time over technical skills. Also, the Employment and Training Administration (ETA) identified skills required for workers across different occupations including (a) interpersonal skills, (b)

integrity, (c) professionalism, (d) initiative, (e) dependability and reliability, and (f) willingness to learn (Ennis, 2008).

Finally, Agran, Hughes, Thoma, and Scott (2016) conducted a survey of secondary special educators, transition coordinators, vocational rehabilitation counselors, and job coaches to determine which employment social skills they felt were most important for students with disabilities and to what extent was instruction provided to teach these skills. Findings revealed they perceived the most important skills for employment to include the following: (a) asking for clarification when they did not understand directions or instructions, (b) being reliable, (c) avoiding inappropriately touching others, (d) immediately following instructions, (e) asking for help when needed, (f) accepting feedback and responding appropriately to constructive criticism, and (g) communicating and interacting easily with customers. However, skills they identified as most important were not the skills they reported teaching most often. Based on the findings from these studies, soft skill instruction should be taught to students with disabilities in school.

Employment Interventions

In an effort to address the gaps in employment outcomes between students with disabilities and students without disabilities, researchers have conducted studies to determine what practices will assist students with disabilities in developing skills needed for employment. Test, Fowler, et al. (2009) conducted a literature review to identify evidence-based instructional practices in secondary transition. Results included 32 practices for secondary transition that were classified as either having a strong level of evidence ($n = 2$), a moderate level of evidence ($n = 28$), or a potential level of evidence (n

= 2) in the post-school outcome areas of education, employment and independent living. Practices focused on specific employment skills included five with a moderate level of evidence and one with a potential level of evidence. More recently the National Technical Assistance Center on Transition (NTACT, 2016) has updated their list of practices to include four research-based practices, and seven promising practices focused on teaching employment skills to secondary students with disabilities. While this large number of practices provides educators with research-based instructional practices to assist students in gaining employment skills, the majority of the practices identified were focused on teaching students to complete specific tasks or gain technical skills for specific jobs (e.g., cleaning, mailing letters, watering plants) and only one focused on communication skills, but did not specifically address soft skills identified as needed for employment.

Self-determination interventions. In addition to the need for acquiring soft skills, previous research suggests students with disabilities with higher levels of self-determination when they leave high school may be more likely to attain positive post-school outcomes (Wehmeyer & Palmer, 2003; Wehmeyer & Schwartz, 1997); such as, employment after high school (Martorell, Gutierrez-Recacha, Pereda, & Ayuso-Mateos, 2008; Wehmeyer & Palmer, 2003). In addition, Test, Mazzotti et al. (2009) and Mazzotti et al. (2016) together identified 20 in-school predictors of post-school success for students with disabilities and one identified predictor for postsecondary education, employment, and independent living was self-determination. Self-determination has been defined as a

“dispositional characteristic manifested as acting as the causal agent in one’s life. Self-determined *people* (i.e., causal agents) act in service to freely chosen goals. Self-determined *actions* function to enable a person to be the causal agent in his or her life.” (Shogren et al., 2015, p. 258)

Shogren et al. (2015) suggested components of self-determination included (a) choice-making, (b) expressing preferences, (c) goal-setting and attainment, (d) problem-solving, (e) decision-making, (f) self-awareness, (g) self-knowledge, (h) self-advocacy, (i) locus of control, and (j) self-regulation and self-management. Due to the correlation between a student's level of self-determination and positive post-school outcomes, interventions including multiple components of self-determination have been developed to teach academic and employment skills to students with disabilities.

Multi-component interventions. Izzo and Lamb (2002) conducted a review of self-determination interventions and identified two intervention packages, the Self-Determined Learning Model of Instruction (SDLMI) and the Self-Determined Career Development Model (SDCDM), designed to teach students with disabilities how to set goals, improve their problem-solving skills, and increase their level of self-determination. SDLMI is an instructional model educators can use to instruct students to set their own goals, become self-regulated problem solvers, and improve their self-determination (Agran, Blanchard, & Wehmeyer, 2000). SDLMI includes three phases (a) set a goal, (b) take action, and (c) develop a plan or adjust the goal. SDLMI has been used to teach a variety of skills including: (a) problem solving on the job (McGlashing-Johnson, Agran, Sitlington, Cavin, & Wehmeyer, 2003); (b) goal attainment (Agran, Cavin, Whemeyer, & Palmer, 2006; Shogren, Palmer, Wehmeyer, Williams-Diehm, & Little, 2012); (c) reducing problem behaviors (Mazzotti, Wood, Test, & Fowler, 2012; Mazzotti, Test, & Wood, 2012); and (e) increasing on-task and a decrease in off-task behavior (Kelly & Shogren, 2016).

SDCDM is a version a SDLMI that was modified for Vocational Rehabilitation (VR) personnel to use when providing support to youth and adults with disabilities accessing VR services. SDCDM includes the same three phases of SDLMI, however, the problem identified relates to some aspect of career development. SDCDM has been used to assist students and adults with disabilities in: (a) setting employment related goals (Benetiz, Lattimore, & Whemeyer, 2005; Wehmeyer et al., 2003); (b) improving their job performance on the job (Devlin, 2008); and (c) improving their level of self-determination (Shogren et al., 2016). Both SDLMI and SDCDM has been able to assist students in gaining skills, achieving their goals, and improving their performance either in the classroom or on the job.

In addition to SDLMI and SDCDM, previous research to teach other employment skills (e.g., technical skills, on-task behavior) has also included components of self-determination such as (a) self-management and self-monitoring (Lagomarcino & Rusch, 1989); (b) self-graphing and self-regulation (DiGangi, Maag, & Rutherford, 1991); and (c) goal setting and attainment (German, Martin, Marshall, & Sale, 2000). Several studies also combined these components to create multi-component interventions to teach employment skills. First, Rogers, Brethower, Dillon, Malott, and Sallwey (1983) found individuals with disabilities were able to improve their work behaviors when they were given frequent specific feedback on their evaluations and self-graphed their performance. Next, Grossi and Heward (1998) investigated the effects of a self-evaluation intervention on the work productivity, quality, and accuracy of individuals with disabilities working in a community work setting. Results demonstrated increased work productivity and quality of work when students self-evaluated their performance demonstrating self-evaluation

training could improve the work performance of employees with developmental disabilities. Finally, Nitttrouer, Shogren, and Pickens (2016) investigated the effects of combining goal setting and attainment instruction with self-management on the job performance of individuals with disabilities. Results suggested goal setting and self-management could lead to important changes in on-task performance and job completion of individual with disabilities in inclusive employment settings.

Technology-aided instruction. Next, technology-aided instruction (TAI), including mobile technology (Mechling, 2011), has been used to support individuals with disabilities in developing academic and employment related skills (Goldsmith & LeBlanc, 2004). For example, Kagohara et al. (2013) conducted a systematic review of the use of iPods, iPads, and related devices in education programs for individuals with developmental disabilities. Results identified 15 studies suggesting individuals with developmental disabilities can be taught to use devices to improve their academic, communication, leisure, employment, and transition skills. In addition, Gentry, Kriner, Sima, McDonough, and Wehman (2015) found when individuals with autism were taught to use an iPod Touch while working, they increased their independence and reduced their need for job support from a job coach. Finally, TAI has also been used to teach students to (a) follow a task list or sequence (Cihak, Kessler, & Alberto, 2008), (b) self-manage their own behaviors (Cihak, Fahrenkrog, Ayres, & Smith, 2010), and self-manage the transition between tasks during independent work sessions (Mechling & Savidge, 2011).

Mnemonic instruction. In addition, mnemonic strategies have been described as a systematic way to increase memorization (Mastropieri & Scruggs, 1998). Specific mnemonic strategies have been correlated with increased memorization and student

performance including letter strategies, keyword method, and pegword method (Scruggs, Mastropieri, Berkeley, & Marshak, 2010). Also, Lee et al. (2006) suggested mnemonic strategies have the potential to increase memorization for students with IDD. Mnemonic strategy instruction has been used to teach academic (Zisimopoulos, 2010), functional (e.g., employment-related; Nelson, Smith, & Dodd, 1994), and problem solving skills (Smith, Siegel, O'Connor, & Thomas, 1994) to students with disabilities. Finally, research indicates students with disabilities could learn to use mnemonic strategies independently and generalize the steps of the mnemonic to other areas (Mastropieri, Scruggs, Levin, Gaffney, & McLoone, 1985; Scruggs & Mastropieri, 1992).

UPGRADE Your Performance

Despite numerous interventions to teach students with disabilities job skills and research suggesting the need to teach students soft skills for employment, there are still few interventions designed to teach soft skills to students with disabilities. In order to address this need, *UPGRADE Your Performance*, a multi-component intervention based on researcher suggestions for teaching soft skills, as well as, research-based instructional practices for teaching employment skills to individuals with disabilities, was developed.

UPGRADE Your Performance includes a job performance rubric (JPR) used to measure students' soft skills in the areas of attitude and cooperation, reliability, productivity and on-task, quality of work, and teamwork and communication. Students are introduced and scored on the JPR while working on an in-school or community job site and then provided with feedback on their performance. Then, students participate in two sessions of goal setting instruction (GSI). The first session of instruction includes (a) information about the soft skills measured by the JPR, (b) why those skills are important,

and (c) an opportunity for students to view their current scores on the rubric and choose one component area of the JPR they want to improve on. The second session of instruction includes specific instruction on the component area of the JPR they have chosen. The lesson includes (a) vocabulary instruction, (b) explicit instruction including examples and non-example, (c) role-play, (d) an opportunity to view a video of someone working and grade them on the chosen component area, and (e) at the conclusion of the lesson students set a goal for themselves on the area of the JPR they have chosen. After GSI is complete students are introduced to *UPGRADE Your Performance* and a mnemonic to help them remember the steps of the intervention (i.e., U=You evaluate yourself, P=Professional evaluates you, G=Graph your scores, R=Restate your goal and determine if you met it, A=Acknowledge what you did well, D=Decide what you need to improve on, and E=Execute improvements tomorrow to meet your goal). Each day after working on an in-school or community job site (a) students evaluate themselves on the JPR for the soft skill area they have chosen, (b) are provided with the interventionist's scores, (c) graph both scores on a graphing worksheet to compare the scores, (c) review their goal to determine if they met it, (d) state what they did well and what they need to work on, and (e) develop a plan to get closer to meeting their goal the next day. Students continue to follow these steps everyday until they reach mastery criteria (i.e., 3 or 4 in each subcomponent area of the soft skill area they selected on the JPR for 4 consecutive days). On the final session of *UPGRADE Your Performance*, students are introduced to a maintenance period where the teacher or job coach's (i.e., P-Professional) presence is faded called *U-GRADE* (i.e., U-You evaluate yourself, G-Graph your scores, R-Restate your goal and determine if you met it, A-Acknowledge what you did well, D-Decided

what you need to do better, E-Execute improvements tomorrow to meet your goal) and are taught how to download the Google drive and Google sheets app on their device (e.g., smart phone, iPod, iPad, computer). The professional (e.g., teacher, job coach) shares a Google spreadsheet with them that includes the steps of *U-GRADE* and a graph tied to the cells that will graph their scores as they enter them. Then, students are given a chance to practice using the digital spreadsheet on their smart phone, iPad, iPod, or computer before starting *U-GRADE* on their own. Then, During *U-GRADE* they will go work on a job and continue to follow the steps of the intervention independently after they finish working. The professional (e.g., teacher, job coach) evaluates them every three days using the JPR to see if they can maintain their skills over time. If the student begins to drop in their performance, the professional (e.g., teacher, job coach) intervenes and restarts *UPGRADE* instruction until the student's performance reaches mastery again.

Research based instructional practices included goal setting and attainment, self-monitoring, self-graphing and self-evaluation. Goal setting and attainment were taught by instructing students to define and express a goal, identify where they are currently performing in relation to that goal, develop a plan of action, and evaluate their progress toward achieving that goal (Agran, King-Sears, Wehmeyer, & Copeland, 2003). Self-Monitoring included the simultaneous use of two strategies: self-evaluation and self-recording (Cooper et al., 2007). This involved an individual making note of his or her behavior and then recording whether or not he or she was engaged in that behavior. Additionally, based on recommendations for assessing soft skills using rubrics (Williams, Wattam, & Evans, 2007) a job performance rubric of the targeted soft skills was used to evaluate students' job performance.

To date two studies have been conducted investigating the effectiveness of *UPGRADE Your Performance* (Clark, Konrad, & Test, in press; Clark, Test, & Konrad, in press). Clark, Konrad, et al. (in press) conducted a study investigating the effects of *UPGRADE Your Performance* on the acquisition of soft-skills of students with disabilities. Using a multiple probe across participants design, researchers measured students' performance on a student-selected soft skill area and their ability to generalize those skills across two in-school job sites and non-targeted soft-skill areas. Results indicated all students increased their performance in a chosen soft-skill area, were able to generalize those skills across soft-skill areas and job sites, and maintain skills over time. Findings from this preliminary study demonstrated the potential for *UPGRADE Your Performance* as a way to teach students with disabilities soft-skills for employment. However, despite positive results from this study, students were unable to maintain their skills at their highest performance level over time and immediately generalize their skills to a second in-school job site.

To address these limitations, a second study was conducted by Clark, Test, et al. (in press). In this study, the length of mastery criteria was changed from two consecutive days to four consecutive days in an attempt to improve maintenance and a fading procedure within two maintenance periods where students continued to self-evaluate and self-monitor themselves, called *U-GRADE* was used in an attempt to increase generalization. Also, technology was introduced by having students self-monitor and self-graph their own data using a shared Google spreadsheet accessed through the Google drive and Google sheets app located on either a personal smartphone or an iPad. Results from this study indicated all students met mastery, were able to maintain their skills over

time, and generalize to community job sites and non-targeted soft skill areas on the JPR.

In summary, students in both studies conducted on *UPGRADE Your Performance* were able to improve their performance on self-selected soft skills while participating in work based learning opportunities (e.g., school job sites, community job sites). During the second study Clark, Test, et al. (in press) incorporated technology during maintenance phases (i.e., *U-GRADE*) and the second *UPGRADE* phase located in the community during community based job sites. Students in both studies also generalized their soft skills from one soft skill area they chose to the other non-targeted soft skill areas measured by the JPR. However, despite this generalization, students did not always meet the mastery criteria in all of the non-targeted soft skill areas. Additionally, during *UPGRADE Your Performance* students learned to graph their own data set including the instructor's scores and their scores on a graph to track to their progress; however, neither study measured if students were able to generalize their graphing skills to a different data set after participating in instruction. Lastly, neither study measured if students were able to generalize soft skills learned during *UPGRADE Your Performance* to skills measured by a Vocational Rehabilitation Work Adjustment (VRWA) rubric.

Purpose of the Study and Research Questions

This study sought to investigate students' ability to generalize across soft skills, graphing skills, and skills measured by a VRWA. The purpose of this study was to investigate the generalized effects of *UPGRADE Your Performance* on the acquisition of soft skills (e.g., attitude, cooperation, reliability, productivity, on-task behavior, quality of work, and teamwork) of secondary students with IDD.

This study sought to answer the following research questions:

1. What is the effect of *UPGRADE Your Performance* on two student-selected soft skill areas of students with IDD? (Primary research question)
2. Are students with IDD able to maintain their performance in the targeted soft skills areas during *U-GRADE*?
3. What is the generalized effect of *UPGRADE Your Performance* on the overall performance on the JPR of students with IDD?
4. Are students with IDD able to acquire skills to graph a novel data set as a result of the intervention as measured by a pre-test, midpoint assessment, and posttest of graphing skills?
5. To what extent do soft skills acquired by students with IDD generalize to skills measured by Vocational Rehabilitation Work Adjustment rubric?
6. What are the teachers' and job coach's perceptions of the impact of *UPGRADE Your Performance* on the soft skills of their students with IDD?
7. What are students' perceptions of *UPGRADE Your Performance* and *U-GRADE* on its ability to help them (a) reach their goals, (b) gain soft skills, and (c) increase their employability?
8. What are employers' perceptions of the (a) JPR and (b) employability of students' based on their scores before and after participating in *UPGRADE Your Performance*?

Significance of the Study

This study contributed to the limited research on teaching soft skills to students with disabilities in several ways. First, this investigation extended previous studies by determining if student acquisition of soft skills, as measured by the JPR, generalized

across non-targeted soft skill areas. Second, this study was the first to measure if students can generalize graphing skills to a different data set as a result of *UPGRADE Your Performance* instruction; therefore, providing a way to tie instruction to Common Core Standards (National Governors Association Center for Best Practices & Council of Chief State School Officers, 2010). Third, also investigated if the skills learned generalized to skills measured by the state VRWA rubric in order to determine if skills taught align with those measured by vocational rehabilitation for employability. Fourth, a digital format using handheld technology (e.g., iPad, iPhone) was used within this study as a way for students to self-monitor and self-graph their performance independently and allow for the presence of the interventionist to be faded. By including TAI, this study assisted in addressing the gap in research on using technology as a way to self-monitor and self-graph data (Bruhn et al., 2015) and could provide practitioners with a manageable way to collect, monitor, and share data. Finally, this study contributed to the evidence base of one of the only identified interventions to teach soft skills, *UPGRADE Your Performance*, and extended the literature by specifically measuring generalization across soft skill areas.

Delimitations

This study has two delimitations. First, participants included in this study were selected from a small group of students selected to participate in community based training on a university campus. In order to participate in community based training students cannot exhibit aggressive or violent behaviors; therefore, this may limit generalization to other groups of students with disabilities who do exhibit those behaviors. The second delimitation was the generalizability of results to students beyond

those included in the study. Since the study utilized a single-subject design, which sought to establish social significance rather than statistical significance (Baer, Wolf, & Risley, 1968), results will not be able to be interpreted for a larger population.

Definitions of Terms

Common Core State Standards: A set of high-quality academic standards in mathematics and English language arts/literacy (ELA) that outline what students should know and be able to do by the end of each grade. State-level education leaders and governors created the standards through a state-led effort with the assistance of teachers, school chiefs, administrators, and content area experts (National Governors Association Center for Best Practices & Council of Chief State School Officers, 2010) retrieved from: <http://www.corestandards.org/Math/Content/HSA>

Community Based Instruction: Community based instruction is teaching functional skills that take place in the community where target skills would naturally occur (Brown et al., 1983).

Generalization: Described one of the seven defining characteristics of applied behavior analysis and defined as a change in behavior can be generalized across environments, behaviors, and time (Baer, Stokes, & Risley, 1978). Stokes and Baer (1977) described that generalization occurs in several ways (a) if a trained behavior occurs at other times outside of the training times, (b) in other places without the requirement of training, or (c) if a related behavior develops that was not directly taught (Cooper et al., 2007)

Goal Setting and Attainment: Goal setting and attainment are taught by instructing students to define and express a goal, identify where they are currently performing in

relation to that goal, develop a plan of action, and evaluate their progress toward achieving that goal (Agran et al., 2003; Wehmeyer & Schwartz, 1998).

Intellectual and other Developmental Disabilities (IDD): This is an umbrella term that includes intellectual disabilities and other developmental disabilities such as autism spectrum disorders (ASD), epilepsy, cerebral palsy, developmental delay, fetal alcohol syndrome and other disorders that occur during the developmental period (i.e., birth to age 18).

Intellectual Disability: Based on the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-V; 2013), an intellectual disability (intellectual developmental disorder) is a disorder with onset during the developmental period that includes both intellectual and adaptive functioning deficits in conceptual, social, and practical domains. The following three criteria must be met:

A. Deficits in intellectual functions, such as reasoning, problem-solving, planning, abstract thinking, judgment, academic learning, and learning from experience, and practical understanding confirmed by both clinical assessment and individualized, standardized intelligence testing.

B. Deficits in adaptive functioning that result in failure to meet developmental and sociocultural standards for personal independence and social responsibility.

Without ongoing support, the adaptive deficits limit functioning in one or more activities of daily life, such as communication, social participation, and independent living, and across multiple environments, such as home, school, work, and recreation. Adaptive functioning should be addressed using both

clinical evaluation and individualized, culturally appropriate, psychometrically sound measures.

C. Onset of intellectual and adaptive deficits during the developmental period.

The severity levels for intellectual disability are based on intelligence quotients (IQ): mild (IQ 70-55), moderate (IQ 55-40), severe (IQ 25-40) and profound (<25). IQ measures are less valid in the lower end of the IQ range.

Rubric: A document that articulates the expectations for an assignment by listing the criteria and describing levels of quality from excellent to poor (Andrade, 2000)

Self-Determination: a “dispositional characteristic manifested as acting as the causal agent in one’s life” (Shogren et al., 2015, p. 2); as well as, the ability to make choices, solve problems, set goals, evaluate options, take initiative to reach one’s goals, and accept the consequences of one’s actions (Rowe et al., 2015).

Self-Evaluation: A procedure where a person compares his or her performance of a specific or target behavior with a predetermined goal or standard; this is often a component of self-management and can also be called self-assessment (Cooper et al., 2007).

Self-Graphing: a form of self-observation, evaluation, and self-knowledge with an added graphing component (i.e., observing and recording one’s behavior on a graph; Cooper et al., 2007).

Self-Management: personal application of tactics to change a behavior that produces a desired behavior change (Cooper et al., 2007). Specific strategies included within self-management include self-monitoring, self-evaluation, self-regulated strategy development, self-instruction, and goal setting (Niesyn, 2009).

Self-Monitoring: A procedure whereby a person observes his behavior automatically and records the occurrence and nonoccurrence of a target behavior (Cooper et al., 2007). A strategy for managing or regulating one's own behavior, in

Self-Regulation: Can be defined as “self- generated thoughts, feelings and actions that are planned and cyclically adapted to the attainment of personal goals” (Zimmerman, 2005).

Soft Skills: For this study soft skills will be defined as: (a) having a good attitude and being cooperative by showing initiative, accepting feedback, and interacting respectfully with people in the workplace; b) demonstrating reliability by being on time, having good attendance, in the appropriate attire, and prepared for work; (c) being productive and on task by staying focused, working independently, and at a consistent pace comparable to other employees; (d) showing quality of work by completing their job task, identifying their own mistakes and correcting them, and checking over their work before they finish; and (e) communicating and working with a team by interacting and communicating with others appropriately, asking for help, offering to help others, being polite, and conforming to the rules and regulations of the job (Clark, Konrad, & Test, 2017).

Technology-Aided Instruction (TAI) : Technology is a central feature of an intervention that supports the goal or outcome for the student (Odom, Thompson, et al., 2014). Technology is defined as any electronic item/equipment/application or virtual network that is used intentionally to increase/maintain, and/or improve daily living, word/productivity, and recreation/leisure capabilities (Odom, Thompson, et al., 2014).

Vocational Rehabilitation Work Adjustment (VRWA): Work adjustment training is a vocational rehabilitation service that can be provided during an eligible individual's

rehabilitation program to assist the individual in developing work skills, work habits, and job retention skills required to obtain and maintain employment. Work adjustment training includes activities to improve and increase productivity, attendance, punctuality, ability to work with others, ability to work under supervision, and work tolerance.

Work Based Learning: Examples of work-based learning include a planned program of job training and work experiences such as job shadowing, informational interviews, and workplace tours; workplace mentoring; and work experience including apprenticeships, volunteer work, service learning, school-based enterprises, on-the-job training, and paid employment. Each of those could contribute to career development, career choice, and career success of individuals with disabilities (Benz & Lindstrom, 1997).

CHAPTER 2: REVIEW OF THE LITERATURE

Individuals with disabilities continue to achieve lower post-school outcomes in the areas of education, employment, and independent living compared to their peers without disabilities (Newman et al., 2011). For example, the U.S. Bureau of Labor Statistics (2017) reported employment rates for individuals with disabilities were 18% compared to 66% for those without a disability. Additionally, youth with disabilities have reported they worked fewer hours and received lower earnings compared with their peers without disabilities (Newman et al., 2011) and 32% of workers with a disability were employed only part-time, compared to 18 % of those without a disability (U.S. Bureau of Labor Statistics, 2017). For individuals with IDD, the outcomes are even lower compared to both their peers with and without disabilities of (Newman et al., 2011).

Researchers have worked to identify barriers to employment for individuals with disabilities; as well as, predictors of post-school employment for individuals with IDD. One identified barrier includes job performance and soft skills for employment (Riesen et al., 2014), and it has been estimated that a lack of these skills could be responsible for 90% of job loss by individuals with disabilities (Elksnin & Elksnin, 2001). Additionally studies have indicated employees lost their jobs due to the inability to interact appropriately with their co-workers (Chadsey, 2007; Storey & Miner, 2001). Employers have also indicated that they value these skills over academic skills (Casner-Lotto & Barrington, 2006) and reported the need for these skills to be taught to students with disabilities (Ju et al., 2012). Despite the need for instruction in this area, the majority of interventions to teach employment skills have focused on technical skills (Agran et al., 2016).

Self-determination has been identified as a predictor of post-school success for individuals with disabilities (Mazzotti et al., 2016; Test et al., 2009). Self-determination includes multiple components (Shogren et al., 2015) and researchers have conducted studies utilizing components of self-determination including multi-component interventions to teach employment skills (Izzo & Lamb, 2002). Another research-based strategy includes technology-aided instruction (TAI). TAI has been used to teach students with IDD employment skills (Goldsmith & LeBlanc, 2004), and to increase their independence while working on the job (Gentry, Kriner, Sima, McDonough, & Wehman, 2015). Finally, two other research-based strategies including mnemonics (Scruggs, Mastropieri, Berkeley, & Marshak, 2010) and non-targeted information (Wolery, Holcombe, Werts, & Cipolloni, 1993) have been used to teach individuals with IDD functional and academic skills. Utilizing these research-based strategies, an intervention to teach soft skills was developed called *UPGRADE Your Performance* instruction (Clark, Konrad, et al., in press). This chapter will review eight themes that provide insight into *UPGRADE Your performance* instruction with a focus on generalization. The strands include (a) characteristics and post-school outcomes for individuals with IDD, (b) job performance and soft skills, (c) evidence-based practices and predictors of post-school employment, (d) self-determination, (e) technology-aided instruction (TAI), (f) mnemonics, (g) non-targeted information (NTI), and (h) *UPGRADE Your Performance* instruction focused on generalization.

Characteristics and Post-School Outcomes of Individuals with IDD

For individuals with IDD in school and post-school employment outcomes are even lower than that of other disability categories (Newman et al., 2011). The term IDD

includes individuals diagnosed with intellectual disabilities (ID) and/or other developmental disabilities such as autism spectrum disorders (ASD), multiple disabilities, and other disorders diagnosed during the developmental period (i.e., birth to age 18).

Intellectual disability

Intellectual disability (ID) is characterized by “significant limitations both in intellectual functioning and in adaptive behavior as expressed in conceptual, social, and practical adaptive skills. This disability originates before age 18.” (Luckasson et al., 2002, p. 1). Schalock et al. (2007) explains the following characteristics of individuals with ID: (a) limitations in present functioning must be considered within the context of community environments typical of the individual’s age peers and culture; (b) valid assessment considers cultural and linguistic diversity, as well as, differences in communication, sensory, motor, and behavioral factors; (c) within an individual, limitations often coexist with strengths; (d) an important purpose of describing limitations is to develop a profile of needed supports; and (e) with appropriate personalized supports over a sustained period, the life functioning of the person with intellectual disability generally will improve.

The Individuals With Disabilities Education Act (IDEA, 2004) defines intellectual disability as significantly below average in intellectual functioning, with existing concurrent deficits in adaptive behavior, and manifesting during the developmental period that adversely affects a child’s educational performance. Lastly, in the American Psychiatric Association’s *Diagnostic and Statistical Manual of Mental Disorders*, 5th Edition (DSM-5; American Psychiatric Association, 2013), expressed the importance of using both clinical and standardized intelligence testing (i.e., Intelligence quotient, IQ);

as well as, basing the severity of the disability on adaptive functioning rather than just IQ scores. Concerning IQ scores, the DSM-5 consider an ID to be approximately two standard deviations or more below the average IQ score (i.e., IQ score of 70 or below). Tasse et al. (2012) defined adaptive behavior as it relates to individuals with ID as including practical, daily living, conceptual (e.g., telling time), social, and interpersonal skills. Lastly, the category of ID includes a range of IQ scores: (a) individuals with mild ID (i.e., IQ between 55 and 70); (b) moderate ID (i.e., IQ between 40 and 55); and severe ID (i.e., IQ below 40; et al., 2010).

Moderate and Severe ID

Westling, Fox, and Carter (2015) defined characteristics of individuals with moderate and severe ID. Individuals with moderate and severe ID were described as capable of acquiring many basic communication, academic, functional, and vocational skills. Authors specify individuals with moderate ID may be able to (a) function in many community and vocational environments, (b) manage their own daily self-care needs, (c) prepare their own food, (d) control gross and fine motor skills, (e) interact with others appropriately, and (f) participate in basic conversations. In order to do these activities these individuals may need varying levels of support depending on the severity of their disability. In addition, Westling et al. (2015) expressed individuals considered to have a severe ID demonstrated much lower adapted functioning and IQ scores compared to individuals with moderate ID. Examples of skills individuals with severe ID may possess include being able to (a) eat with a fork or spoon, (b) dress and bathe with supervision, and (c) use the toilet independently and wash their hands (with a reminder). Both

individuals with moderate and severe ID may need varying levels of assistance to function independently.

Autism Spectrum Disorders

IDEA (2004) defined autism spectrum disorder (ASD) as a developmental disability significantly impacting social interaction; as well as, verbal and nonverbal communication. It is generally diagnosed by age three and has an adverse affect on an individual's educational performance. Additional characteristics include stereotyped movements and repetition of activities, abnormal sensory responses, and opposition to change in routines or their environment. In 1990 under P.L. 101-476, ASD was added as a separate disability category. Previously, the law covered students with ASD; but now the law identifies ASD as a separate category entitled to benefits under the law.

According to the *Diagnostic and Statistical Manual of Mental Disorders* (4th ed., text rev.; *DSM-IV-TR*; American Psychiatric Association, 2000) individuals could be diagnosed with a disability associated with autism in four different ways including (a) autistic disorder, (b) Asperger's disorder, (c) childhood disintegrative disorder, or (d) pervasive developmental disorder not otherwise specified. However, researchers found these diagnoses were being applied differently across clinics and treatment centers. As a result, the Neurodevelopmental Work Group of the National Institute of Mental Health, recommended the *DSM-5* criteria for ASD as a better way to reflect the current knowledge of autism and suggested a single diagnosis area such as ASD as a way to improve consistency of diagnoses without changing the sensitivity of the criteria or the number of children diagnosed. The *DSM-5* included the previous four diagnoses under one category, Autism Spectrum Disorders (ASD). Anyone diagnosed with one of the

previously four mentioned under *DSM-IV* should still meet the criteria for ASD under *DSM-5* (American Psychiatric Association, 2013).

According to the *DSM-5*, individuals with ASD exhibit: (a) deficits in communication (e.g., engaging in inappropriate conversation, misreading nonverbal cues, difficulty in social situations); (b) dependency on specific routines; (c) sensitivity to change; (d) hyper-focused attention on specific items; and (d) exhibit symptoms beginning in early childhood even though they are not recognized until the child is older. Symptoms of ASD occur along a continuum of mild to severe symptoms and affect each individual differently (American Psychiatric Association, 2013).

Multiple Disabilities

IDEA (2004) defines multiple disabilities as an individual who has more than one disability or impairment (e.g., ID and visual impairment) and the combination causes more significant education needs that can not be met by receiving educational services under just one disability category. The area of multiple disabilities does not include deaf-blindness and if a child has more than one disability and is not diagnosed as having deaf-blindness or a developmental delay, they must be reported under the disability category of having a multiple disability. In addition, students with multiple disabilities can have health problems such as heart disease, eating disorders, respiratory diseases, and growth impairments (Heller, 2004; Thuppall & Sobsey, 2004). Students with multiple disabilities can also display repetitive movements, self-injurious behaviors, and may benefit from alternative or augmentative communication (AAC) systems (Snell et al., 2010).

Post-School Employment Outcomes of Individuals with IDD

Individuals with IDD have been recognized as highly underrepresented in the

workforce (Migliore, Mank, Grossi, & Rogan, 2007). According to the National Longitudinal Transition Study 2, young adults with IDD were less likely to obtain employment compared to young adults with other disabilities (39 % vs. 67%; Newman et al., 2011). Recently, the National Longitudinal Transition Study 2012 found students with IDD, compared to their peers with other disabilities, were less likely to obtain paid employment during high school (25% vs. 40%; Libscomb et al., 2017). In addition, Anderson, Larson, and Wuorio (2011) reported only 15% of adults with IDD were employed. Unfortunately, the disparity in employment outcomes can become larger as individuals with IDD age, as only 32% of adults between the ages of 20 and 30 were employed compared to 74% of people without disabilities (Sulewski, Zalewska, Butterworth, & Migliore, 2013). A survey of 11,599 adults with IDD across 16 states found only 14.7% reported being competitively employed (Human Services Research Institute, 2012). Grigal, Hart, and Migliore (2011) found students with IDD were less likely to attend postsecondary education or obtain competitive employment and more likely to sheltered and/or supported employment outcomes compared to their peers with other disabilities. Lastly, Newman, Wagner, Cameto, and Knokey (2009) found workers with ASD, when compared to workers with emotional disturbance, learning disabilities, and a language impairment, were most likely to be fired (27%) yet least likely to quit (28%).

Despite poor outcomes, researchers found most individuals with IDD listed their top post-school goals included (a) being able to live independently, (b) being self-sufficient, and (c) obtaining employment in the community (Gray, McDermott, & Butkus, 2000; Migliore et al., 2007). In addition, employment after high school was a shared goal among family members and students with IDD (Chambers, Hughes, &

Carter, 2004; Grigal & Neubert, 2004; Migliore et al., 2007). Lastly, Simões and Santos (2016) found age, independent living, employment, and health status were associated with enhanced quality of life for individuals with ID.

Summary of Characteristics and Post-School Outcomes of Individuals with IDD

Students with IDD include students with ID, ASD, or multiple disabilities or a combination of those disabilities diagnosed during the developmental period (i.e., birth to age 18). Participants for this study will include students with IDD who have a diagnosis in one of the previously mentioned disability categories (i.e., ID, ASD, multiple disabilities) or a combination of two of the categories (e.g., ASD and ID). Research indicates individuals with IDD experience poorer employment outcomes compared to their peers with other disabilities (Lipscomb et al., 2017; Newman et al., 2011). However, students with IDD listed their top post-school goals included obtaining employment in their community (Gray et al., 2000; Migliore et al., 2007) and employment was found to be associated with higher quality of life (Simões & Santos, 2016). Therefore, it is imperative to teach students with IDD the skills needed in order to obtain and maintain employment.

Job Performance and Soft Skills

To determine how to assist students with IDD in improving their post-school employment outcomes several studies have focused on what skills are needed for employment and how to provide instruction on those skills. This theme will review literature examining: (a) factors impeding employment for individuals with IDD and needed skills for employability (i.e., job performance and soft skills); (b) definitions of

job performance and soft skills; (c) the importance of soft skills; and (d) instructional methods for teaching and assessing soft skills.

Factors Impeding Employment for Individuals with IDD

Previous research consistently found people perceived those with a lower social status (e.g. women, members of visible minorities, individuals with disabilities) as being less skilled compared to individuals of a higher social status (e.g., men, individuals without disabilities; Moss and Tilly 1996; Steinberg 1990). Similar research suggests people with disabilities were perceived to have fewer skills regardless of their work experience and training (Carter et al. 2009; Shier, Graham, and Jones 2009). Luecking and Luecking (2015) identified that one explanation for poorer outcomes of students with intellectual, emotional, and multiple disabilities was a lack of support during career development and work based learning experiences. Another identified hurdle to obtaining employment for students with disabilities included insufficient occupational skills (e.g., work completion, task accuracy, punctuality, social skills, self-regulation; Riesen, Morgan, Schutlz, & Kupferman, 2014).

Needed skills for employment. To obtain employment, Elksnin and Elksnin (2001) suggested employees need academic skills (e.g., reading, writing, basic math), vocational skills specific to certain occupations, and occupational social skills. Several studies reported a majority of job loss is due to problems socially in the workplace (Bullis, Evans, Fredericks, & Davis, 1992; Cartledge, 1989; Hagner, Rogan, & Murphy, 1992; Johnson & Johnson, 1990). Additional studies suggested employees with disabilities did not lose their jobs because they were unable to perform job tasks, but

because they struggled to fit in socially on the job (Butterworth & Strauch, 1994; Chadsey, 2007).

Occupational social skills have been defined by the work industry as “soft skills” and have been identified as key for obtaining and maintaining employment (Elksnin & Elksnin, 2001). For example, Fornes, Rocco, and Rosenberg (2008) suggested attaining self-determination and job performance skills for individuals with IDD could positively impact job retention. Additionally, Lindstrom, Kahn, and Lindsey (2013) identified one strategy for enhancing career development that included developing individual attributes and skills because previous research indicated individuals with disabilities who were able to successfully advance in their careers displayed soft skills such as problem solving, goal setting, time management, prioritization, positive communication with co-workers and supervisors, an ability to respond appropriately, and adapt to change. This body of research indicates a need for instruction on job performance skills, such as soft skills, in order to assist students with gaining and maintaining employment.

Job performance and soft skills. Job performance and soft skills have been identified as key skills for students with disabilities to have in order to obtain and maintain employment (Lindsay et al., 2014; Lindsay et al., 2015). Hartman (2009) indicated teaching communication, collaboration, and social skills could have a positive impact on students with disabilities’ ability to work and live in the community. In addition, Mohanty (2010) found individuals with a positive attitude were more likely to be hired. Surveys of employers have also consistently indicated they are looking for employees that have soft skills and not solely academic or technical skills (Burnett & Jayaram, 2012; Cunningham & Villasenor, 2014). Lastly, Kautz et al. (2014) found soft

skills rival academic or technical skills in predicting employment, earnings, and other outcomes. Due to the importance of these skills, the next section will provide (a) definitions for job performance and soft skills, (b) employer's perceptions of soft skills, (c) information on how to assess soft skills, and (d) instructional strategies for teaching soft skills.

Defining Job Performance and Soft Skills

Job performance includes occupational or job responsibility and productivity. Job responsibility has been described as work endurance, motivation, initiative, and attitude. Task production has been defined as the ability to perform certain work tasks requiring a specific quality of work and productivity. Quality of work has been defined as an employee's ability to complete work with the accepted standard of accuracy; productivity includes an employee's ability to work at an accepted rate and pace compared to other employees (Roessler, 2002; Roesnberg & Brady, 2000). Viswesvaran and Ones (2000) described job performance as dichotomous in that it can either be (a) specific to a certain occupation, or (b) applicable across different occupations. One area identified as applicable across jobs included task performance. According to Murphy (1989), task performance includes completion of task and duties specified and required within a job description. For this study, job performance will be focused on soft skills that are transferrable across jobs.

Soft skills have also been referred to as occupational social skills and as social skills that related to obtaining and maintaining employment (Elksnin & Elksnin, 2001). Lippman, Ryberg, Carney, and Moore (2015) defined soft skills as "a broad set of skills, competences, behaviors, attitudes, and personal qualities that enable people to effectively

navigate their environments, work well with others, perform well on the job, and achieve their goals.” (p. 15). Ryberg et al. (2015) also identified five critical soft skills most likely to assist individuals in gaining employment: (a) social skills, (b) communication skills, (c) higher-order thinking skills, (d) self-control, and (e) positive self-concept. Additionally, hard work, dependability, responsibility, and self-motivation were described as highly valued by employers. Lindsay et al. (2014) found employers and employment counselors identified key soft skills as the ability to learn new skills, communication skills, and a positive attitude; both emphasized the ability and willingness to learn and having a positive attitude as essential skills for gaining entry-level employment. Additional soft skills described by Rosenberg and Brady (2000) included (a) cooperation, (b) time management, (c) ability to accept constructive criticism, (d) demonstration of appreciation and gratitude, and (e) honesty and integrity. Lastly, the Employment and Training Administration (ETA; Ennis, 2008) identified skills important for employees across occupations that included (a) interpersonal skills, (b) integrity, (c) professionalism, (d) initiative, (e) dependability and reliability, and (f) willingness to learn.

For individuals with IDD, soft skills or work-related social behaviors can contribute to their job performance including: (a) appropriately interacting with supervisors and coworkers, offering to help others, and understanding the work environment; (b) working under pressure and handle the stress of the job; (c) demonstrating self-control; and (d) personal appearance and hygiene (Brady & Rosenberg, 2002). In this study, soft skills for employment will be defined as: (a) having a good attitude and being cooperative by demonstrating initiative, accepting feedback,

and interacting respectfully with others (e.g., co-workers, supervisors, customers) in the workplace; (b) being reliable by having good attendance, being on time, wearing appropriate attire (e.g., uniform), and being prepared for work; (c) being productive and on-task by staying focused, working without assistance, and at a consistent pace comparable to other employees; (d) demonstrating quality work by fully completing each job task, identifying mistakes and correcting them without assistance, and checking over work before finishing a job task; and (e) communicating and working with a team by appropriately interacting and communicating with others at work (e.g., co-workers, supervisors, customers), asking for assistance when needed, offering to help others, being polite and courteous to others, and following all of the rules and regulations of the job (Clark, Konrad, et al., in press).

Importance of Soft Skills

Literature suggests employers are increasingly emphasizing the importance of soft skills and expect employees to have them prior to gaining employment (McDowell, 2009). These skills have also been identified as just as important, or more important, than academic skills for obtaining and maintaining employment (Burnett & Jayaram, 2012; Cunningham & Villasenor, 2014; Kautz et al., 2014). Several studies investigated employers and educators perceptions of soft skills to identify (a) skills valued by employers, (b) importance of soft skills compared to other skills, and (c) implications for education and training focused on soft skills.

First, Baxter and Young (1982) surveyed 461 employers to determine their perceptions of skills needed by high school students in order to obtain employment. Researchers asked employers to rate usefulness of employment skills and attitudes on a

scale of one (i.e., needed very little or not at all) to a scale of seven (i.e., greatly needed). They were also asked to indicate what skills and attitudes they felt needed to be emphasized more during secondary school. Employment skills included (a) following verbal and written instruction, (b) speaking and listening, (c) basic reading skills, (d) basic math skills, (e) writing skills, (f) problem-solving, (g) driving a car, (h) using tools, and (i) secretarial work. Employment attitudes included (a) being dependable, (b) productivity and on-task, (c) getting along with others on the job, and (d) understanding the importance of health and wellbeing. Findings demonstrated employers rated being dependable as most important compared to any other skill or attitude. Employment attitudes were rated as being more important than employment skills. Findings also indicated attitude, being dependable, and getting along with others were skills that needed to be emphasized during secondary school.

Second, McCrea (1991) conducted a study to examine the relationship between employers' and special educators' perceptions of important skills needed for students with disabilities to obtain employment and success on the job. McCrea surveyed 87 special educators and 100 employers asking them to rate factors they perceived were critically important for individuals with disabilities to have in order to be successful at work. Respondents were asked to rate each factor from a one to a four, with one indicating a factor considered most important to job success and a four representing a factor considered least important. They were also asked to list the top five factors considered most important for job success. Results indicated educators ranked factors from most important to least important in the following order: (a) work-related, (b) social, (c) communication, and (d) personal. Employers' ranked factors in this order: (a)

work-related, (b) communication, (c) personal, and (d) social. Employers and educators agreed work-related skills were most important and these skills included: (a) working independently, (b) following instruction, (c) understanding the work routine, (d) being able to adapt to new work situation, and (e) responding appropriately to feedback. Within the other categories, employers and educators also both ranked getting along well with others, efficiency, and demonstrating initiative on the job as most important.

Next, Casner-Lotto and Barrington (2006) conducted a survey of 461 business leaders to determine what skills new employees needed to be successful in the workplace. Using a survey design, researchers asked employers to rate the importance of 20 areas of basic knowledge and applied skills across three educational levels of new entrants to the workforce including high school diploma, two-year or technical college degree or diploma, and four-year college degree. Respondents were asked to rate the importance of each skill as either not important, important, or very important; as well as, rate readiness of each group of new entrants as either deficient, adequate, or excellent. Results indicated employers' viewed soft skills such as work ethic, professionalism, teamwork, collaboration, critical thinking, problem solving, and communication skills as more important in today's workplace than basic reading, math, and writing skills. Additionally, employers indicated all high school diploma students often lacked soft skills in the areas of teamwork, cooperation, problem solving, work ethic, and communication. Lastly, employers reported educational level increased readiness in important skills, but there were still deficits in all three groups.

In addition, Ju et al. (2012) conducted a descriptive study to identify employability skills employers value and examine if employers have different

expectations for individuals with and without disabilities. Researchers surveyed 168 employers asking them to rate the importance of 36 skills across five categories including basic skills, higher order thinking skills, personal management skills, interpersonal skills, and personal attributes using a 4-point Likert-scale for employees with and without disabilities. Findings indicated employers valued the same four soft skills for individuals with and without disabilities soft skills including: (a) demonstrate personal honesty and integrity at work; (b) ability to follow instructions; (c) ability to show respect for others, including co-workers, supervisors, and customers; and (d) ability to be on time for work. One noted difference between employees with disabilities compared to employees without disabilities was employers were more concerned with the ability of workers with disabilities to follow safety procedures.

Next, Bailey (2014) conducted a qualitative study to survey 325 information technology managers to determine what soft skills they felt were important for employees. Using qualitative interviews, focus groups, and a web-based survey, researchers sought to identify the most important non-technical knowledge, skills, and abilities needed by employees. Respondents identified 32 desirable non-technical skills including 12 business skills and 20 soft skills. Of the 20 identified soft skills, five were considered highly desired for all occupations and included problem solving, teamwork, listening, time management, and communication. Furthermore, some employers indicated they would hire individuals who possess minimum technical skills as long as they demonstrate solid soft and business skills.

Additionally, Lindsay et al. (2014) conducted qualitative interviews with employers and employment counselors to identify what skills and characteristics are

valued when they hired young workers and to determine if they viewed skill levels between youth with and without disabilities differently. Using semi-structured interviews, researchers asked participants to share experiences working with youth, what skills were essential in entry-level positions, and if there were any perceived differences in pre-employment skills between youth with and without disabilities. Findings revealed employers and employment counselors identified the following skills as important for young workers to be able to obtain employment including (a) preparation, (b) job fit, (c) a good attitude, and (d) soft skills. Both employers and employment counselors emphasized the importance of job readiness, practical skills, and soft skills for youth in obtaining employment.

Lastly, Agran et al. (2016) conducted a survey of secondary special educators, transition coordinators, vocational rehabilitation counselors, and job coaches to identify what employment social skills were most important for students with disabilities and how often instruction focused on teaching these skills. Results indicated the most important skills perceived for obtaining employment were (a) asking for assistance or clarification of instructions, (b) reliability, (c) interacting appropriately with others, (d) following instructions without prompting, (e) responding appropriately to constructive criticism and feedback, and (f) communicating appropriately with others including customers. Despite these findings, skills educators identified as most important were not skills they reported teaching most often.

Instructional Methods for Teaching and Assessing Soft Skills

Consistently across the previous studies reviewed, implications for practice included the need to provide instruction in soft skill areas identified as important by

employers while students are in high school. Despite these implications there are few identified interventions for teaching soft skills. Instead, authors have suggested instructional strategies that could be used to teach soft skills to students with disabilities.

Instruction. Two articles suggested students could develop and improve soft skills through student practice, reflection, and feedback (Blaszczynski & Green, 2012; Dixon, Belnap, Albrecht, & Lee, 2010). In addition, McEwen (2010) described a framework for building soft skills including the following steps (a) introduce soft skills, (b) explain how the skill is developed, (c) practice soft skills with guidance, and (d) evaluate and provide feedback to reinforce soft skills. Also, the Office of Disability Employment Policy (2010) suggested using three strategies of experiential learning for teaching soft skills including interactive teaching, coaching in the workplace setting, and in-school simulations of a workplace (i.e., in-school job sites, classroom simulations of workplaces). Another instructional strategy described by Greene and Staff (2012) included developing work based learning experiences and opportunities for students. They felt these experiences could enhance the development of soft skills (e.g., punctuality, dependability, and teamwork). An additional instructional practice for teaching soft skills included using role-play (Elksnin & Elksnin, 2001). Role-play involves setting up a social situation and asking a student or students to perform a job demonstrating the soft skill after learning about the skills.

Assessment. One identified challenge with soft skills instruction is assessment. While Blaszczynski and Green (2012) indicated soft skills could be more challenging to measure than hard skills (i.e., technical skills), they identified several ways soft skills could be assessed including pretest/posttest and rubrics. First, using a pretest can allow

instructors to gain baseline data on where a student is performing prior to receiving instruction and a posttest can provide information on student progress after instruction is complete. Next, rubrics have been identified as an effective way to assess soft skills, and one advantage of using rubrics is multiple assessors may use it (Williams, Wattam, & Evans, 2007). Rubrics can also provide on-going assessment to monitor progress throughout instruction so instruction may be modified if students are not making progress in a skill area. Additionally, Dunbar, Brooks, and Kubick (2006) found students could benefit from the use of a standardized rubric for soft skill instruction using specific criteria that clearly identifies what is expected and allows students to determine which areas they need to improve after being assessed.

Elksnin and Elksnin (2001) identified another way to assess students by observing students while working or in a simulated situation and rating them using a rating scale or rubric. This allows for the teacher to observe the student in a real or simulated work setting and provides opportunities for teachers to give feedback on students' performance of soft skills. Lastly, Andrade (2005) defined a rubric as an assessment tool that provides criteria needed for quality and examples of what is included for quality from excellent to poor. Noted benefits of using rubrics included (a) providing clear expectations for students, (b) assisting students in understanding the goal of an assignment and how to focus their effort, (c) providing opportunities for more informative feedback from the instructor, (d) providing opportunities for students to assess themselves and others, (e) allowing the teacher to create more challenging assignments, and (f) keeping the instructor fair and unbiased in their grading.

Assessment of soft skills may involve one approach or many approaches. For this study assessment will include observation of students while working utilizing a rubric and students will also engage in self-assessment using a rubric. Engagement in assessment is critical because of its role in communicating student performance and providing them with feedback so they can work to improve their performance.

Summary of Job Performance and Soft Skills

Overall, job performance and soft skills have been recognized as essential skills for students with disabilities when pursuing future employment (Lindsay et al., 2014). Job performance includes skills such as productivity, task completion, quality of work, and soft skills (Roessler, 2002; Roesnberg & Brady, 2000). Soft skills have been defined in various ways and found to be highly valued by employers and implications for practice included: (a) incorporating skills identified as important by employers into instruction in order to assist students in gaining skills needed for employment (McCrea, 1991); (b) high school and college educators should consider infusing these skills into their current curricula and expanding opportunities for students to practice these skills prior to graduation (Agran et al., 2016; Casner-Lotto & Barrington, 2006); and (c) the need for schools and vocational rehabilitation counselors to align their instruction and practices with skills valued by employers in order to adequately prepare students with disabilities for the workforce (Ju et al., 2012). While literature has suggested strategies for instruction and assessment of soft skills (Blaszczynski & Green, 2012; Dixon, Belnap, Albrecht, & Lee, 2010; McEwen, 2010; Williams, Wattam, & Evans, 2007), these suggestions have focused primarily on what skills to teach rather than how to teach those skills. Currently, there is one identified intervention for teaching soft skills to students

with IDD, *UPGRADE Your Performance* instruction (Clark, Konrad, et al., in press; Clark, Test, et al., in press). This intervention will be described in more detail in the final theme. As a result, it is apparent more research is needed to define what instructional strategies are effective in teaching soft skills to students with IDD.

Evidence-Based Practices and Predictors of Post-School Employment

Despite the lack of research on soft skill interventions, in an effort to address poor post-school employment outcomes students with disabilities experience and provide practitioners with instructional practices to teach skills needed for employment, researchers have worked to identify evidence-based instructional practices to teach skills needed for employment; as well as, in-school predictors of successful post-school employment for students' disabilities. This theme will review the literature on evidence-based instructional practices and in-school predictors of post-school employment for students with disabilities.

Evidence-Based Practices

Test, Fowler, et al. (2009) conducted a literature review to identify evidence-based practices (EBPs) in secondary transition as part of the work of the National Secondary Transition Technical Assistance Center (NSTTAC). Results included 32 practices for secondary transition that were classified as either having a strong level of evidence (n=2), a moderate level of evidence (n=28), or a potential level of evidence (n=2) in the post-school outcome areas of education, employment, and independent living. Practices focused on teaching employment skills included: (a) employment skills using community based instruction (Bates, Cuvo, Miner, & Korabek, 2001); (b) job specific employment skills (Bates et al., 2001; Cihak, Alberto, Kessler, & Taber, 2004;

Mechling & Gast, 1997; Mechling & Ortega-Hurndon, 2007; Mitchell, Schuster, Collins, & Gassaway, 2000; Riffel et al., 2005); (c) job specific employment skills using computer-assisted instruction (Mechling & Gast, 1997; Mechling & Ortega-Hurndon, 2007; Riffel et al., 2005); (d) job related social communication skills (Clement-Heist, Seigel, & Gaylord-Ross, 1992; Heller, Allgood, Ware, & Castelle, 1996); (e) completing a job application (Nelson, Smith, & Dodd, 1994); and (f) self-management for employment skills (Lancioni & O'Reilly, 2002).

More recently the National Technical Assistance Center on Transition (NTACT, 2016) updated this list of practices to include 11 EBPs, 47 research-based practices, and 73 promising practices. Four research-based practices and seven promising practices were focused on teaching employment skills to secondary students with disabilities. The four research-based practices focused on teaching specific employment skills including: (a) visual response prompting to teach initiation of job tasks (Sowers, Verdi, Bourbeau, & Sheehan, 1985); (c) tactile cues and self-delivered reinforcement teach packaging skills (Berg & Wacker, 1989); (c) self-management instruction and picture schedules to teach initiation of job tasks (Irvine, Erickson, Singer, & Stahlberg, 1992); and (d) auditory prompts paired with least-to-most prompts to teach cleaning skills (Mitchell et al., 2000).

First, Sowers, Verdi, Bourbeau, and Sheehan (1985) conducted a study to investigate the effects of using picture cues and self-monitoring on the independence of individuals with intellectual disability while working on a job. Using a multiple baseline across participants design to measure the impact of picture cues and self-monitoring on the correct number of independent task changes of four secondary students (i.e., age 18-21) with ID, results indicated a functional relation between picture cues and self-

monitoring and an increase in participants initiation of independent work tasks. In addition, participants generalized skills when new picture cues were introduced and maintained skills over time. Authors indicated this intervention package might be able to be used in competitive integrated employment settings to assist students with IDD in gaining independence while working.

Next, Berg and Wacker (1989) evaluated the effects of tactile cues on the vocational task performance of a young adult (i.e., age 19) with multiple disabilities. Using a multiple baseline across tasks with a sequential withdrawal design to investigate the use of tactile cues on the accuracy of completing three different job tasks, results demonstrated a functional relation between tactile prompts and students' performance on the job task and generalization to new tasks and prompts. Findings also indicated tactile cues were necessary for the student to maintain her performance over time.

Then, Irvine, Erickson, Singer, and Stahlberg (1992) conducted a study to determine the effects of a self-management system on initiating job tasks at school and at home by four secondary students with moderate to severe ID. Researchers used a multiple baseline across subjects design replicated across settings to measure the effectiveness of a self-management intervention on the percent of job tasks initiated each day at school and home. Findings indicated a functional relation between the self-management system and initiation of job tasks across both settings for all students. Results also demonstrated after completion of the intervention, all students increased their ability to initiate tasks without prompting at school and increased their level independence with tasks at home.

Finally, Mitchell, Schuster, Collins, and Gassaway (2000) investigated the effects of teaching high school students with mild ID to use auditory prompts with a fading procedure on learning vocational skills of cleaning a bathroom. Authors used a multiple probe across behaviors design replicated across participants to determine the impact of auditory prompting on the percentage of correct steps completed independently on three different cleaning tasks (i.e., bathroom mirror, sink, and toilet) and generalization to an untrained setting. Results found a functional relation between auditory prompting with a fading procedure and an increase in students completion of job tasks across all three cleaning tasks; as well as, generalization of their skills to a new setting without needing auditory prompting.

Of the seven promising practices identified for teaching employment skills, six included positive results with students with IDD. The six studies included (a) a 5 s constant time-delay paired with total task chaining that was used to teach cleaning skills and mailing letters (Wolery, Ault, Gast, Doyle, & Griffen, 1991); (b) least-to-most prompting to teach communication skills while working on a job (Heller et al., 1996); (c) system of least-to-most prompts to teach cleaning skills (Smith, Collins, Schuster, & Kleinert, 1999); (d) community-based instruction was used to teach employment skills (Bates et al., 2001); (e) computer-assisted instruction in combination with least-to-most prompts was used to teach completing steps of a job task (Riffel et al., 2005); and (f) computer-assisted instruction combined with video modeling and 3 s constant time-delay was used to teach watering plants, delivering mail, and changing paper towels (Mechling & Ortega-Hurndon, 2007).

First, Wolery, Ault, Gast, Doyle, and Griffen (1991) conducted a study using a multiple probe across tasks design replicated across students to determine the impact of constant time delay instruction on the completion of four vocational and domestic chained tasks. Tasks were divided and one student received instruction on the first part of the task and the second student in the dyad received instruction on the second part of the task. Results indicated a functional relation between constant time delay and completion of chained vocational tasks by students with moderate ID. Additionally, students were able to learn half of the chained task through instruction with constant time delay and the other part of the task by observing the other student in their dyad.

Second, Heller, Allgood, Ware, and Castelle (1996) examined the effectiveness of dual communication boards on communication (i.e., expressive and receptive) skills of high school students with multiple disabilities (i.e., low vision, moderate to profound hearing impairment, mild to severe ID) with co-workers, supervisors, and vocational trainers over two studies. The first study used a multiple probe across participants design to determine the effectiveness of using dual communication boards during simulated activities and generalization to community sites. Results indicated a functional relation between the use of dual communication boards in the community and student communication accuracy while using the communication boards. All students reached 100% accuracy using the dual communication board. The second study used a reversal design to determine the maintenance and generalization of participant's (i.e., from the first study) usage of dual communication boards one year after completion of the first study; as well as, compared the effectiveness of single communication boards to dual communication boards for participants from the first study and two new students.

Findings indicated a functional relation between both communication boards (i.e., single and dual) and student's rates of correct responses. In addition, all students' maintained high rates of correct responses using dual communication boards at several new vocational sites and demonstrated the ability to use either dual or single communication boards with high accuracy at work sites.

Third, Smith, Collins, Schuster, and Kleinert (1999) investigated the impact of using a system of least to most prompts combined with multiple exemplars and observational learning to teach vocational tasks to secondary students with moderate to severe ID. Using a multiple probe across participants design to evaluate the effectiveness of systematic instruction (i.e., system of least to most prompts combined with multiple exemplars and observational learning) on the number of correct independent steps completed while cleaning tables as a job task; results demonstrated a functional relation between the system of least to most prompts and number of steps completed correctly and independently while cleaning tables. In addition, findings indicated multiple exemplars were effective in promoting generalization to different types of materials and tables; as well as, three different settings (i.e., cafeteria, teacher's lounge, church).

Fourth, Bates et al. (2001) conducted a study to determine the effects of simulated instruction on the acquisition of four simulated tasks of students with mild and moderate ID in school and community settings. Researchers used a multi-factor mixed experimental group design with two repeated measures replicated across four tasks to evaluate differences between level of ID (i.e., mild and moderate), simulated versus community-based instruction, and assessments in school and community settings. Results indicated participants with mild ID did better on simulated tasks and tasks in community

settings and were more successful in generalizing their skills to community settings compared to participants with moderate ID. Both participants with mild and moderate ID increased their levels of independence performing tasks after receiving community-based instruction compared to simulated instruction.

Fifth, Riffel et al. (2005) investigated the effects of the Visual Assistant computer program on job task completion, productivity, and independence of secondary students with ID. Researchers used a multiple probe across students design to determine the impact of the Visual Assistant handheld computer on independent task completion. Findings indicated a functional relation between the use of Visual Assistant and students' increased ability to independently complete job tasks. In addition, results demonstrated students' needed a reduced number of prompts to complete job tasks.

Lastly, Mechling and Ortega-Hurndon (2007) conducted a study to determine the impact of using computer-based video instruction (CBVI) to teach job skills to high school students with moderate ID. Authors used a multiple probe across behaviors (i.e., job tasks) design replicated across participants to examine the effectiveness of CBVI on the performance of correct steps of a job task across three different job tasks. Simulations of specific employment tasks were by recording the steps of a job task on video and providing instruction to students through a computer based program. Results indicated a functional relation between CBVI and students' increased performance of correct steps across all three-job tasks. Additionally, findings provided preliminary evidence for combining video and computer based instruction as a way to teach job skills to students with ID.

Predictors of Post-School Employment

In addition to identifying evidence-based instructional practices, researchers have also worked to identify in-school predictors of post-school success for students with disabilities. Test, Mazzotti, et al. (2009) and Mazzotti et al. (2016) together identified 20 predictors of post-school success for individuals with disabilities. See Table 1 for predictors and post-school outcome areas they are associated with.

Table 1

In-School Predictors of Post-School Success and Outcome Areas

Predictors	Outcomes		
	Education	Employment	Independent Living
Career Awareness	X	X	
Community Experiences		X	
Exit Exam /High School Diploma		X	
Goal-Setting	X	X	
Inclusion in General Education	X	X	X
Interagency Collaboration	X	X	
Occupational Courses	X	X	
Paid Employment/Work Experience	X	X	X
Parent Expectations	X	X	X
Parental Involvement		X	
Program of Study		X	
Self-Advocacy/ Self-Determination	X	X	
Self-Care/Independent Living	X	X	X
Social Skills	X	X	
Student Support	X	X	X

Transition Program	X	X
Travel Skills		X
Vocational Education	X	X
Work Study		X
Youth Autonomy/Decision-Making	X	X

Additionally, Wehman et al. (2015) examined data from NLTS-2 to identify variables associated with post-school competitive integrated employment for students with disabilities. Findings indicated attending a regular school, employment experiences during high school, attending a vocational or 4-year university, not having an arrest record, and positive parental expectations for post-high school employment were all significant predictors of competitive employment after high school for students with disabilities. Predictors with the highest significance included positive parental expectations and paid work experience during high school.

Predictors of post-school employment for students with IDD. In addition to the identified predictors of post-school employment for students with disabilities (Mazzotti et al., 2016; Test, Mazzotti, et al., 2009; Wehman et al., 2015), other studies have identified predictors of post-school employment specifically for students with IDD. First, Fornes, Rocco, and Rosenberg (2008) analyzed factors predicting job performance, job satisfaction, and job retention outcomes of individuals with ID. Results determined self-determination was a significant predictor of all three employment outcomes (i.e., job performance, job satisfaction, job retention) for individuals with ID. Next, Carter, Austin, and Trainor (2012) investigated predictors of post-school employment for individuals with severe disabilities. Findings revealed (a) being male, (b) having paid employment during high school, (c) having more independence in self-care, (d) higher social skills, (e)

responsibilities during adolescence, and (f) parents expectations were all associated with paid employment after high school. Then, Grigal, Hart, and Migliore (2011) analyzed data from NLTS2 to compare students with ID to students with other disabilities concerning: (a) post-school transition goals in their Individualized Education Program (IEP); (b) contacts, referrals, and participation of outside agencies during transition planning; and (c) students post-school education and employment outcomes. Findings indicated two predictors were associated with post-school employment for students with ID including having a post-school goal of attending a two or four-year college documented on their IEP and attending a two or four year college after high school.

Next, Simonsen and Neubert (2012) also examined community employment outcomes for youth with IDD. Results identified five predictors of post-school integrated employment including (a) race or ethnicity, (b) family expressed preference for paid work in the community, (c) paid work experience, (d) self-management, and (e) community mobility skills. Lastly, Siperstein, Heyman, and Stokes (2014) conducted a study to examine how individuals with ID obtained employment, including sheltered and competitive employment, and characteristics associated with competitive employment outcomes. Results indicated higher levels of adaptive skills, a lack of behavioral and/or emotional problems, early work experiences, and being younger in age were especially associated with competitive integrated employment. In addition, living at home and working in a sheltered workshop indicated individuals were less likely to obtain competitive employment.

Summary of EBPS and Predictors of Post-School Employment

NSTTAC and NTACT identified four research-based practices and seven promising practices focused on teaching employment skills to secondary students with disabilities (NTACT, 2016; Test, Fowler, et al., 2009). Practices identified focused primarily on technical skills for employment (e.g., completing a specific job task). While one practice focused on communication skills on the job (Heller et al., 1996), it did not address other skills associated with soft skills. These results reiterate the need for research-based practices for soft skills. Findings from these studies indicated a need for future research to examine (a) effects of systematic instruction on students' ability to perform tasks while other people are present as they would be in a natural setting (Smith et al., 1999); (b) using simulations combined with community-based assessment or training across different populations of students and job tasks (Bates et al., 2001); (c) using technology to promote independence and positive transition outcomes for students with disabilities (Riffel et al., 2005); and (d) expanding the number of job tasks measured and vary job tasks throughout the study (Mechling & Ortega-Hurndon, 2007).

Identified predictors of post-school employment for students with disabilities included 20 predictors identified by Mazzotti et al. (2016) and Test, Mazzotti, et al. (2009) and five identified by Wehman et al. (2015). Predictors identified specifically for students with IDD included (a) self-management and self-determination skills (Fornes et al., 2008; Simonsen & Nuebert, 2012); (b) paid work experience during high school (Carter, Austin, & Trainor, 2012; Simonsen & Nuebert, 2012; Siperstein, Heyman, & Stokes, 2014); (c) family expectations for post-school employment (Carter et al., 2012; Simonsen & Nuebert, 2012); (d) higher social skills (Carter et al., 2012), (e) higher adaptive skills and independence (Carter et al., 2012; Siperstein et al., 2014); (f)

responsibilities during adolescence (Carter et al., 2012); (g) community mobility (Simonsen & Nuebert, 2012); (h) age (Siperstein et al., 2014); (i) gender (Carter et al., 2012); (j) race or ethnicity (Simonsen & Nuebert, 2012); (k) post-school IEP goal of attending college and attending college after high school (Grigal, Hart, & Migliore, 2011); and (l) lack of behavioral and/or emotional problems (Siperstein et al., 2014).

Salient predictors of post-school employment across studies for students with disabilities and students with IDD included self-determination, family expectations, early work experience, social skills, postsecondary education attendance, and travel skills or community mobility. These results provide evidence for providing instruction in self-determination, social skills, travel skills and opportunities for work experience for students with IDD in order to increase their likelihood of obtaining employment after high school.

Self-Determination

Self-determination has been identified as a predictor of post-school employment for students with IDD (Fornes et al., 2008; Simonsen & Nuebert, 2012). This theme will review literature on (a) the definition and components self-determination, (b) significance on post-school outcomes, (c) teaching self-determination skills, and (d) multi-component interventions.

Definition and Components of Self-Determination

The theory behind self-determination dates back to the 1970s and includes the concept of locus of control. Rotter (1975) defined locus of control as a belief of behavior-reinforcement contingencies that are likely to influence the actions a person chooses to take. Locus of control involves individuals taking responsibility for their actions and the

results of their actions. Definitions of self-determination have evolved over the years. For example, Deci and Ryan (1985) defined self-determination as the ability to choose and have choices and to be able to decide your own actions. Then, Field and Hoffman (1994) defined self-determination as

A combination of skills, knowledge, and beliefs that enable a person to engage in goal-directed, self-regulated, autonomous behavior. An understanding of one's strengths and limitations together with a belief in oneself as capable and effective are essential to self-determination. When acting on the basis of these skills and attitudes, individuals have great ability to take control of their lives and assume the role of successful adults in society. (p.2)

Wehmeyer (1999) defined these characteristics: (a) autonomy means a person's actions are based on his or her own preferences, values, or interests; (b) self-regulation is when a person creates a plan and identifies ways to address limitations of his or her own abilities related to future goals, makes decisions, and if needed evaluate the plan and make changes; (c) when people are psychologically empowered "they are able to perform behaviors needed to influence outcomes in their environment, and if they perform such behaviors, anticipated outcomes will result" (Wehmeyer, 1999, p. 57); and (d) a person who is considered self-realizing will "use a comprehensive, and reasonably accurate, knowledge of themselves and their strengths and limitations to act in such a manner as to capitalize on this knowledge in a beneficial way" (Wehmeyer, 1999, p. 57). Wehmeyer, Abery, Mithaug, and Stancliffe (2003) suggested self-determined behavior refers to the actions that are identified by four essential characteristics: (a) autonomy, (b) self-regulated behavior, (c) psychological empowerment, and (d) self-realization. Self-determined behavior has also been defined as "volitional actions that enable one to act as the primary causal agent in one's life and to maintain or improve one's quality of life" (Wehmeyer, 2006, p.17). Most recently, self-determination has been defined as:

“dispositional characteristic manifested as acting as the causal agent in one’s life. Self-determined *people* (i.e., causal agents) act in service to freely chosen goals. Self-determined *actions* function to enable a person to be the causal agent in his or her life.” (Shogren et al., 2015, p. 258)

Shogren et al. (2015) suggested components of self-determination included (a) choice-making, (b) expressing preferences, (c) goal-setting and attainment, (d) problem-solving, (e) decision-making, (f) self-awareness, (g) self-knowledge, (h) self-advocacy, (i) locus of control, and (j) self-regulation and self-management. Lastly, self-determination has been described as the ability to make choices, solve problems, set goals, evaluate options, take initiative to reach one’s goals, and accept the consequences of one’s actions (Deci & Ryan, 1985; Rowe et al., 2015).

The Significance of Self-Determination and Post-School Outcomes

Previous research suggests students with disabilities who leave high school with higher levels of self-determination may be more likely to achieve positive post-school outcomes (Wehmeyer & Palmer, 2003; Wehmeyer & Schwartz, 1997). For instance, Wehmeyer and Palmer (2003) found students with higher levels of self-determination were more likely to be employed, independent, and have financial independence. In addition, Martorell et al. (2008) found self-determination was associated with improved employment outcomes for individuals with disabilities. Additional studies found self-determination can have positive effect on academic outcomes (Agran, Wehmeyer, Cavin, & Palmer, 2010) and increased independence and community integration (Powers et al., 2012). Lastly, Shogren, Wehmeyer, Palmer, Rifenbark, and Little (2015) examined the relationship between self-determination and post-school outcomes for youth with disabilities. Results suggested the level of self-determination a student maintains when exiting high school was positively correlated with adult outcomes.

Test, Mazzotti et al. (2009) conducted a systematic literature review and identified 16 predictors of post-school outcomes for individuals with disabilities. One predictor, self-determination, was associated with positive outcomes in the areas of education and employment. Recently, Mazzotti et al. (2016) conducted a follow up review of the literature and found four additional predictors including parent expectations, youth autonomy, goal setting, and travel skills. Goal setting is a component of self-determination; however, emerging evidence suggests goal setting can stand alone as a separate predictor category predicting post-school education and employment outcomes. These post-school outcome studies provide clear evidence supporting the importance of teaching self-determination skills.

In addition, special education teachers and parents of students with disabilities also indicated they believed self-determination was important for students with disabilities (Agran, Snow, & Swaner, 1999; Grigal, Neubert, Moon, & Graham, 2003). Initially, Agran et al. (1999) surveyed 69 special education teachers to discover (a) what self-determination skills they taught, (b) how often their students use self-determination skills, (c) their perception of the importance of self-determination, and (d) how beneficial self-determination is. Findings demonstrated less than half of the teachers (42%) viewed it as a high priority and about half of the teachers (52%) indicated it was a medium-level priority. The majority of teachers reported they felt self-determination led to increased competence, self-esteem, and self-confidence. They also reported they felt it assisted students in preparing for life after high school; however, most indicated they do not regularly observe their students using self-determination skills.

Next, Grigal et al. (2003) conducted a survey of 496 teachers and parents to determine their perceptions of the importance of self-determination. Results demonstrated parents thought students should be taught self-determination skills and should be involved in their Individual Education Program meetings; however, they slightly agreed students had multiple opportunities to apply and use self-determination skills. This may mean that students not only need to be taught the skill, but also need opportunities to use them regularly. It is evident teachers and parents view self-determination as important for students with disabilities, and the literature provides evidence to support that self-determination has a positive impact on post-school outcomes.

Teaching Self-Determination Skills

Due to the importance of self-determination skills, teachers can incorporate component skills across a variety of content areas and embed them within the curriculum in order to enhance self-determination while simultaneously teaching content to students with disabilities. Several literature reviews of self-determination interventions have been done over the years. First, Wood, Fowler, Uphold, and Test, (2005) conducted a literature review of self-determination interventions and found choice making was the most frequently taught self-determination skill for students with severe disabilities. Additional findings included that self-management, problem solving, goal setting, decision-making, and self-advocacy skills were also often taught.

Next, Konrad, Fowler, Walker, Test, and Wood (2007) conducted a literature review of intervention research examining the effects of self-determination interventions on the academic skills of student with learning disabilities and/or attention deficit/hyperactivity disorder. Results revealed that self-management interventions were

most frequently studied, closely behind were interventions that combined self-management with one or more components of self-determination. The strongest effects were seen when intervention combined self-management with goal setting to increase productivity, as well as using goal setting to improve math skills.

Then, Carter, Lane, Pierson, and Stang (2008) surveyed 340 high school educators to determine their efforts and views of implementing self-determination components in their classrooms. Results indicated two-thirds of the educators surveyed rated problem solving, self-management/self-regulation, decision-making, and goal setting and attainment as being very important and believed they should be incorporated regularly in their curriculum. Three component skills including problem-solving, goal-setting, and self-management can provide students with strategies such as how to (a) set goals related to academic and transition content, (b) solve problems encountered when working toward their goals, and (c) monitor and evaluate their progress. Due to the importance of these component skills, several studies have investigated the effectiveness of component interventions including (a) self-management and self-regulation interventions, (b) goal setting and attainment interventions, and (c) combined goal setting and self-management interventions.

Self-management and self-regulation interventions. Self-regulated behavior includes self-managing one's life, including self-management components such as self-monitoring, self-evaluation, self-instruction, and self-reinforcement. Self-monitoring strategies include teaching students to assess, observe, and record their own behavior (Wehmeyer & Schalock, 2001). An early study conducted by Lagomarcino and Rusch (1989) found one student was able to self-monitor and self-reinforce his own behavior,

and when both components were done in combination, it was effective in improving his work performance across two work tasks. Next, DiGangi et al. (1991) conducted a study to determine the effects of self-graphing, self-evaluation, and self-reinforcement on improving on-task behavior and academic performance (e.g., productivity and accuracy) of students with disabilities. Results indicated a functional relation between the addition of self-graphing and self-monitoring and a significant increase in both on-task behavior and academic productivity. These findings suggested self-monitoring can be an effective intervention and having students self-graph their behavior may significantly increase activity. Self-graphing is a form of self-observation, evaluation, and self-knowledge with an added graphing component (i.e., observing and recording one's behavior on a graph; Cooper et al., 2007). Another study suggested self-graphing can increase student success and allow students to see a visual representation of his or her progress (Kasper-Ferguson & Moxley, 2002).

Peterson, Young, Salzberg, West, and Hill (2006) evaluated whether students could use a self-management strategy to generalize appropriate classroom social skills to other classroom settings and teachers. Findings demonstrated a functional relation between the self-management strategy and a decrease in off-task behavior and an increase in appropriate social skills for all participants during intervention. During generalization, students continued the strategy, and after the implementation of self-rating and teacher matching intervention was introduced in general education classes, some participants showed greater increases in their appropriate social behaviors. Lastly, Lee, Simpson, and Shogren (2007) found a functional relation between self-monitoring, self-reinforcement, and self-management packages and increases in appropriate behavior.

Goal setting and attainment interventions. Goal setting and attainment includes key skills needed to enhance an individual's self-determination including planning, setting, and achieving goals (Wehmeyer & Schalock, 2001). Goal setting and attainment are taught by instructing students to express and define a goal, identify how they are currently performing in relation to that goal, develop a plan of action, and evaluate their progress toward achieving that goal (Agran, King-Sears, Wehmeyer, & Copeland, 2003; Wehmeyer & Schwartz, 1998). One example, German et al. (2000) investigated the effects of *Take Action*, an intervention that systematically teaches students a process to attain their own goals, on the attainment of daily goals of six high school students (age range: 16-18 years old) with moderate intellectual disability. Using a multiple baseline across pairs design, researchers determined the effects of *Take Action* on students' ability to attain their daily goals. Results indicated a functional relation between *Take Action* and students' ability to attain their daily goals, and maintain their skills over time; as well as, when the teacher's instruction was withdrawn.

Goal setting instruction alone may not be enough for all students to gain skills. Copeland and Hughes (2002) reviewed goal setting interventions and found goal setting, when taught in conjunction with other instructional strategies, was effective in improving individuals with ID's performance on tasks. An additional finding suggested individuals with ID might need explicit instruction in self-management skills (e.g., self-monitoring, self-evaluation) in order for goal setting to have a positive effect on their performance. Another study investigated the effects of two self-regulated strategies, goal setting and self-monitoring. Results indicated students made some progress when just solely using a self-monitoring intervention, suggesting self-monitoring can be used as an intervention

by itself, but it may be more effective when combined with other interventions such as goal setting (Wehmeyer, Hughes, Agran, Garner, & Yeager, 2003). These findings indicate combining goal setting and self-management interventions may be an effective way to teach skills to students with disabilities.

Combined goal setting and self-management interventions. Lee, Palmer, and Wehmeyer (2009) discussed the potential impact of using goal setting and self-monitoring in conjunction with one another. In addition to students achieving their goals, additional benefits discussed included (a) becoming more organized, (b) decreased stress over assignment completion, (c) increased confidence, (d) improved student participation, (e) improved ability to track progress, (f) greater understanding of assignments, and (g) better use of study time at home.

For example, Grossi and Heward (1998) investigated the effects of a self-evaluation intervention, including both goal setting and self-monitoring, on the work productivity, quality, and accuracy of individuals with developmental disabilities working in a community work setting. Researchers used a multiple baseline across behaviors to examine effects of self-evaluation on work productivity of students working in the community. Results demonstrated a functional relation between self-evaluation instruction and increased work productivity for all participants when they self-evaluated their performance while maintaining their quality of work. These findings suggested self-evaluation training could have potential for improving and maintaining work performance of employees with developmental disabilities.

More recently, Nittrouer et al. (2016) investigated the effects of combining goal setting and attainment instruction with self-management on the job performance of

individuals with IDD (i.e., ASD and ID). Using a multiple baseline across participants design, researchers examined effects of goal setting and self-management instruction on young adults with IDD's on-task and job completion behavior. Results indicated a functional relation between goal setting and self-management instruction and increased on-task performance and job completion for all participants suggesting goal setting and self-management could lead to meaningful changes in the job performance of individuals with IDD working in inclusive employment settings. As a result of the intervention, all participants demonstrated increases in their on-task behavior and completion of job tasks; however, only setting goals and reviewing goals daily did not appear to be enough to lead to sustained changes over time. The greatest changes in on-task behavior and job completion were observed during the self-management phase. Therefore, these results suggest combining goal setting and self-management strategies may lead to sustainable changes in behavior.

Multi-component Interventions

Izzo and Lamb (2002) reviewed interventions focused on developing of self-determination and career decision-making skills and provided implications for promoting the development of self-determination within career development activities. One intervention they reviewed included the Self-Determined Learning Model of Instruction (SDLMI). Another intervention, the Self-Determined Career Development Model (SDCDM), was a version of SDLMI modified for Vocational Rehabilitation (VR) personnel to use while supporting adults receiving VR services. SDCDM follows the same organization and function of SLDMI, except the focus is specifically on career and employment-related goals (Wehmeyer et al., 2003).

Self-Determined Learning Model of Instruction (SDLMI). SDLMI involves teaching students a self-regulated problem-solving process in which students set their own goals based on their preferences and instructional needs, develop and implement action plans to enable them to achieve these goals, and evaluate their progress in achieving these goals. The process involves three phases: (a) set a goal, (b) take action, and (c) adjust goal or plan. The questions differ across phases, but represent similar steps in the problem-solving sequence. Students must identify the problem (i.e., what they want to change or gain), identify potential solutions to the problem (i.e., what actions could be taken), identify barriers to the solution (i.e., obstacles or additional factors that need to be considered), and identify consequences of each solution (i.e., the anticipated effects; Wehmeyer, Palmer, Agran, Mithaug, & Martin, 2000). SDLMI has been used to increase student skills in a variety of areas including: (a) academics (Agran et al., 2006; Shogren, Palmer, Wehmeyer, Williams-Diehm, & Little, 2012); (b) on-task behavior (Kelly & Shogren, 2016); (c) appropriate classroom behavior (Mazzotti et al., 2012); (d) transition skills (Shogren et al., 2012); and (e) problem-solving and job performance (McGlashing-Johnson et al., 2003). This section will briefly describe results from studies focused on teaching job performance and soft skills.

First, McGlashing-Johnson et al. (2003) examined the effects of the SDLMI on the job performance of four students with moderate to severe cognitive disabilities whose ages ranged from 16 to 21 years of age and participated in community job sites as part of their transition program. Using a multiple baseline across students design, researchers examined the effects of SDLMI on the mastery of student-selected job performance goals. Results from this study indicated a functional relation between SDLMI and

increased job performance for all students. Three of the four participants achieved their goals and all four participants demonstrated increases in job performance and maintained their gains throughout the maintenance phase suggesting SDLMI could be an effective method for teaching problem-solving and job skills to students with ID.

Next, Shogren et al. (2012) conducted a two-year study to investigate the effects of SDLMI on academic and transition-related goal attainment and access to the general education curriculum. Researchers used a randomized control trial design with switching replication design to examine the impact of SDLMI on goal attainment and access to the general curriculum of students with learning disabilities (LD) and students with ID. Results found students with LD were able to increase their academic skills to attain academic goals and students with ID were able to increase their transition skills to attain transition goals. Findings for both groups of students indicated increased access to the general curriculum.

Lastly, Kelly and Shogren (2016) investigated the effects of SDLMI on the on- and off-task behaviors of students with EBD. During intervention students scored their own goal attainment scale rubric in a natural setting. Using a multiple baseline across participants design, authors examined the impact of SDLMI with students scoring their own goal attainment scale rubric on students' progress toward a self-select goal and on-task behavior. Results indicated a functional relation between SDLMI and student progress on their goals, increased on-task behavior, and decreased off-task behavior. Findings also suggested students could accurately evaluate and self-report their goal attainment and demonstrated the possibility of using goal attainment scaling in natural settings to involve students in evaluating their own behavior.

Overall, SDLMI is an effective intervention to teach students goal setting and problem solving. Results from these studies indicate using self-directed learning strategies could assist in increasing job skills and soft skills of students with disabilities.

Self-Determined Career Development Model (SDCDM). SDCDM, an adaptation of SDLMI, includes three instructional phases and each phase includes a problem to be solved by the person with the disability. Problems relate to some aspect of the job and career development process. Participants must be able to (a) identify the problem, (b) generate possible solutions to the problem, (c) identify barriers they may encounter, and (d) identify the consequences of each solution. The problems presented in each phase include (a) setting a goal, (b) developing a plan, and (c) based on what they have learned, adjusting their plan or goal (Shogren et al., 2016). This section will describe the results of studies conducted using SDCDM.

First, Wehmeyer et al. (2003) conducted a pilot study to examine the impact of a model of SDCDM modified in order to allow VR counselors to support individuals with disabilities receiving VR services. This model was designed to help individuals with disabilities self-regulate and problem solve in order to meet employment and career-related goals and evaluate their progress toward those goals. This study was conducted with five adults whose ages ranged from 22 to 50 years old and who were working with vocational rehabilitation to obtain employment. Using a multiple baseline across participants design, researchers examined the impact of SDCDM on each individual's ability to set a career-related goal and their progress toward attaining that goal. Results indicated a functional relation between SDCDM and participants ability to set a job-related goal and to make progress toward their goal. All participants were able to set an

employment goal and four of five participants demonstrated progress toward their goal. In addition, all participants indicated they felt participating in SDCCDM was beneficial.

Next, Benetiz, Lattimore, and Wehmeyer (2005) conducted a study to examine the impact of SDCCDM on the ability six high school students with EBD to set employment goals, develop a plan to meet those goals, and adjust their action plan to meet their goal. In this study three different measures of goal attainment were developed related to conflict resolution, assertiveness, and career exploration. Using an AB design, researchers investigated the impact of SDCCDM on goal achievement. Findings revealed all students made progress toward their goal and this model could support students with EBD in identifying goals and setting up action plans to reach individualized employment goals. However, since the design did not control for threats to internal validity such as a failure to control for maturation and history, a functional relation could not be established and it is impossible to determine if increases were a result solely of the intervention or if other variables also influenced the outcomes.

Then, Devlin (2008) examined the impact of SDCCDM on the job performance of four young adults with moderate ID employed competitively at a university working 20 hours a week, their ages ranged from 20 to 32 (mean: 26). Using a multiple baseline across participants design, researchers investigated the impact of SDCCDM training on the attainment of participants' self-selected goals. Results indicated a functional relation between SDCCDM and improved job performance of all four participants. In addition, all participants were able to maintain skills over time and exceeded expectations of their employers and job coaches in their ability to achieve their work-related goals.

In the most recent study, Shogren et al. (2016) examined the effects of the SDCCDM implemented in community-based employment by direct employment support providers on individuals with disabilities level of self-determination. Using a group

experimental design, researchers randomly assigned 22 community support providers to either the treatment (SDCDM) or control group and data were collected on self-determination outcomes of 197 adults with a mean age of 34.5 (range: 17 to 75) with disabilities (i.e., ID, ASD, learning disability, EBD, other health impairment, speech and/or hearing impaired, traumatic brain injury). Of the participants, 117 were assigned to the SDCDM treatment group and 80 were assigned to the control group where conditions were “business as usual.” Findings suggested participants in the treatment group showed an increase in their levels of self-determination, particularly in one essential characteristic of self-determination, autonomy.

Summary of Self-Determination

Self-determination has been established as an important predictor in promoting post-school success for individuals with disabilities (Shogren et al., 2015; Test, Mazzotti et al., 2009; Wehmeyer & Palmer, 2003; Wehmeyer & Schalock, 2001). Self-determination includes component skills that can be used to teach students with disabilities a variety of skills. Key components of self-determination include self-management, self-regulation, and goal setting (Wehmeyer & Schalock, 2001). These components have been used separately to teach individuals disabilities skills including career development skills (Lagomarcino & Rusch, 1989). However, research indicates when instruction combines skills students make greater gains than when the skills are taught separately (Wehmeyer et al., 2003). Two research-based interventions to combine these components as part of a treatment package to teach skills include SDLMI and SDCDM (Izzo & Lamb, 2002). Both treatment packages demonstrated the ability to assist students in gaining skills needed for obtaining employment after high school. This

study will examine the effects of an intervention, *UPGRADE Your Performance*, utilizing self-directed learning strategies such as goal setting, self-evaluation, and self-management on students with IDD's attainment of soft skills for employment. Studies reviewed in this strand provided evidence to support *UPGRADE Your Performance's* inclusion of self-determination components such as goal setting, self-evaluation, and self-management within the intervention package as a way to promote an increase in students' job performance.

Technology-Aided Instruction

In addition to self-determination, technology can assist individuals with IDD in attaining vocational skills and academic knowledge; as well as, provide support for increased independence in the workplace and everyday life. Additionally, technology has been able to increase life opportunities not previously available for individuals with IDD in several ways. For example, a systematic review of the use of iPods, iPads, and related devices in education programs for individuals with developmental disabilities identified 15 studies suggesting when individuals with IDD were taught to use devices; they could improve their academic, communication, leisure, employment, and transition skills (Kagahora et al., 2013). Technology can be provided in many formats and has changed substantially over time, from teaching machines (Pressey, 1924; Skinner, 1954) to various platforms used today that are continually evolving (Stephenson & Limbrick, 2015). Due to the importance of these skills this theme will review the literature on (a) the background and definition of Technology-aided instruction (TAI), (b) TAI for individuals with IDD, (c) TAI to teach transition and employment skills, and (d) TAI and self-determination.

Background and Definition of TAI

TAI came from the field of psychology during the early 20th century. A professor of psychology from The Ohio State University, Sidney Pressey, was the first to experiment providing instruction with teaching machines. Pressey (1926) defined a teaching machine as a self-controlling or automatic device that (a) presented information to a student, (b) provided a way for a student to respond to the information, and (c) provided feedback about the correctness of the learner's responses. Pressey was one of the first to emphasize the importance of feedback in education and to try to develop a system where each student could work at their own pace and have an active role in their learning; however, there were limitations to the teaching machines developed by Pressey (Skinner, 1968). Almost 30 years later, Skinner (1954) described the development of his teaching machines that were different from Pressey's machines. For example, with Pressey's teaching machine, "teaching" occurred by allowing a student to answer questions until they selected the correct answer. In comparison, Skinner's machines allowed students to create responses by using levers (e.g., enter a numerical answer). Skinner described the importance of providing answers beyond limited choice formats. Additionally, Benjamin (1988) described that the construction of a correct response demonstrates a higher level of understanding than selecting a correct answer from a list of choices including incorrect answers.

Teaching machines were initially thought to be able to provide teachers with the ability to meet the various needs of all students in their classrooms and presumed the teaching machine could take the place of functions teachers were currently providing. Despite possible benefits, there were concerns about using teaching machines including

(a) the perception they were not needed for presenting programmed materials, (b) cost, and (c) uncertainty concerning the amount of teaching a machine could provide (Benjamin, 1988). In addition to the teaching machine, others were developed including the AutoTrader (Crowder, 1962) and both were based on the principles of programmed instruction (Molenda, 2008). Bijou, Birnbrauer, Kidder, and Tague (1968) described programmed instruction as systematically and efficiently organizing and reorganizing the environment to produce behavior change. Programmed instruction was intended to make teaching and learning more efficient and customizable to meet the needs of each student individually (Molenda, 2008).

To relieve the need for hardware, programmed instruction was included within in textbooks. The term “teaching machines” is no longer a term used in current literature, however, there are other terms used to indicate programmed instruction presented through technology. One term used in a review of evidence-based practices (Wong et al., 2014) by the National Professional Development Center (NPDC) is Technology-aided instruction (TAI). In that review, TAI was defined as when technology is the central feature to support the goal or outcome of a student during instruction. Some examples of TAI include programs or apps installed on a desktop computer, laptop or notebook computer, tablet (e.g., iPad), or handheld mobile device (e.g., Android phone, iPod, iPhone). Another commonly used term is Computer-assisted instruction (CAI). CAI is defined as interventions that use computers as the main feature to support student learning, display instructional materials, or assess student’s knowledge (Anohina, 2005). The main difference between TAI and CAI is the type of technology that is the focus of

the intervention. This dissertation study will focus on TAI and include TAI in this literature review due to the way technology will be used within the intervention.

TAI for Individuals with IDD

Several reviews of the effectiveness of TAI instruction with students with IDD have been conducted. First, four reviews indicated technology aided instruction (TAI) can be beneficial for students with IDD when learning academic skills (Knight, McKissick, & Saunders, 2013; Pennington, 2010; Root, Stevenson, Geddes, Ley-Davis, & Test, 2015). In addition, Kagohara et al. (2013) conducted a systematic review of the use of iPods, iPads, and related devices in education programs for individuals with developmental disabilities. Findings included 15 studies suggesting individuals with developmental disabilities can be taught to use devices to improve their academic, communication, leisure, employment, and transition skills. Additional studies indicated TAI could provide job training and support through self-prompting, decision-making, and training supports using the following formats: (a) self-prompting using auditory prompts (Davis et al., 1992; Mitchell et al., 2000; Steed & Lutzker, 1999); (b) hand held visual and audio prompting (Davies et al., 2002a; Davies et al., 2002b; Riffel et al., 2005); and (c) simulations (Bates et al., 2001; Mechling & Ortega-Hurndon, 2007). Lastly, TAI has also been found to assist individuals with IDD in increasing their level of independence. For example, TAI has been used to teach students to: (a) follow sequence of steps or task list (Cihak et al., 2008), (b) self-instruction skills (Smith, Shepley, Alexander, & Ayres, 2015); (c) monitor and manage their own behavior (Bouck, Savage, Meyer, Taber-Doughty, & Hunley, 2014), and (d) self-monitor and transition between work tasks while working independently (Mechling & Savidge, 2011). In addition, Cihak, Kessler, and

Alberto (2007) identified handheld devices as not only portable, making it easy for individuals with IDD to use them in the community, but they allow individuals with IDD to blend in with their peers and environment. Also, Cihak et al. (2007) discussed the benefits of using a commercially produced handheld device rather than a device designed specifically for an individual with a disability. Commercially produced devices are generally less expensive and frequently used by individuals without disabilities making them more socially acceptable for use in on the job and in the community. These studies provide evidence TAI can be beneficial to students with IDD in learning academic and functional skills.

TAI to Teach Employment Skills

TAI has also been found to be effective in improving students with disabilities' transition and employment skills. Wehmeyer, Smith, Palmer, and Davies (2004) examined the literature to determine the use of technology by individuals with ID in seven functional areas including (a) communication, (b) mobility, (c) environmental control, (d) activities of daily living and community inclusion, (e) education, (f) employment, and (g) recreation and leisure. Results indicated technology can enhance students with ID's ability to communicate with others by being able to make choices, express interests, sharing wants and needs, and have conversations with peers. In addition, technology can enhance students with ID's mobility, independence, and control over their environment, community access, and ability to learn academically in school. Lastly, findings revealed technology could assist students with ID in gaining and maintaining employment and engaging in recreation and leisure activities with their peers.

Several interventions using TAI have been used with students with IDD to promote employment skills. First, Morgan and Salzberg (1992) conducted two studies to examine the effects of video-assisted training on acquisition, generalization, and maintenance of employment related social skills. The first study used a multiple baseline across participants design with three participants with ID to determine effects of video-assisted training on the percentages of correct social interactions and number times assistance was requested when encountering a problem at work during video training, work setting, and 60 day follow-up assessments. Results from the first study indicated a functional relation between video-assisted training and participants ability to request assistance and interact socially during video training; however, two of the three participants struggled to generalize their skills to the work setting until after they rehearsed asking for help. To address the limitations of generalization from the first study, the second study sought to investigate the effects of video-assisted training on two participants with ID's ability to fix and report four work problems. Using a multiple baseline across participants design, researchers taught two participants how to identify and fix work problems using video-assisted instruction; as well as, allowed for them to rehearse how to fix and report one or two work problems. Findings revealed after participants rehearsed how to fix and report work problems, they began to fix and report remaining problems with video-assisted training alone. However, a functional relation was not determined since only two participants were included and replication was needed across three participants based on the design implemented. Results from both studies suggested video instruction could be a useful and effective way to teach skills to individuals with ID.

Next, Taber, Alberto, and Fredrick (1998) conducted a study to compare the effects of single and multiple-word auditory prompts on the ability of participants to follow a chain of vocational tasks across two work sites in the community. Authors used an alternating treatment design within a multiple probe across settings with an embedded withdrawal to analyze and evaluate the effect of self-operated single and multiple-word auditory prompts on changes in worker's task performance across two job sites. Findings indicated a functional relation between self-operated auditory prompts and increases in independent task performance of workers with moderate ID. Additionally, results suggested self-operated auditory prompts could motivate desired behavior and were effective for teaching workers with moderate ID to manage their own task changes in work settings. Also, findings indicated this prompting system could be generalized across settings without the need for any additional training and both single- and multiple-word prompts were effective; although, multiple-word prompts resulted in more independent task changes and quicker transitions between tasks than single-word prompts for most workers.

Then, Davies, Stock, and Wehmeyer (2002a) investigated the effects of a portable multimedia training system on the independent vocational task completion of individuals with ID across two job tasks. Researchers used a two-group within-subjects design to compare the impact on all participants with ID who participated in vocational tasks with and without support from the portable training device (i.e., Visual Assistant). Results indicated individuals performed tasks with increased accuracy and independence when using the Visual Assistant.

Finally, Kellems and Morningstar (2012) evaluated the effectiveness of video modeling on the job performance of young adults with ASD. Using a multiple probe across participants design, researchers used video modeling delivered through an iPod with written instructions to teach job-related tasks to four young adults with ASD. Participants were employed at various locations (i.e., bowling alley, airport, community center, and museum) and all jobs were related to maintenance tasks. Outcomes indicated a functional relation between video modeling and increases in job performance for all four participants. Additionally, all participants were able to use the iPod independently and maintained their skills over time. Employers and job coaches indicated video modeling was helpful and socially acceptable for community employment settings.

Findings from these studies indicate the effectiveness of using TAI to teach employment skills to individuals with IDD. Throughout these studies individuals were taught key skills for employment including increased task completion (Davies, Stock, & Wehmeyer, 2002a; Kellems & Morningstar, 2012; Taber, Alberto, & Fredrick, 1998), independence (Davies et al., 2002a, Kellems & Morningstar, 2012; Taber et al., 1998), and initiation of communication and appropriate social interactions (Morgan & Salzberg, 1992). In addition to these studies, components of self-determination have been taught in conjunction with TAI to increase employment skills in individuals with IDD.

TAI and Self-Determination

As mentioned previously Shogren et al. (2015) suggested some components of self-determination included self-management, self-awareness, and self-regulation. Several studies have used TAI in conjunction with self-management, self-awareness, or self-regulation to teach employment skills to students with IDD.

First, Davis, Brady, Williams, and Burta (1992) investigated the impact of self-operated auditory prompting tapes on fluency of task performance of individuals with severe ID while working on vocational tasks. Using a multiple baseline across participants design with three participants with severe ID, authors examined the effects of prompting intervention on the number of items completed correctly (i.e., filled salt and pepper shakers; dry trays lined) during their 50-minute work period. Results indicated a functional relation between self-operated auditory prompting and students fluency and accuracy on work tasks. Additionally, this type of prompting system reduced the need for on-site supervision and increased each student's level of independence on the job.

Next, Steed and Lutzker (1999) conducted a study to examine the effectiveness of recorded audio prompts on the independent task completion of individuals with mild and moderate ID; as well as, co-morbid mental health disorders. Using a multiple baseline across tasks design, researchers investigated the impact of recorded audio prompts on an audio cassette player on the percentage of steps completed independently across three different vocational tasks. Results indicated a functional relation between recorded audio prompts and an increase in task completion for each job task. Additionally, both participants were able to generalize those skills to an additional job site; as well as, when the instructors presence was faded and audio prompts were removed, both participants were able to maintain their performance at criterion or higher.

Additionally, Mechling and Savidge (2011) conducted a study to explore the effects of using a personal digital assistant (PDA) on the completion of new vocational task boxes and transition time within and between tasks. Using a multiple probe across tasks replicated across three students with ASD, researchers examined the impact of a

PDA with multiple levels of prompts (i.e., video, picture + auditory, and picture prompts) on students' ability to transition within and between vocational tasks and completion of new tasks. Findings indicated a functional relation between PDA and students' ability to transition between tasks and complete new tasks. In addition, results demonstrated all students transitioned within tasks equally as well using either the PDA or the task strip and one student began to self-fade his use of the most intrusive prompts.

Then, Bereznak, Ayres, Mechling, and Alexander (2012) examined the effects of video prompting via an iPhone on the completion of vocational and independent living tasks of three high school students with ASD. Researchers used a multiple probe across behaviors design replicated across students to determine the effectiveness of the video prompting intervention. Findings demonstrated a functional relation between video prompting and an increase in vocational and independent living task completion across all tasks (i.e., using a washing machine, making noodles, using a copier). In addition, two participants were able to learn to self-prompt using the iPhone and teach themselves skills needed to complete their job tasks independently.

Next, Bouck, Savage, Meyer, Taber-Doughty, and Hunley (2014) conducted a study to compare the effects of low-tech (e.g., paper and pencil) and high-tech (e.g., iPad) self-management interventions on the independent task completion of three middle school students with ASD. Using an alternating treatment design, researchers investigate the effectiveness of two self-monitoring interventions (i.e., low-tech, high-tech) on students' ability to complete food preparation tasks independently. Results indicated both interventions increased student's level of independence and decreased the need for prompting; however, students demonstrated higher levels of independence when using

the iPad to self-monitor their behavior. Students were also able to maintain their level of independence with food preparation tasks after summer vacation. Additional results from social validity surveys indicated students preferred the iPad compared to paper and pencil.

Recently, Smith et al. (2016) investigated the effects of progressive time delay (PTD) on teaching four high school students with ASD and ID how to initiate self-instruction when presented with a task direction for an untrained task. Using a multiple probe across settings replicated across participants design, researchers investigated the effectiveness of PTD to teach students self-instruction skills using an iPhone on untrained vocational and living skills across three settings. Results indicated a functional relation between PTD and students' ability to use self-instruction skills using an iPhone to complete vocational and functional tasks. Additional findings included: (a) two participants were able to generalize self-instruction skills to two new settings; (b) two participants needed instruction in two settings, but were able to generalize their skills to a third setting; and (c) all participants maintained self-instruction skills for one week after meeting mastery criterion in each setting.

Summary of TAI

TAI has evolved considerably over time, starting with teaching machines (Pressey, 1924; Skinner, 1954) and progressing to multiple modes available today (Stephenson & Limbrick, 2015). TAI has been identified as an effective method of instruction for teaching students with IDD academic skills (Knight et al., 2013; Pennington, 2010; Root et al., 2015), combination of academic, transition, and independent living skills (Kagohara et al., 2013), and transition and employment skills

(Wehmeyer et al., 2004). TAI in conjunction with components of self-determination has been able to assist students with IDD with job training and support (Smith et al., 2016). Results from these studies indicated TAI has been effective in increasing employment skills for individuals with IDD and provide implications for future research to investigate the effects of TAI on: (a) increased independence and reduced dependence on a teacher or job coach (Bouck et al., 2014; Davis et al., 1992; Smith et al., 2016); (b) increased accuracy and productivity (Davies et al., 2002a; Kellems & Morningstar, 2012); (c) increased maintenance and generalization to other job sites or tasks (Steed & Lutzker, 1999; Taber et al., 1998); (d) maintenance of students' accuracy and fluency when prompts are faded over time (Davis, Brady, Williams, & Burta, 1992), and (e) development of social skills (Kagohara et al., 2013). This study will address suggestions for future research by including TAI as a way for students to monitor their performance independently while working on a job using a handheld device. Also, students will be learning soft skills for employment that include social skills aspects such as communication and working with others. Lastly, TAI will be used during the phase of the intervention (e.g., *U-GRADE*) where the interventionist's presence is faded over time to promote maintenance of students' performance, as well as, increase their independence and reduce their dependence on adult supervision while working.

Mnemonic Instruction

The previous section reviewed TAI as an effective way to teach academic and employment skills to students with IDD; another valid instructional method includes mnemonic strategy instruction. This theme will review the literature on defining

mnemonic strategies and instruction using mnemonic strategies for students with disabilities.

Defining Mnemonics

Mnemonic strategies have been defined as systematic procedures for improving memory through the use of cues for recall such as a key word, picture or visual, or sentence (Bellezza, 1981; Lombardi & Butera, 1998). Mastropieri and Scruggs (1998) further described mnemonic strategies as a systematic way to enhance memorization by developing ways for learners to take in information in a way that makes it easier for them to retrieve it. Scruggs, Mastropieri, Berkeley, and Marshak (2010) defined specific mnemonic strategies associated with improving student performance and memorization including (a) keyword method, (b) pegword method, and (c) letter strategies.

First, the keyword method is defined as using a similar word to represent unfamiliar information (e.g., vocabulary words, people, places) that could be associated with the information that needs to be remembered. An example described by Scruggs et al. (2010) included using the keyword “bunny” as a way to remember a new vocabulary word *bunnia*, a Hindu word for merchant or trader. Bunny was described as a possible key word for this word because it looks similar to the word, is easily visualized and drawn (e.g., a picture of a person selling or trading bunnies), and could help a learner remember the meaning of *bunnia* by thinking of someone selling or trading bunnies.

Next, the pegword method was defined as using a rhyming word to represent a number as a way to remember numbered or ordered information. An example included the word gate as a rhyming word for eight and a teacher showing a picture of a spider weaving a web on a gate as a way for students to remember spiders have eight legs.

Lastly, the most commonly used mnemonic strategies included letter strategies. Letter strategies were defined in two ways (a) using an acronym where each letter represents a word (e.g., HOMES to remember the great lakes, Huron, Ontario, Michigan, Eerie, Superior), and (b) an acrostic using the first letters of words in a sentence to help students remember a list of steps or sequence of events (e.g., Please Excuse My Dear Aunt Sally to remember the order of operations that should be followed for solving a math problem, Parentheses, Exponents, Multiplication, Division, Addition, Subtraction). For this study a letter strategy will be used to assist students in memorizing a list of steps they will follow during the intervention.

Mnemonics Instruction for Students with Disabilities

Mnemonic instruction has been used to teach students with disabilities academic content and functional skills such as: (a) science vocabulary (King-Sears, Mercer, & Sindelar, 1992; Levin, Morrison, McGivern, Mastropieri, & Scruggs, 1986); (b) filling out a job application (Nelson et al., 1994; Lee et al., 2006); (c) managing problem behaviors (Carpenter, 2001); (d) mathematical problem solving (Cuenca-Carlino, Freeman-Green, Stephenson, & Hauth, 2016; Freeman-Green, O'Brien, Wood, & Hitt, 2015; Manalo, Bunnell, & Stillman, 2000; Test & Ellis, 2002); (e) recalling multiplication facts (Ipoulos, 2010); (f) social studies vocabulary (Fontana, Scruggs, & Mastropieri, 2007); and (g) within self-regulated strategy development (SRSD) to teach writing skills (Konrad, Clark, & Test, 2017; Konrad & Test, 2007; Konrad, Trela, & Test, 2006).

Additionally, mnemonic strategies have been used address problem behaviors for students with disabilities including within self-directed learning strategies (e.g., problem

solving, self-instruction, self-monitoring), through the keyword method or letter strategy (Smith et al., 1994). For example, Smith, Siegel, O'Conner, and Thomas (1994) conducted a study to investigate the effects of a cognitive-behavioral training (CBT) strategy on the problem behaviors of upper elementary aged (i.e., 10 and 11 years old) students with disabilities. Using a multiple baseline across participants design, researchers investigated the effects of the CBT strategy ZIPPER on three students with behavioral disorders' problem behaviors. ZIPPER was a mnemonic including the following steps Z-zip your mouth, I-identify the problem, P-pause, P-put yourself in charge of your choices, and R-Reset. During intervention students (a) were introduced to the mnemonic, (b) were shown through modeling how to follow the steps of ZIPPER, (c) participated in role-playing, and (d) practiced using the strategy. Results indicated a functional relation between the CBT strategy ZIPPER and a decrease in problem behavior. In addition, all three students were able to learn and apply the ZIPPER strategy and maintain low levels of problem behavior over time.

In addition to improving problem behavior for students with disabilities, several studies demonstrated positive effects of teaching students to use a mnemonic strategy independently and generalize the steps of the mnemonic to different concepts (Mastropieri et al., 1985; Scruggs & Mastropieri, 1992). For example, Mastropieri, Scruggs, Levin, Gaffney, and McLoone (1985) conducted two studies to investigate the effects of key word mnemonic (i.e., study 1) and mnemonic imagery (i.e., study 2) instruction compared to direct instruction on the ability of students with learning disabilities to learn definitions of science vocabulary words. In the first study researchers used a between groups comparison design to determine the impact of key word

mnemonic instruction compared to direct instruction on students with LD's acquisition and recall of science vocabulary. Findings demonstrated key word mnemonic instruction was more effective than direct instruction. The second study used a group comparison design to compare the effects of mnemonic imagery instruction and direct instruction on students with LD's ability to acquire and recall science content. During mnemonic imagery instruction students learn how to create their mnemonic illustrations. Results indicated mnemonic imagery instruction was more effective than direction instruction and students were able to use the mnemonic independently, develop their own strategy for learning, and generalize the strategy to other vocabulary words. Researchers compared effects from the first study to the second study and found students who learned key word mnemonic instruction (i.e., study 1) demonstrated higher scores compared to scores of students who received mnemonic imagery instruction (i.e., study 2).

In addition, Scruggs and Mastropieri (1992) conducted a study to examine the effectiveness of mnemonic instruction on the acquisition of science content of middle school students with disabilities. Participants included 20 students with LD and one student with mild ID. Using a within subjects group design in which two special education classes received both mnemonic instruction and traditional instruction for life science units counterbalanced across classrooms. Results indicated statistically significant effects for mnemonic instruction compared to traditional instruction. In addition, students were able to use the mnemonic strategy independently, were taught to generate their own mnemonic strategy, and were able to generalize those skills to new content. Both, Mastropieri et al. (1989) and Scruggs and Mastropieri (1992) taught students to generalize the learned mnemonic strategy to other content areas including science and

social studies. These studies demonstrated the ability to teach students to use mnemonic strategies independently as a way to increase generalization to other areas.

Mnemonic instruction for students with IDD. Research suggests students with IDD “show increased learning and memory when the content is presented in meaningful contexts” (Taylor & Turnure, 1979, p. 660). Mnemonic strategy has the potential to highlight areas of cognitive strength for students with IDD (e.g., memory for pictures, acoustic memory; Lee et al., 2006). Of the studies supporting instructional practices mentioned above, several demonstrated positive effects with students with IDD.

First, Mastropieri and Scruggs, (1989) investigated the effects of teacher delivered mnemonic instruction on the acquisition of social studies content of students with disabilities, including students with ID. Using a group comparison design, researchers examined the impact of mnemonic instruction compared to text book instruction on students performance on chapter tests for immediate and delayed recall. Results indicated statistically significant differences in student’s scores under the mnemonic instruction compared to traditional instruction (i.e., $p=.000$). Overall, students receiving mnemonic instruction scored an average of 89.9% correct on weekly tests compared to 74.9% correct scored by students receiving traditional instruction.

Second, Test and Ellis (2005) conducted a study to examine the effects of an additional mnemonic strategy, LAP Fractions, on the addition and subtraction of fractions with uncommon denominators of six middle school students with either a learning disability in math or an ID. Researchers used a multiple probe across participants design to investigate the impact of LAP Fractions strategy instruction on the percentage of correct steps memorized by students and the percent correct on a test of fraction addition

and subtraction problems. LAP Fractions strategy includes a mnemonic to help students remember the steps to follow including (a) L- look at the sign and denominator, (b) A-ask yourself the question, and (c) P-pick your fraction type. Findings indicated a functional relation between LAP Fractions and student acquisition of the LAP strategy and their ability to use the strategy to correctly solve addition and subtraction fraction problems.

Next, Konrad, Trela, and Test (2006) sought to determine the effects of GO 4 IT...NOW! instruction on the paragraphing writing skills of secondary students with multiple disabilities. Authors used a multiple probe across participants design to investigate the impact of GO 4 IT...NOW! strategy instruction on content and quality of student's Individual Education Program goal paragraphs. GO 4 IT...NOW! strategy instruction is a learning strategy instructing students to write paragraphs about goals and objectives while using a mnemonic to help them memorize the steps (i.e., G-goals, O-objectives, 4-4 objectives, I-identify, T-timeline) and generalize those skills to other types of paragraphs by learning to self-evaluate their paragraphs (i.e., N-named their topic, O-ordered their steps, W-wrapped it up by restating the topic). Results indicated a functional relation between the intervention and an increase in students paragraph writing skills. Findings indicated all students IEP goal paragraph writing increased in quality and content, students generalized their skills to other types of paragraph writing, and maintained their improvement over time.

Finally, Konrad, Clark, and Test (2017) conducted a study to extend findings from Konrad et al. (2006) and investigate the effects of GO 4 IT...NOW! strategy instruction on the expository writing skills of high school students with IDD. Using a multiple probe across participants design, authors examined the impact of GO 4

IT...NOW! instruction on the quality of student's expository paragraphs; as well as, content and quality of students IEP goal paragraphs. Results indicated a functional relation between the intervention and improved paragraph writing for all students.

Mnemonic instruction for employment skills. Previous studies described included using a mnemonic to teach academic skills. One identified study used a mnemonic strategy to teach students with disabilities a skill needed for employment (Nelson, Smith, & Dodd, 1994). This study was designed examine the impact of mnemonic strategy instruction on the completion of job applications by secondary students with LD. Researchers used a pretest-posttest control group design to investigate the impact of mnemonic strategy instruction compared to traditional instruction on students with LD's ability to correctly complete a job application by not leaving anything required blank (e.g., omissions), demonstrating neatness, and writing the correct information in the correct places throughout the application. Students in the mnemonic strategy condition learned the letter mnemonic strategy, SELECT to assist them in remember the six steps they needed to follow to fill out a job application including (a) S-survey the entire job application, (b) E-look for Emphasized words, (c) L-look closely at the application for Location cues indicating where requested information should be entered, (d) E-enter the correct information into the appropriate location, (e) C-check to see if the information entered is accurate, and (f) T-turn in the completed application to the appropriate person. Results indicated students in the mnemonic strategy condition had significantly lower numbers of information omission errors and location errors compared to students in traditional instruction condition. In addition, students in the

mnemonic condition had statistically significant higher overall ratings on their job applications compared to students in the traditional condition.

Summary Mnemonics

Mnemonics have been found to increase students with disabilities performance and memorization of content (Scruggs et al., 2010). Mnemonic instruction has been used to teach various academic content and functional skills to students with disabilities. It has also been used to improve problem behaviors (Smith et al., 1994) as well as to teach students to use the strategy independently and generalize skills to other areas (Mastropieri et al., 1985; Scruggs & Mastropieri, 1992). Research also suggested mnemonic instruction can be beneficial for students with IDD (Lee et al., 2006) and several studies demonstrated positive results when using mnemonic instruction with students with IDD (Konrad, Clark, et al., 2017; Konrad, Trela, et al., 2006; Mastropieri & Scruggs, 1989; Test & Ellis, 2005). Additionally, one study was found teaching employment skills to students with disabilities (i.e., correctly filling out a job application; Nelson, Smith, & Dodd, 1994) indicating students with disabilities can use a letter mnemonic strategy to assist them in remembering steps of a task. Despite positive results and implications supporting mnemonic strategies when teaching students with IDD, only one identified intervention used mnemonic instruction to teach students with disabilities an employment skill and only included students with LD. Due to the limited employment related research using mnemonics and positive results providing support for including mnemonic strategies when teaching students with IDD; this study will utilize a mnemonic to assist students in memorizing the strategy, increase independence, and generalizing their skills to multiple areas.

Non-Targeted Information

Previous themes have focused on teaching employment skills to students with IDD in order to assist them in attaining better post-school employment outcomes. In addition to employment skills, academic skills have been correlated with better post-school employment outcomes for students with disabilities (Benz, Yovanoff, & Doren, 1997; McDonnell & Crudden, 2009). Therefore it is important that students with IDD learning both soft skills and academic skills. This theme will review literature on (a) combining transition and academic instruction, (b) definition of incidental learning, (c) functional and vocational skill instruction with embedded academic content, and (d) self-graphing with embedded functional mathematic skills.

Combining Transition and Academic Instruction

The standards-based reform movement has focused on ensuring access to the general curriculum and academic instruction is provided for all students (Thurlow, 2002). Therefore, Lee, Wehmeyer, Palmer, Soukup, and Little (2008) discussed the importance of coupling transition and standards-based education to ensure students with disabilities receive adequate instruction in both areas. Bartholomew, Papay, McConnell, and Cease-Cook (2015) defined two approaches to teaching transition and academic skills simultaneously including: (a) starting with an academic skills and extending it to include relevant transition skills (e.g., literacy instruction with included conflict resolution and social skills instruction); or (b) starting with a transition skills and embedding relevant academic skills (e.g., food preparation and fraction instruction). One identified strategy to combine transition and academic content includes incidental learning by embedding non-targeted academic information (NTI) within systematic instruction (Wolery, Holcombe,

Werts, & Cipolloni, 1993).

Definition of Incidental Learning

Wolery, Ault, Gast, Doyle, and Mills (1990) defined incidental learning as acquisition of information that a student is exposed to, but not directly taught or reinforced. Recently, Westling et al. (2015) defined incidental learning as what happens when a teacher is providing direct instruction to a student or students and includes additional information by embedding the information within the task. Information could be embedded while providing directions, targeted instruction, within a controlling prompt, or during reinforcement. Previous research indicates incidental learning can occur by including NTI and could be an effective way to maximize learning during instruction (Collins, Hendricks, Fetko, & Land, 2002).

Non-targeted instruction. NTI has been defined as the acquisition of additional information provided during the antecedent or consequent portion of an instructional trial (Werts, Wolery, Holcombe, & Gast, 1995). NTI has been embedded within an instructional sequence in four different locations including: (a) antecedent (Daugherty, Grisham-Brown, & Hemmeter, 2001); (b) task direction (Doyle, Schuster, & Meyer, 1996; Roark, Collins, Hemmeter, & Kleinert, 2002); (c) prompt hierarchy (Doyle, Gast, Wolery, Ault, & Meyer, 1992; Fiscus, Schuster, Morse, & Collins, 2002); and (d) consequent event (Jones & Collins, 1997). Incidental learning can be valuable for several reasons including it can (a) maximize instructional efficiency since it can be used at different times without direct instruction, (b) allow teachers to take advantage of natural learning opportunities, and (c) be useful in inclusive environments (Westling et al., 2015).

Functional and Vocational Skill Instruction with Embedded Academic Content

Several studies have embedded NTI within vocational skill instruction for secondary students with IDD. First, Jones and Collins (1997) conducted a study to investigate the effects of the system of least prompts (SLP) with embedded NTI on the microwave cooking skills of three secondary students with ID. Using a multiple probe across behaviors design replicated across participants, researchers examined the impact of SLP with embedded nutritional and safety information on the microwave food preparation skills of cooking hot chocolate, popcorn, and a baked potato. NTI of nutritional and safety facts were embedded within the prompt hierarchy and instructive feedback. Results indicated a functional relation between SLP with embedded content and students' ability to perform microwave cooking skills. In addition to gaining microwave cooking skills, all students maintained skills over time, two students generalized all skills to their home environment, and one student generalized all, but one skill, to their home environment. Lastly, all students learned NTI within the prompt hierarchy (i.e., range: 83%-100%) and instructive feedback (i.e., range: 100%).

Next, Taylor, Collins, Schuster, and Kleinert (2002) examined the impact of SLP with multiple exemplars of materials and embedded NTI on the laundry skills of four high school students with moderate ID. Researchers used a multiple probe across students design to evaluate the effectiveness of SLP with embedded NTI of functional laundry sight words on percentage of correct steps completed for doing laundry. Results indicated a functional relation between SLP with embedded NTI and students' ability to perform the correct steps of doing laundry. All students acquired and maintained targeted laundry skills; as well as, generalized skills to two community Laundromats. In addition, students

acquired most of the NTI of laundry sight words and generalized those skills to the community setting.

Then, Karl, Collins, Hager, and Ault (2013) conducted a study to investigate the effects of simultaneous prompting with embedded academic content on the acquisition and generalization of core content of four secondary students with moderate ID. Using a multiple probe across behaviors design replicated across participants, authors examined the impact of simultaneous prompting with embedded instruction during a functional cooking activity on students' acquisition and generalization of reading, mathematic, and science content. Results indicated a functional relation between simultaneous prompting with embedded instruction and acquisitions of academic content of students with moderate ID. All four students successfully learned reading, mathematic, and science content; as well as, generalized those skills to a community grocery store setting to (a) read and define words on new cake mixes, (b) calculate percent off of their purchase, and (c) answering questions about force regarding pushing a grocery cart.

Recently, Collins, Terrell, and Test (2017) conducted a study to investigate the effects of simultaneous prompting with embedded science content on the acquisition of an employment skill of four high school students with mild ID. Using a multiple probe across participants design, researchers examined students' ability to follow steps to care for a plant in a greenhouse while embedding NTI on photosynthesis within instructive feedback when students completed a step of the task analysis. Findings revealed a functional relation between simultaneous prompting and the acquisition of steps for taking care of a plant. All students reached mastery criterion on the vocational task of caring for a plant and acquired some of the science content during instructional sessions

limiting the time it took to provide direct instruction on photosynthesis content following the intervention for each student to learn all of the NTI.

Self-Graphing with Embedded Functional Mathematic Skills

Only one study has measured NTI focused on mathematics (Karl et al., 2013). However it was focused on computation skills. None of the previous studies investigated algebraic skills that would be taught during high school. However, one study's, Shimabukuro, Prater, Jenkins, and Edelen-Smith (1999) findings did result in students learning graphing skills. This study was designed to investigate the effects of self-monitoring of academic performance of secondary students with LD using a multiple baseline across behaviors design replicated across participants. Results indicated a functional relation between self-monitoring and improved academic performance in reading comprehension, mathematics, and written expression. To self-monitor their performance, students graphed their scores to monitor their progress in each academic area. Additional findings included students' also acquired non-targeted functional skills of computing percentages, plotting, and analyzing graphs.

Summary of Non-targeted Information

Academic skills have been associated with positive employment outcomes for students with disabilities (Benz et al., 1997; McDonnell & Crudden, 2009). Lee et al. (2009) described the importance of bringing together transition and academic instruction to ensure students with disabilities are receiving quality instruction in both areas. One identified method for combining academic and transition content is incidental learning through embedded NTI (Wolery et al., 1993). Studies have embedded NTI within vocational or functional skill instruction to teach: (a) nutritional and safety facts (Jones &

Collins, 1993); sight words (Taylor et al., 2002); reading, math, and science content (Karl et al., 2013); and photosynthesis science content (Collins et al., 2017). Only one study taught mathematic content (Karl et al., 2013), however, it was focused on computation skills and one additional study found students were able to learn non-targeted graphing information by self-graphing their performance (Shimabukuro et al., 1999). Since there are not any identified studies measuring acquired graphing skills as a result of self-graphing with students with IDD and the minimal research on embedded non-targeted mathematics instruction, this study will seek to determine if students with IDD can acquire non-targeted graphing information by self-graphing their performance daily and apply that knowledge to graph a novel data set after completing intervention.

UPGRADE Your Performance Focused on Generalization

The lack of soft skills has been identified as a barrier to employment for individuals with IDD included soft skills (Riesen et al., 2014). However, interventions described throughout this chapter have not focused on teaching students with IDD soft skills for employment. One identified intervention to teach soft skills is *UPGRADE Your Performance*. This strand will (a) provide an overview of *UPGRADE Your Performance*, (b) review previous studies, (c) connect *UPGRADE Your Performance* to previous strands, (d) maintenance and generalization, (e) define generalization, (f) describe programming for generalization, and (g) *UPGRADE Your Performance* and maintenance and generalization.

Overview of UPGRADE Your Performance

UPGRADE Your Performance is a curriculum using research-based practices to teach soft skills. *UPGRADE Your Performance* can provide students with a strategy for

self-evaluation, including self-monitoring, goal setting, self-graphing, and TAI where students learn to self-monitor themselves independently. *UPGRADE Your Performance* also utilizes a job performance rubric (JPR) to assess students' soft skills in the following five areas (a) attitude and cooperation, (b) reliability, (c) productivity and on-task, (d) quality of work, and (e) teamwork and communication.

Prior to *UPGRADE Your Performance*, students are evaluated on JPR while working on an in-school and/or community job site. Then, two days of goal setting instruction occur with students. The first day of instruction targets (a) an introduction to the soft skills measured by the rubric, (b) the importance of soft skills for employment, and (c) time for students to view their current scores on the rubric and choose one area of the rubric they want to improve on. The second day of instruction provides explicit instruction on the area of the rubric they chose in the previous lesson. The second goal-setting lesson includes (a) instruction on key vocabulary words, (b) examples and non-examples of vocabulary words, (c) role-play scenarios, (d) video instruction where students will grade the person in the video on the self-selected component of JPR, and (e) to end the lesson, students set a goal for themselves on the self-selected area of JPR. After completing goal-setting instruction, students begin instruction on *UPGRADE Your Performance*.

UPGRADE Your Performance also includes a mnemonic to assist students in remembering the steps of the intervention (i.e., U=You evaluate yourself, P=Professional evaluates you, G=Graph your scores, R=Restate your goal and determine if you met it, A=Acknowledge what you did well, D=Decide what you need to improve on, and E=Execute improvements tomorrow to meet your goal). Each day after working on an in-

school or community job site (a) students assess themselves on the JPR, (b) are provided with the interventionist's scores of their performance, (c) graph both scores on a graphing worksheet to analyze and compare them, (c) determine if they have achieved their goal, (d) explain what they did well and what they should improve on, and (e) generate a plan to help them improve and make progress toward meeting their goal the following day. Students continue to follow these steps everyday until they reach mastery criterion (i.e., 3 or 4 in each subcomponent of the rubric for 4 consecutive days). Currently, two studies have been conducted examining the effects of *UPGRADE Your Performance* on the acquisition of soft skill of students with disabilities.

Previous *UPGRADE Your Performance* Studies

First, Clark, Konrad, et al. (in press) conducted a study to evaluate the effects of *UPGRADE Your Performance* instruction on the attainment of soft skills of four high school students with disabilities. Using a multiple probe across participants design to examine students' performance on a self-selected soft skill area; as well as, their ability to generalize skills across two in-school job sites and non-targeted soft skill areas. Findings indicated a functional relation between the intervention and increased performance in a chosen soft skill area by all students. In addition, all students were able to generalize those skills across soft skill areas and job sites, and maintain skills over time. Results from this study demonstrated the potential for *UPGRADE Your Performance* as a way to teach students with disabilities soft skills for employment. Limitations included students' inability to maintain skills over time at their highest level achieved during intervention and to generalize their skills immediately to a second in-school job site.

To address these limitations, a second study (Clark, Test et al., in press) was

conducted to implement changes including: (a) an increase in mastery criteria (i.e., changed from 3 or 4 or higher in each subcomponent area for two consecutive days to 3 or 4 or higher in each subcomponent area for four consecutive days); (b) an added maintenance period between job sites; and (c) a fading procedure within maintenance periods where students continued to follow *UPGRADE* steps, without the P to self-evaluate and self-monitor themselves independently. The fading procedure during maintenance periods is called *U-GRADE* (U-You Grade yourself, G-Graph your scores, R-Restate your goal and determine if you met it, A-Acknowledge what you did well, D-Decide what you need to do better, E-Execute improvements tomorrow to meet your goal).

In addition, the second study addressed the limited research using technology to self-monitor and self-graph data (Bruhn, McDaniel, & Kreigh, 2015) by implementing a digital element for recording and graphing data during *U-GRADE* phases using a shared spreadsheet through Google drive students could access from a hand-held device (e.g., iPhone, iPod, android phone). Clark, Test, et al. (2017) conducted this second study to investigate the effects of *UPGRADE Your Performance* on the soft skills of secondary students with disabilities across in-school and community based job sites. Using a multiple probe across participants design, researchers evaluated the impact of *UPGRADE Your Performance* on students' acquisition of soft skills while working on an in school and community based job site. *UPGRADE Your Performance* during community based job sites utilized TAI to deliver instruction via an iPad. Results demonstrated a functional relation between *UPGRADE Your Performance* and improved performance in a self-selected soft skill area for all students across both school and community job sites. In

addition, all students (a) were able to self-monitor their own performance using a handheld device, (b) increased their independence on the job, and (c) generalized their skills to a second setting and non-targeted soft skill areas measured by the JPR. Authors suggested future research should utilize a multiple baseline across behaviors design to investigate targeting three soft skill areas to determine if generalization will occur to meet mastery criteria in all soft skill areas.

Connection to Previous Strands

Findings from both studies provided preliminary evidence to support *UPGRADE Your Performance* as a way to teach students with disabilities soft skills for employment. The current studies included participants with the following disabilities (a) ID, (b) ASD, (c) emotional behavior disorder and ID, (d) SLD, (e) ID and deaf and hard of hearing, and (f) other health impaired. This provides some evidence for students with IDD, but a future study focused specifically on students with IDD will add to the evidence base.

Additionally, *UPGRADE Your Performance* includes components of self-determination such as self-evaluation, self-monitoring (i.e., self-graphing), and goal setting and attainment. Both studies found students' performance did not increase after two days of goal-setting instruction which confirms findings from Copeland and Hughes (2002) suggesting goal setting instruction alone may not be sufficient to increase students' performance and found when goal setting was taught in conjunction with other instructional strategies it may be more effective. However, after the introduction of *UPGRADE Your Performance*, including multi-components of self-determination (i.e., self-evaluation, self-monitoring, and goal setting and attainment), students were able to increase their performance in a self-selected soft skill area. These results extended

literature supporting multi-component interventions using components of self-determination to teach employment skills (e.g., Nittrouer et al., 2016).

The second study added TAI to provide *UPGRADE Your Performance* during community job sites and as a way to fade the presence of the interventionist and allow students to self-evaluate themselves during *U-GRADE* phases. Also, added *U-GRADE* phases reduced the need for teacher support during job sites. Students were able to independently monitor their performance, reflect on what they needed to improve on, and make changes the next day to improve or maintain their performance. Data were collected during these phases the same way as baseline and maintenance probes were collected. Students did not receive any verbal feedback or instruction time, they were observed and their scores were entered into the shared spreadsheet. Findings from the second study indicated students were able to consistently perform well without verbal feedback or instruction during this phase affirming previous research reviewed on TAI where students were able to reduce their support needs on the job utilizing hand-held technology as a vocational support (Gentry et al., 2015).

UPGRADE Your Performance includes two mnemonic letter strategies, one for students to memorize the steps of the intervention (i.e., U=You evaluate yourself, P=Professional evaluates you, G=Graph your scores, R=Restate your goal and determine if you met it, A=Acknowledge what you did well, D=Decide what you need to improve on, and E=Execute improvements tomorrow to meet your goal) and the second during *U-GRADE* phases where the *P* is dropped to increase each participants ability to self-evaluate themselves independently. Findings from both studies revealed students were able to memorize the steps of the intervention and follow them independently during

UPGRADE and *U-GRADE* phases. Particularly, during *U-GRADE* phases used their hand-held device to evaluate and monitor their performance. These results supported previous mnemonic instruction research as a way to increase students with disabilities memorization and performance (Scruggs et al., 2010). Results from these studies also extend previous findings indicating students can learn to use a mnemonic strategy independently and generalize skills to other areas (Mastropieri et al., 1985; Scruggs & Mastropieri, 1992).

One area that has not been addressed yet in either study investigating the effects of *UPGRADE Your Performance* is the measurement of incidental learning through NTI of graphing skills. Instructional programs identified the development of graph production and interpretation skills as one of the most important objectives of K-12 mathematics education (National Council of Teachers of Mathematics [NCTM], 2000). According to Leinhardt, Zaslavsky, and Stein (1990), the introduction of graphs represents an important landmark in the middle school mathematics curriculum and builds the foundation skills needed to be successful in high school mathematics. Graphing is an essential component of two major topics of high school Algebra identified by the National Mathematics Advisory Panel Report (2008). During *UPGRADE Your Performance* instruction students graphed their scores and the interventionist's scores on a graph daily on a graphing worksheet. They used a graph with a labeled x and y-axis to graph their scores. The x-axis represents the day or session of instruction and the y-axis represents their total score. They used two different colored pencils to represent their score and the teacher's score. Once the points are graphed, students connected same colored points to create a line. Then, students were asked to analyze the graph to

determine if they were making progress toward their goal. They also observed and reported differences between their scores and the interventionist's scores. As students continued through *UPGRADE Your Performance* lessons they received fewer prompts and instruction in order to increase student independence with completing each step of the intervention. Graphing skills are considered to be an important aspect of high school mathematics (NCTM, 2000); therefore, this study will seek to determine if students can learn graphing skills by assessing their graphing skills of a data set before and after intervention as possible incidental learning of NTI.

Maintenance and Generalization

A second area that needs to be addressed based on findings from the first two studies is the need to promote maintenance and generalization of soft skills learned. While generalization across soft skills was observed in both studies, students were unable to reach and maintain mastery criteria in all non-targeted soft skill areas. This study will focus on programming to increase maintenance and generalization acquired soft skills.

Definition of Generalization

Learning a new skill or behavior can be useful if it can be retained over time and applied to novel situations or settings. Students with IDD often have trouble generalizing and maintaining new skills (Westling et al., 2015). Stokes and Baer (1977) conducted a literature review of applied research and found generalization could be described as “the occurrence of relevant behavior under different, non-training conditions (i.e., across subjects, settings, people, behaviors, and/or time) without the scheduling of the same events in those conditions as had been scheduled in the training conditions”(p. 350). Another definition includes responding appropriately in untrained situations (Haring,

1988). Stokes and Osnes (1988) indicated outcomes most important for practitioners and applied researchers include some transfer of the effects of the intervention to new situations, behaviors, settings, and over time. Baer, Wolf, and Risley (1968) described generality of behavior change as one of seven dimensions of applied behavior analysis, and deduced that, “in general, generalization should be programmed, rather than expected or lamented” (p. 97). Programming for generalization should be considered when developing and implementing an intervention.

Programming for Generalization

Stokes and Osnes (1986) described three principles of programming for generalization including: (a) take advantage of naturally occurring contingencies of reinforcement (e.g., what happens when this behavior occurs in a natural setting that could reinforce the appropriate behavior such as, positive social interaction); (b) train diversely (e.g., maintain as little control as possible and incorporate natural settings into training when possible); and (c) incorporate functional and relevant aspects in training environments that occur in generalization settings (e.g., include objects in physical and social environment that are present in generalization settings or situations). Stokes and Osnes (1986) also described 11 procedures for programming generalization including (a) teach relevant behaviors, (b) modify environments to support maladaptive behaviors, (c) recruit natural communities of reinforcement, (d) use sufficient stimulus exemplars, (e) use sufficient response exemplars, (f) train loosely, (g) use indiscriminable contingencies, (h) reinforce unprompted generalizations, (i) use common physical stimuli, (j) use common social stimuli, and (k) use self-mediate stimuli. Procedures should be incorporated within interventions to increase the probability of generalization. Stokes and

Osnes (1988) described the ethical obligation and responsibility to ensure generalization programming is included in any program seeking to cause important social and life-style changes for students.

UPGRADE Your Performance and Maintenance and Generalization

Since results from the first study indicated students struggled to maintain at the level reached during intervention (Clark, Konrad, et al., in press), the second study (Clark, Test, et al., in press) implemented a fading procedure, one identified procedure to increase maintenance. Fading occurs when a program is gradually removed and can include dividing a program into different levels (Esveldt-Dawson & Kazdin, 1998). In Clark, Test, et al., (in press) *UPGRADE* was faded by implementing a second phase or level called *U-GRADE*. Results from this second study indicated including the fading procedure through *U-GRADE* increased students' ability to maintain at the level reached during intervention. Students in both studies demonstrated generalization to other non-targeted soft skill areas and reached mastery in at least one or two other non-targeted areas (Clark, Konrad, et al., in press; Clark, Test, et al., in press). However, none of the participants were able to meet mastery criteria in every soft skill area measured by the JPR and maintain mastery through maintenance phases.

Based on findings from the first two studies; students who selected to work on productivity and on-task also demonstrated generalized increases in attitude and cooperation and teamwork and communication. Of the four students, one student increased to mastery in both of those areas and maintained through maintenance (i.e., Amelia). Students who selected quality of work also exhibited generalized increases in attitude and cooperation and teamwork and communication; however, of the two, only

one was able to maintain mastery in both areas. The other areas that were selected only included one student's data so it is difficult to determine if any pattern in generalization exists. In addition, since data from both studies only included eight students, it is difficult to draw conclusions about which targeted soft skills will generalize to other not-targeted soft skill areas. To seek to determine generalization of targeted skill to non-targeted skill areas, this study will focus primarily on generalization by targeting multiple skill areas. Determining consistent patterns of generalization may assist in providing practitioners with a way to maximize instructional time by focusing on targeted skill areas and gain increases across multiple skill areas. See Table 2 for data from previous studies.

Table 2

Generalization Across Soft Skill Areas

	Attitude & Cooperation			Reliability			Productivity & On-Task			Quality of Work			Teamwork & Communication							
	Mastery=12-16			Mastery=9-12			Mastery=9-12			Mastery=9-12			Mastery=12-16							
Student	IV		M	IV		M	IV		M	IV		M	IV		M					
	J1	J2		J1	J2		J1	J2		J1	J2		J1	J2						
<u>MaKayla</u>	10	12	10	8	9	9	10	12	10	7	8	8	12	12	10					
Robert	10	11	10	8	8	8	10	11	9	7	8	8	11	11	10					
Amelia	12	13	13	9	9	9	10	11	10	9	9	9	11	12	13					
<u>Deondra</u>	12	12	12	8	9	8	8	9	9	10	10	9	11	12	11					
Lindsay	12	12	J1 13	J2 14	9	9	J1 10	J2 10	8	8	J1 10	J2 10	11	11	J1 10	J2 11	11	14	J1 14	J2 14
Brendan	11	12	10	11	9	10	9	10	10	9	9	9	8	7	8	9	14	15	13	13
<u>Avana</u>	12	13	11	12	8	9	9	9	11	11	10	11	8	11	10	11	12	11	11	11
<u>Antwoine</u>	12	14			10	10			10	9			8	9			12	11		

Note. (IV=Final Intervention data point; M=Final Maintenance data point; J1=First job site; J2=Second job site; Bold=student-selected soft skill area)

Targeting Generalization in *UPGRADE Your Performance*

In order to target generalization in this study, the following strategies or procedures for programming will be used (a) teaching relevant behaviors, (b) using sufficient response exemplars, and (c) self-mediated instruction. Teaching relevant behaviors includes useful and adaptive behaviors that are likely to come in contact with natural positive reinforcement in other settings and environments (Stokes & Osnes, 1988). The skills measured by the JPR could be considered relevant behaviors for multiple environments and are likely to be reinforced naturally by others. The skills of having a positive attitude, being cooperative, reliable, productive, and on-task, demonstrating quality work, teamwork, and appropriate communication skills are likely to be viewed positively in other settings and environments other than just on the job; as well as, by others in the students' lives outside of the interventionist. Next, using sufficient response exemplars includes a diversity of response training where multiple related behaviors are the targeted outcome of the intervention and several examples of each behavior are included in the training (Stokes & Osnes, 1988). To incorporate this strategy within *UPGRADE Your Performance*, this study will target multiple skill areas and provide several examples of how to perform each behavior appropriately within each phase of goal-setting instruction through role-play, discussion, and video instruction. Lastly, self-mediated instruction will be used within training conditions. Self-mediated instruction includes self-management procedures such as self-monitoring and self-evaluation (Stokes & Osnes, 1988). This study will include self-monitoring and self-evaluation procedures throughout all phases of intervention. Self-mediated instruction

will be combined with fading during the *U-GRADE* phase to maximize maintenance and generalization of skills.

Purpose

Research suggests individuals with IDD have poorer post-school employment outcomes compared to their peers in other disability categories (Newman et al., 2011). An identified barrier to employment includes a lack of soft skills for employment (Riesen et al., 2014). Despite the need for instruction in employment soft skill there are few identified interventions for teaching soft skills. Instead the literature provides suggestions for instructional practices for teaching soft skills (Blaszczynski & Green, 2012; Dixon et al., 2010; McEwen, 2010). However, recently one identified intervention *UPGRADE Your Performance* has demonstrated promising results for teaching soft skills to students with IDD (Clark, Konrad, et al., in press; Clark, Test, et al., in press). Findings from both studies included generalization of self-selected soft skills to other non-targeted skills; however, students from both studies were unable to generalize and maintain at mastery criteria in all soft skill areas. Therefore, this study will target generalization by programming for generalization by focusing instruction on relevant behaviors, targeting multiple skill areas and including sufficient exemplars of each behavior in instruction, and self-management components combined with fading to promote maintenance and generalization.

CHAPTER 3: METHOD

This study used a multiple baseline across behaviors design (Cooper et al., 2007) to investigate generalized effects of *UPGRADE Your Performance Instruction* on the acquisition of soft skills of high school students with IDD from an urban high school participating in an 18-21 program located on a university campus. Additionally, a pre-test, mid-point test, and post-test were used to investigate participants' acquisition of graphing skills as a result of the intervention. Social validity and generalization data were also collected.

Participants

Participants for this study included two high school students between the ages of 18 and 21 who have been identified as having an IDD (i.e., ASD, ID) according to state and federal criteria. The researcher met with the special education teachers for the 18-21 program and asked them to nominate participants who met the following inclusion criteria: (a) diagnosis of IDD; (b) participation in the district's 18-21 program's community based training located on a large university campus; (c) an individualized education program (IEP) goal of gaining employment after high school; and (d) a record of good attendance (i.e., no more than 10 absences in the previous school year).

Shawn. Shawn was an 18-year-old Black male diagnosed with a mild intellectual disability (Weschler Nonverbal scale of Ability, WNV; full-scale IQ: 74) and a visual impairment (Wide Range Assessment of Visual Motor Abilities, WRAVMA; functional vision assessment). His academic skills were below average in mathematics, reading, and written expression (Woodcock-Johnson-III, WJ-III). His adaptive scores indicated he was below average in daily living and communication skills (Vineland Adaptive Behavior

Scales 2nd Edition). His attendance records indicated he had good attendance and missed less than 10 days in the previous school year. His post-school employment goal indicated he wants to obtain a job in the construction industry working at least 20 hours per week. His job site was located in the student activity center on campus where he worked in a study hall room for student athletes. He was responsible for checking them in and out by scanning their university identification cards, greeting athletes as they came in, pushing in chairs throughout the room, checking computer monitors, and organization tasks as assigned by the person in charge of the study hall center.

Anthony. Anthony was a 19-year-old, Black male diagnosed with autism and moderate intellectual disability (Differential Ability Scales (DAS) School-Age; full-scale IQ: 55). His academic skills were in the very low average range in reading comprehension, math calculation, math reasoning, and written expression (WJ-III). His adaptive behavior skills were in the low average range for all areas indicating he struggled to complete tasks independently, however, it was noted he was friendly and talkative (Adaptive Behavior Assessment System-2nd Edition, ABAS-II). His attendance records indicated he had good attendance and missed less than 10 days in the previous school year. His post-school employment goal indicated he wants to work with a job coach to find competitive employment. His job site was located in the library on campus where he worked with facilities removing trash, recycling, and other items throughout the library (e.g., books, equipment, paper, boxes, cardboard).

Setting

This study took place on a large university campus located in an urban city in the Southeastern United States. The university is classified by the Carnegie Foundation for

the Advancement of Teaching as having high research activity and as being a community engaged university. Approximately 28,000 students attend this university including 40% from diverse populations and 41% of undergraduates are considered low-income students. Both data collection and instructional sessions occurred on the university campus. During all data collection sessions the interventionist stood at a distance that did not intrude on participant's ability to work (e.g., 10 to 15 feet).

Data collection for Shawn occurred in the study hall room located inside the student activity center where he worked checking student athletes in and out for study hall. The room had rows of computer cubicles and six individual study rooms. Instructional sessions for Shawn occurred in one of the individual study rooms within the study hall room. The study room had a table and two chairs; the interventionist sat next to the student at the table during instructional sessions.

Data collection for Anthony occurred in the library on campus where he was working with facilities. The library has 10 floors and data collection occurred across all areas of the library where Anthony collected recycling, trash, items (e.g., cardboard, paper, books), and discarded materials as needed. Instructional sessions for Anthony occurred in a quiet area of the library at a table with two or three chairs. During instructional sessions the interventionist sat next to the student at the table.

Experimenter

The experimenter was a third year doctoral student in special education at UNC Charlotte. The experimenter has a master's degree in school administration and is certified in special education general and adapted curriculum, general education mathematics, and as a curriculum and instruction specialist. She has eight years of

teaching experience with high school students with autism, intellectual disabilities, and emotional and behavioral disabilities. The experimenter was the primary data collector and instructor throughout all phases of the study (i.e., baseline 1, GSI, baseline 2, *UPGRADE Your Performance*, *U-GRADE*, maintenance).

Another doctoral student in special education collected interobserver reliability and treatment fidelity data. She was a third-year doctoral student in special education with a bachelor's and master's degree in special education. She was special education teacher for six years and worked as a state autism consultant for 13 years.

Dependent Variables and Measurement

There were four dependent variables within this study. The primary dependent variables included (a) student acquisition of two self-selected individual soft skills and (b) generalization of non-targeted soft skills on the JPR. The secondary dependent variables were (a) students' scores on a pre-test, mid-point test, and post-test measuring their ability to graph a data set and (b) student's scores on the Vocational Rehabilitation Work Adjustment rubric.

Job performance rubric (JPR). The first and second dependent variables were measured by the JPR. The JPR includes the following skill component areas (a) attitude and cooperation, (b) reliability, (c) productivity and on-task behavior, (d) quality of work, and (e) teamwork and communication. Each component skill area has three or four subcomponent areas (Appendix D). The rating scale includes a four point rating scale and for each component, the JPR provides additional details about skills and behaviors included within each score (see Tables 1-5 located in Appendix D). The overall score of each soft skill area was calculated out of 12 points if there were three subcomponents

(i.e., reliability, productivity and on-task, quality of work) or 16 if there were four subcomponents (i.e., attitude and cooperation, teamwork and communication). Each soft skill area has the following number of subcomponents (a) attitude and cooperation (4 subcomponents), (b) reliability (3 subcomponents), (c) productivity and on-task (3 subcomponents), (d) quality of work (3 subcomponents), and (e) teamwork and communication (4 subcomponents). The total JPR is located in Appendix E.

Individual soft skill components. The first primary dependent variable was each participant's performance on two self-selected individual soft skill components of the JPR. During Goal Setting Instruction each student selected a soft skill to focus on based on their scores from baseline. Both Shawn and Anthony chose productivity and on-task as their first skill and quality of work as their second skill. Data were collected daily on each participant's performance on their self-selected individual soft skill while working at their job site.

Non-targeted soft skill components. The second dependent variable was each participant's performance on all non-targeted soft skills measured on the JPR. Data were collected on each student's performance on their job site using the entire JPR in order to measure generalization to non-targeted soft skills. The rating scale was the same one used to measure the primary dependent variable. The overall total score could range from 17 to 68 (Appendix E).

Acquisition of non-targeted graphing skills. The third dependent variable was the acquisition of graphing skills not explicitly taught during the intervention. The interventionist used a graphing assessment to measure each student's ability to correctly graph a data set of 10 data points. The graphing assessment is located in Appendix F. At

the beginning of baseline 1, students took the graphing assessment pre-test. Next, after students completed *UPGRADE* on their first selected soft skill, a mid-point test was given using the same assessment from the pre-test. Lastly, a post-test was conducted after the completion of *U-GRADE* for both selected soft skill areas using the same assessment. In order for a student to receive a correct score they had to be able to graph a point correct on the graph by putting a dot in the correct location using the x and y axis. Scores were calculated in the same way for all three tests as either correct or incorrect and scored out of 10 possible points. Student scores on the graphing assessment were analyzed descriptively by comparing pre, mid, and post-intervention data.

Vocational Rehabilitation Work Adjustment (VRWA) rubric. Data were collected by the interventionist at the beginning of baseline 1 and after students completed intervention (i.e., final maintenance of second soft skill area) on their skills measured by the VRWA rubric (see Appendix G). This is a rubric used by state Vocational Rehabilitation to measure student's skills in the component areas of attendance, appearance, productivity, and interpersonal skills. Vocational Rehabilitation uses this measure to determine how much money a student can earn while participating in work-based learning activities while they are in school. Each component area of the rubric is broken down in subcomponent areas (a) appearance has 2 subcomponents, (b) attendance has 4 subcomponents, (c) productivity has 14 subcomponents, and (d) interpersonal has 2 subcomponents. The rating scale includes a four-point rating scale (a) 4=very good, (b) 3=satisfactory, (c) needs improvement, and (d) unsatisfactory. Total scores could range from 22 to 88. Student scores were analyzed descriptively by comparing pre-and post-intervention data.

Interobserver Agreement

To determine interobserver agreement (IOA), a second scorer independently scored 34% of all sessions (including generalization measures) during all phases (i.e., baseline 1, GSI, baseline 2, *UPGRADE*, *U-GRADE*, maintenance). The second scorer was trained for two sessions on the JPR by the interventionist. The first training session lasted for two hours and included an overview of the JPR, operational definitions of each of the soft skills measured by the JPR, practice with grading employees using the rubric by watching videos of individuals working, and discussion of each area of the JPR and level of the rating system. The second training session lasted for one hour. During this session the interventionist and second scorer watched a video of a person working and both evaluated the person in the video. At the conclusion of the video, they compared their scores, discussed any disagreements, and reviewed different parts of the JPR. A level of 85% agreement had to occur during training before the session was completed.

During training and intervention an item-by-item analysis was used to determine agreement for all soft skill areas. Agreement was calculated for each individual component of the JPR, as well as, the whole JPR. Scorers assigned points for the items, and the number of agreements were divided by the total number of items (i.e., 4 subcomponents for two components areas plus 3 subcomponents for 3 component areas totaling 17 subcomponents for all 5 component areas of the rubric). The same process was followed for each individual soft skill area of the JPR.

For the acquisition of non-targeted graphing skills, IOA was collected by a second scorer who graded 100% of each student's tests (i.e., pre-test, mid-point test, post-test) using an answer key of the correct answers to determine the score. IOA was calculated

using an item-by-item method where the number of agreements were divided by the number of agreements plus disagreements and multiplied by 100.

For the VRWA rubric, the second scorer participated in one hour of training. During the training the interventionist explained the areas measured by the VRWA, the scoring system, and practice with the second scorer by watching videos of individuals working and grading them on the VRWA rubric. At the conclusion of the video, they compared their scores, discussed any disagreements, and reviewed different parts of the rubric. A level of 86% agreement had to occur during training before ending the session. Agreement was calculated using an item-by-item comparison for the total items on the rubric. Scorers assigned ratings to each item and then scores were compared using an item-by-item comparison method and calculated by the number of agreements divided by the number of agreements plus disagreements and multiplied by 100.

Social Validity

Social validity was used to measure the social significance of a study in three ways including (a) social significance of the goals, (b) social appropriateness of procedures, and (c) social importance of the effects or outcomes of the study (Wolf, 1978). In order to measure both special education teachers' perception of the goals and outcomes of the intervention, they both completed two different questionnaires. The first questionnaire measured both teachers' perception of the goals and outcomes of the study. It was an 8-item questionnaire and was given at the completion of all intervention sessions. The questionnaire used a 4-point rating scale (1 = I strongly disagree; 2 = I disagree, 3 = I agree; 4 = I strongly agree) to assess the teacher's level of agreement or disagreement with each statement. Higher scores indicated greater treatment acceptability

(Appendix H). The second questionnaire measured the teachers' perception of the outcomes of the intervention on each student's job performance and will be completed for each student once that student completes intervention. This questionnaire was also completed by one job coach, also completed consent forms (Appendix I), assigned to the university program to gain their perception of the effects on each student's performance before and after participating in the study. This was 6-item questionnaire that asked specific questions on the teachers' and job coach's perception of the student's performance on each soft skill on the rubric (Appendix J). This questionnaire used a 5-point rating scale (1 = I strongly disagree; 2 = I disagree; 3 = Neutral; 4 = I agree; 5 = I strongly agree).

Next, to measure student satisfaction on procedures and outcomes, students completed an 8-item questionnaire modified from the Student Intervention Rating Profile (SIRP; Snyder, 2002) on the last day of maintenance of the final student-selected individual soft skill area (Appendix K). The questionnaire used the same 4-point rating scale used in the teacher's survey to assess student level of agreement or disagreement with each statement. Their teacher read aloud directions and statements, instructed students not to put their names on the survey, and encouraged them to be honest in their responses.

Finally, to measure the social significance of the outcomes of the study, four employers from the community who were unfamiliar with the study agreed to participate in social validity measures by signing a consent form (Appendix L) and were given JPR scores from baseline, final sessions from each phase of intervention (i.e., *UPGRADE*, *U-GRADE*), and maintenance. They were asked to indicate which employee they would hire

for their company with a blue sticker or would not hire with a red sticker. They also completed a 5-question survey on their perception of the goals of the study by giving their opinion of the skills measured on the JPR using the same 4-point rating scale as the students' and teacher's questionnaires (Appendix M).

Experimental Design

The experimental design was a multiple baseline across behaviors design (Cooper et al., 2007) including the following phases (a) baseline 1, (b) goal-setting instruction, (c) baseline 2, (d) *UPGRADE Your Performance*, (e) *U-GRADE*, and (f) maintenance. The conditions of *UPGRADE Your Performance*, *U-GRADE* Instruction, and maintenance were replicated across soft skill areas.

Students received three initial baseline probes on their job site until their performance was stable using the JPR. These probes were followed by two pre-intervention GSI sessions. During the first session of GSI students reviewed their scores from baseline and selected one soft skill component to focus on by choosing between either productivity and on-task or quality of work. During the second GSI session students received instruction on their chosen soft skill area (i.e., productivity and on-task or quality of work). After both GSI sessions, each student received at least three additional baseline probes or until their performance was stable on their job site.

Next, students began *UPGRADE Your Performance* instruction with their first self-selected soft skill area and continued to be probed daily on the other non-targeted soft skill areas. Once each participant reached mastery criteria (i.e., three or four on each subcomponent area for the soft skill area of the JPR they chose for four consecutive days), they moved into the first maintenance phase (i.e., *U-GRADE*) and followed the

steps of instruction independently each day and a probe was collected every three days. After three probes, the student entered the final maintenance phase for that skill area and data were collected once a week for three weeks.

After each student completed *U-GRADE* instruction and entered the final maintenance phase for the first selected soft skill area, the student reviewed their scores in all areas and determined the next skill to focus on. Then they received one day of GSI on the next soft skill area they chose that lasted 45-60 minutes. The same process was used for each subsequent soft skill area and the same rules were used to begin intervention with each student in the study.

This study specifically focused on assessing generalization of skills to non-targeted areas of the JPR. In previous studies, participants have generalized skills from their self-selected soft skill area to the other non-targeted soft skill areas measured by JPR (Clark, Konrad, et al., in press; Clark, Test, et al., in press). This study was designed to determine if there were soft skills students consistently generalized to when they focused on a specific soft skill area. In this study, Shawn and Anthony first selected productivity and on-task to focus on and then quality of work. During intervention for both soft skill areas data were also collected on all other soft skill areas measured by the JPR to determine generalization.

Materials

The materials included *UPGRADE Your Performance* curriculum lesson plans, worksheets, and shared Google spreadsheets (Appendices P, Q, & R). *UPGRADE Your Performance* curriculum included lesson plans for GSI for each soft skill area, worksheets for each lesson (Appendix O), *UPGRADE Your Performance* description

sheet, a graphing worksheet, and a shared Google spreadsheet during *U-GRADE* instruction. The materials for *UPGRADE Your Performance* are located in Appendix N. Additional materials included (a) data collection form for the JPR (Appendix E), (b) pre-test, mid-point test, and post-test of student graphing skills (Appendix F), (c) data collection form for the VRWA rubric (Appendix G), and a handheld device (e.g., personal smartphone; iPod; iPad).

Procedures

Baseline 1 (BL 1). Prior to collecting baseline data on soft skills using the JPR, data were collected using the graphing pre-test (Appendix F) and VRWA rubric (Appendix G). During Baseline 1 each student was observed while working at their job site on campus (i.e., Shawn in athletic study hall, Anthony in the library). While working, they were evaluated on the JPR. Their teacher provided instructions on what was required to complete the job task prior to starting work on the university campus, however, students did not receive any feedback or instruction in the soft skill areas measured by the JPR. Baseline 1 probes for the first soft skill area occurred for three sessions until baseline data points were stable. Baseline 1 probes for the second soft skill area occurred during the duration of intervention phases (i.e., *UPGRADE*, *U-GRADE*) for the first selected soft skill area.

Pre-intervention goal setting instruction (GSI). Pre-intervention GSI for the first student-selected soft skill area occurred for two sessions following baseline 1 (Lesson plans for both days are located in Appendix O). The first session included introducing the student to the JPR, explaining the importance of soft skills, and explaining the components of the JPR. Then, students looked their baseline scores and

selected one soft skill area to focus on (i.e., one of their lowest areas) choosing between productivity and on-task and quality of work. The second session of instruction was specific to their self-selected soft skill area (i.e., productivity and on-task or quality of work). The lesson included defining key words, role-playing, and viewing a video where they practiced grading someone on their self-selected soft skill area using the rubric. At the end of the second lesson, each student set a goal for themselves on what they wanted to improve on in their chosen soft skill area. Each lesson occurred in a one-to-one format and lasted approximately 45-55 minutes.

For each subsequent student-selected soft skill area GSI occurred the day after students complete *U-GRADE* for the first soft skill area and took place for one session lasting for 45 minutes to one hour. The procedures included (a) viewing their scores on other areas of the JPR and selecting a second soft skill area to focus on, (b) specific instruction on the second soft skill area they chose following the same format as lesson two in the initial second GSI session, and (c) at the end of the lesson they set a goal on the area they chose.

Baseline 2 (BL 2). Following GSI for each student-selected soft skill, a second baseline session was conducted to determine any effect of GSI and to ensure stability before introducing *UPGRADE Your Performance* instruction. During the second baseline procedures were the same as they were for the first baseline session. Baseline 2 probes occurred three days until data points were stable for the first selected soft skill area. Baseline 2 probes for the second soft skill area occurred from one to three days until data points were stable.

UPGRADE Your Performance on selected soft skill. The phase for the first student-selected soft skill occurred for a minimum of five sessions (e.g., 45-65 minutes each) and in this order (a) the student went to their job site on campus and the interventionist assessed the student using the JPR (e.g., approximately 30-45 minutes); and (b) when the job task was complete the interventionist and student went to a small room to begin *UPGRADE Your Performance* (e.g., instruction that lasted approximately 15-20 minutes). *UPGRADE Your Performance* occurred in the following order: (a) the interventionist provided the student with the worksheet for the day and asked the student to follow the first step in *UPGRADE Your Performance*: U=You evaluate yourself; (b) the interventionist then provided the student with her score of the student's performance solely on the selected soft skill component (e.g., reliability) and then the student listed the scores on their worksheet (i.e., P=Professional evaluates you); (c) the student graphed both scores on a graphing worksheet and compared the scores (i.e., G=Graph both scores on the graphing worksheet); (d) the student restated his or her goal and determined if they met their goal (i.e., R=Restate your goal and determine if you met it); (e) the student listed one or two things they did well on the job (i.e., A= Acknowledge what you did well); (f) the student listed one or two things they needed to improve on in order to meet their goal (i.e., D=Decide what you need to do better on in order to meet your goal); and (g) finally, the student selected one thing to focus on to get closer to meeting their goal the next day (i.e., E=Execute improvement tomorrow to meet my goal). This continued each day until the student reached mastery criteria. Lesson plans are located in Appendix P. Once a student reached mastery criteria, they entered *U-GRADE* instruction to determine maintenance on this soft skill area. On their final day of *UPGRADE Your*

Performance students were taught how to download the Google Sheets app and a spreadsheet will be shared with them. During this instruction, students were given time (e.g., approximately 10 minutes) to practice using the spreadsheet with the interventionist until they were able to input data independently (Final Lesson Plan located in Appendix Q). Students followed the same procedures for each subsequent student-selected soft skill. Also, after the completion of *UPGRADE* for the first soft skill area students completed the midpoint graphing assessment.

U-GRADE instruction. *U-GRADE* instruction lasted approximately 10 minutes per session. During *U-GRADE* instruction, after the student finished working on their job site they accessed the Google Spreadsheet from their hand held device (e.g., smart phone, iPod, or iPad) and followed the *U-GRADE* steps of (a) U-You evaluate yourself, (b) G-graph your scores, (c) R-restate your goal and determine if you met it, (d) A-acknowledge what you did well, (e) D-decide what you need to do better, and (f) E-execute improvements tomorrow to meet your goal (example of the *U-GRADE* Spreadsheet is located in Appendix R). Every third day the interventionist observed the student for 20 to 30 minutes without providing any feedback and evaluated them using the JPR. Then, after the student completed the *U-GRADE* steps, she entered her scores into the shared Google spreadsheet for the student to view. This continued for three probes over nine days. After the completion of *U-GRADE* for the second soft skill area students completed the post-test graphing assessment.

Maintenance. Once a student reached mastery criteria on each of their selected soft skill areas and maintained at mastery through *U-GRADE* phase, they entered a final maintenance phase. Maintenance conditions were identical to baseline conditions and

data were collected once a week for three consecutive weeks. During maintenance probes, students were probed on all areas of the JPR and did not rate themselves.

Generalization. Generalization was measured in three different ways. First, data were collected on all soft skill areas measured by the JPR throughout intervention phases to determine if students generalized skills to other soft skill areas (i.e., both student-selected and non-targeted skills). Second, data were collected before intervention at the beginning of baseline one, after the completion of *UPGRADE* for the first selected skill area for a mid-point assessment, and after the completion of *U-GRADE* for their second soft skill area on each student's ability to graph data points on a graph. Finally, data were collected on the VRWA rubric before intervention at the beginning of baseline 1 and after intervention during the final maintenance phase for the second soft skill area to determine if students increased in those skills as a result of participation in *UPGRADE Your Performance*.

Procedural Fidelity

Another doctoral student was trained to collect procedural fidelity data and observed a 34% of the intervention sessions. Observations were distributed across all phases of the intervention in order to have procedural fidelity checks on all parts of the intervention. In order to document the adherence to the intervention, the observer had checklist of steps for the observation period of the intervention (Appendix S) and a lesson plan of the session to use as a checklist. Both the observation checklist and the lesson plan were divided into steps, and the observer marked each section as present or not. Number of steps completed correctly were divided by total number of steps and multiplied by 100 to obtain a procedural fidelity mean score.

CHAPTER 4: RESULTS

Interobserver Agreement

To determine interobserver agreement, a second scorer independently scored 34% of all sessions during all phases (e.g., baseline, intervention, maintenance). An item-by-item analysis was used to determine agreement for all dependent variables during intervention. Agreement was calculated for each individual component of the JPR, as well as, the whole JPR. Each scorer assigned points for items, and the number of agreements was divided by the total number of items. Results across four subcomponents of attitude and cooperation were 91% (range: 75–100%), three subcomponents of reliability were 95%, three subcomponents of productivity and on-task were 91% (range: 67–100%), three subcomponents of quality of work were 86% (range: 67–100%), and four subcomponents of teamwork and communication were 93% (range: 75–100%). Across all five areas the average interobserver agreement was 91% (range: 85–100%).

Procedural Fidelity

Procedural fidelity data were collected for 34% of all sessions. Observations were distributed across all intervention phases. Fidelity scores were 100% for all sessions.

Research Questions

Research Question 1: What is the effect of *UPGRADE Your Performance* on two student-selected soft skill areas of students with IDD?

Research Question 2: Are students with IDD able to maintain their performance in the targeted soft skills areas during *U-GRADE*?

The effects of *UPGRADE Your Performance* on two student-selected soft skill areas and each student's ability to maintain their performance on targeted soft skill areas

during *U-GRADE* phases are presented in Figures 1 and 2. Results indicated both students were able to master two self-selected soft skill areas, as well as master non-targeted soft skill areas.

Shawn. Figure 1 represents Shawn's scores on self-selected soft skill areas and non-targeted soft skill areas. The first skill Shawn focused on was productivity and on-task and the second skill was quality of work. For productivity and on-task, Shawn's scores during Baseline 1 ranged from 3 to 4, with a mean of 3.3. During Baseline 2 his scores ranged from 3 to 4, with a mean of 3.5. During *UPGRADE* instruction his scores ranged from 5 to 11, with a mean of 8.3. He reached mastery criteria after 9 sessions. During *U-GRADE* his scores ranged from 9 to 10, with a mean of 9.3, indicating he was able to maintain his performance at mastery (i.e., score of 9 or higher) level during *U-GRADE*. During maintenance his scores ranged from 9 to 12, with a mean of 10.1.

Shawn's second self-selected skill was quality of work. For quality of work, Shawn's scores during Baseline 1 ranged from 3 to 7, with a mean of 5.1. During Baseline 2 his scores ranged from 6 to 7, with a mean of 6.3. During *UPGRADE* instruction his scores ranged from 7 to 11, with a mean of 9.4. He reached mastery criteria after 5 sessions. During *U-GRADE* his scores were all 11. During maintenance his scores ranged from 9 to 11, with a mean of 10.

Anthony. Figure 2 represents Anthony's scores on self-selected soft skill areas and non-targeted soft skill areas. The first skill Anthony focused on was productivity and on-task and the second skill was quality of work. For productivity and on-task, Anthony's scores during Baseline 1 ranged from 3 to 4, with a mean of 3.7. During Baseline 2 his scores ranged from 3 to 4, with a mean of 3.25. During *UPGRADE* instruction his scores

ranged from 5 to 12, with a mean of 8.5. He reached mastery criteria after 8 sessions. During *U-GRADE* his scores ranged from 10 to 11, with a mean of 10.7, indicating he was able to maintain his performance at mastery (i.e., score of 9 or higher) level during *U-GRADE*. During maintenance his scores ranged from 10 to 12, with a mean of 11.

Anthony's second self-selected skill was quality of work. For quality of work, Anthony's scores during baseline 1 ranged from 3 to 7, with a mean of 5. During baseline 2 his score was 5. During *UPGRADE* instruction his scores ranged from 8 to 11, with a mean of 9.8. He reached mastery criteria after 5 sessions. During *U-GRADE* his scores ranged from 10 to 11, with a mean of 10.6. During maintenance his scores were all 11.

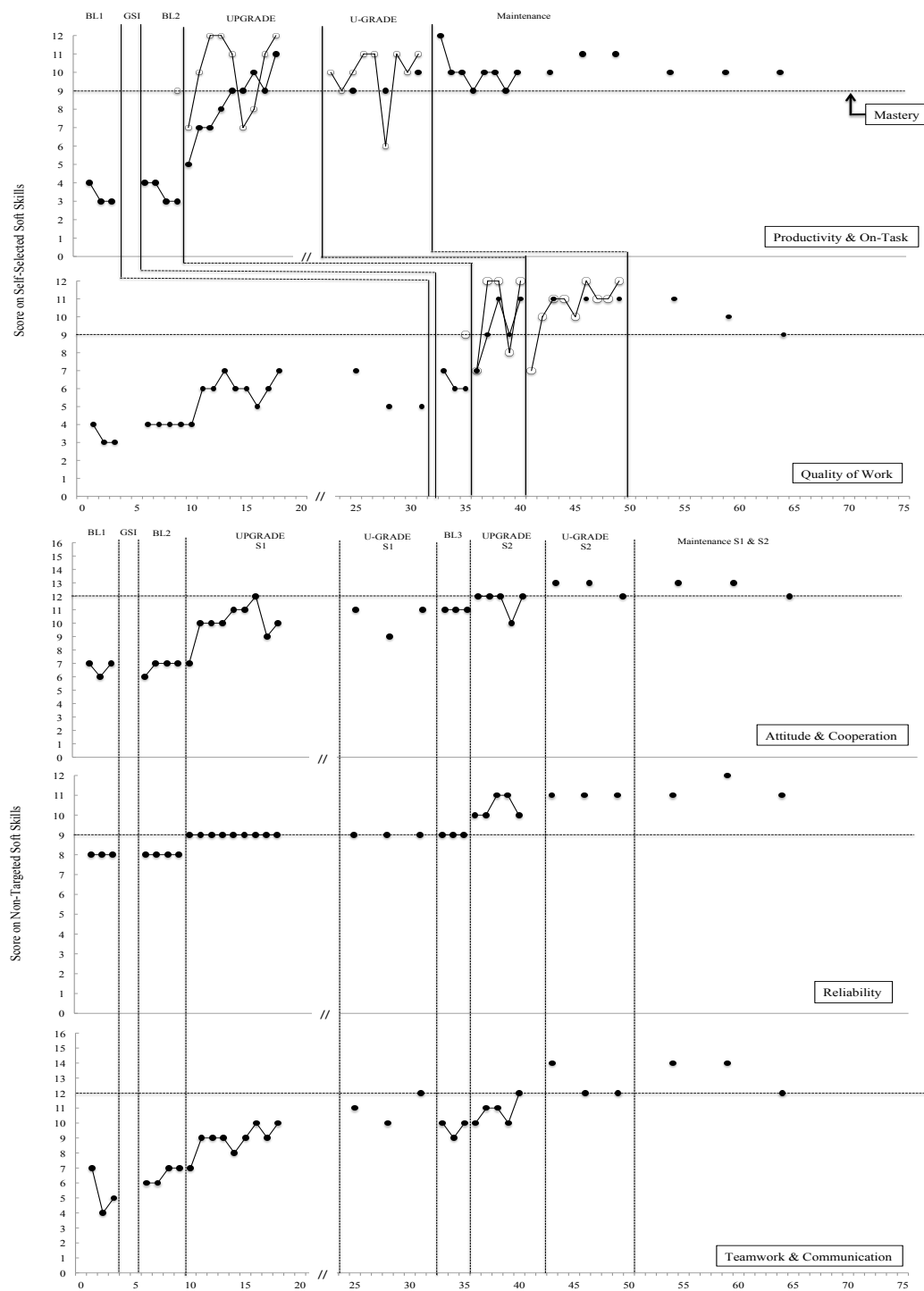


Figure 1. Shawn's Performance on Individual Soft Skill Components
 (● = interventionist score, ○ = student score, // = two week holiday break, BL= Baseline, GSI=Goal Setting Instruction, S1= Skill 1, S2= Skill 2)

Figure 1. Shawn's Performance on Selected Soft Skill Areas

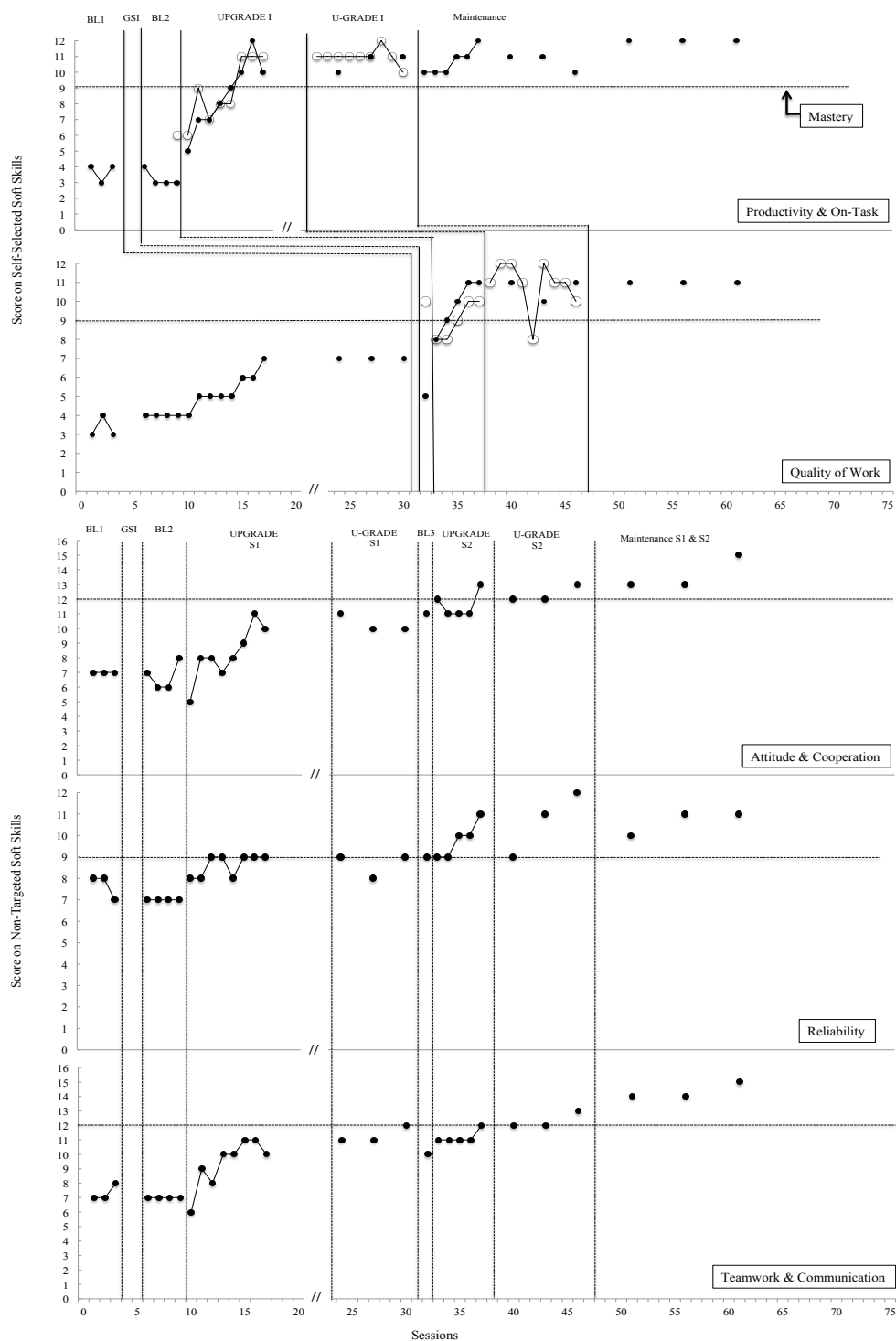


Figure 2. Anthony's Performance on Individual Soft Skill Components
 (● = interventionist score, ○ = student score, // = two week holiday break, BL= Baseline, GSI=Goal Setting Instruction, S1= Skill 1, S2= Skill 2)

Figure 2. Anthony's Performance on Selected Soft Skill Areas

During *UPGRADE* and *U-GRADE* phases students self-evaluated themselves and compared their scores to the scores of the interventionist. Table 3 shows student and interventionist scores and displays the point difference between their scores. For example if a student scored themselves as 11 and the interventionist scored them as 10, the difference between their scores was one point and a one is displayed in the table for the session. Sessions students performed at mastery level or higher are marked with an asterisk.

Table 3

Difference Between Student and Interventionist Scores

Shawn												Sessions		
Soft Skill Area	UPGRADE										U-GRADE			
	1	2	3	4	5	6	7	8	9	10	1	2	3	
Productivity & On-Task	6	2	3	5	4	2	2	2	2	1	1	3	1	
Quality of Work	3	0	3	1	1	1	N/A	N/A	N/A	N/A	0	1	1	
Anthony												Sessions		
Soft Skill Area	UPGRADE										U-GRADE			
	1	2	3	4	5	6	7	8	9		1	2	3	
Productivity & On-Task	3	2	2	0	0	1	1	1	1		1	0	1	
Quality of Work	5	0	1	1	1	1	N/A	N/A	N/A		1	2	1	

Note. Bold=Difference when score was at mastery level

Shawn. During *UPGRADE* for productivity and on-task the difference between Shawn's scores of his performance and interventionist's scores ranged from 1 to 6, with a mean difference between scores of 3 points. Before Shawn reached mastery level, differences ranged from 2 to 6, with a mean difference of 3.7 points. It took Shawn six sessions before he reached mastery level during sessions 7, 8, 9, and 10. The differences

in his scores then and during *U-GRADE* sessions ranged from 1 to 3, with a mean difference of 1.7 points. During *UPGRADE* for quality of work the difference between scores ranged from 0 to 3, with a mean difference of 1.5 points. Before reaching mastery level, his scores ranged from 0 to 3, with a mean difference of 1.5 points; however, after two sessions Shawn reached mastery level during sessions 3, 4, 5, and 6. During those sessions at mastery level and during *U-GRADE* sessions, the difference between scores ranged from 0-3, with a mean difference of 1.1 points. While at mastery level across both soft skill areas the difference between scores ranged from 0 to 3, with a mean difference of 1.4 points.

Anthony. During *UPGRADE* for productivity and on-task the difference between Anthony's scores of his performance and interventionist's scores ranged from 0 to 3, with a mean difference of 1.2 points. Before Anthony reached mastery level, differences ranged from 0 to 3, with a mean difference of 1.4 points. After five sessions Anthony reached mastery level during sessions 6, 7, 8, and 9. The difference between scores while he was performing at mastery level during *UPGRADE* and during *U-GRADE* sessions ranged from 0 to 1, with a mean difference of 0.8 points. During *UPGRADE* for quality of work the difference in scores ranged from 1 to 5, with a mean difference of 1.5 points. Prior to reaching mastery level, the difference ranged from 0 to 5, with a mean difference of 2.5 points. After two sessions, Anthony reached mastery during sessions 3, 4, 5, and 6. The difference in scores then and during *U-GRADE* sessions ranged from 1 to 2 points, with a mean difference of 1.1 points. While at mastery level across both soft skill areas the difference in scores ranged from 0 to 2, with an average difference of 1 point.

Research Question 3: What is the generalized effect of *UPGRADE Your*

Performance on the overall performance on the Job Performance Rubric of students with IDD?

The effect of *UPGRADE Your Performance* on the overall performance of each participant on the JPR is described in the section below and Table 4 shows students' JPR scores on their final data point from baseline, *UPGRADE* instruction, and *U-GRADE* in each individual soft skill area. Results indicated Shawn and Anthony increased their scores to mastery on all non-targeted soft skill areas, as well as mastery on their overall score on the JPR.

Shawn. During Baseline 1 Shawn's JPR scores ranged from 24 to 30, with a mean of 26.7. During Baseline 2 for productivity and on-task his scores ranged from 28 to 29, with a mean of 28.8. During *UPGRADE* instruction for productivity and on-task his scores ranged from 32 to 47, with a mean of 42.1. During *U-GRADE* for productivity and on-task his scores ranged from 44 to 47, with a mean of 45.3. During maintenance for productivity and on-task and Baseline 2 for quality of work his scores ranged from 45 to 49, with a mean of 46.7. During *UPGRADE* for quality of work his scores ranged from 48 to 55, with a mean of 51.8. During *U-GRADE* for quality of work his scores ranged from 57 to 59 with a mean of 58. During maintenance for quality of work and productivity and on-task his scores ranged from 56 to 59, with a mean of 58.

Anthony. During Baseline 1 Anthony's JPR scores were all 29. During Baseline 2 for productivity and on-task his scores ranged from 27 to 29, with a mean of 28.25. During *UPGRADE* instruction for productivity and on-task his scores ranged from 28 to 49, with a mean of 40. During *U-GRADE* for productivity and on-task his scores ranged from 47 to 49, with a mean of 48. During maintenance for productivity and on-task and

Baseline 2 for quality of work his score was 45. During *UPGRADE* for quality of work his scores ranged from 50 to 59, with a mean of 53.4. During *U-GRADE* for quality of work his scores ranged from 55 to 59, with a mean of 56.7. During maintenance for quality of work and productivity and on-task his scores ranged from 60 to 64, with a mean of 61.7.

Table 4

Participant Scores on the Final Data Point in Each Phase for Each Soft Skill

Shawn							
Area	Mastery	BL2 S1	UP S1	UG S1	BL2 S2	UP S2	UG S2
Attitude & Cooperation	12-16	7	10	11	11	12	12
Reliability	9-12	8	9	9	9	10	11
Productivity & On-Task (S1)	9-12	3	11	10	N/A	N/A	N/A
Quality of Work (S2)	9-12	4	7	5	6	11	11
Teamwork & Communication	12-16	7	10	12	10	12	12
Total Rubric Score	51-68	29	47	45	46	55	57
Anthony							
Area	Mastery	BL2 S1	UP S1	UG S1	BL2 S2	UP S2	UG S2
Attitude & Cooperation	12-16	6	10	10	11	13	13
Reliability	9-12	7	9	9	9	11	12
Productivity & On-Task (S1)	9-12	3	10	11	N/A	N/A	N/A
Quality of Work (S2)	9-12	4	7	7	5	11	11
Teamwork & Communication	12-16	7	10	12	10	12	13
Total Rubric Score	51-68	28	46	49	45	59	59

Note. Participants' targeted soft skill areas are shown in boldface (BL2 S1: Baseline 2 Skill 1; UP S1: *UPGRADE* Skill 1; UG S1: *U-GRADE* Skill 1; BL2 S2: Baseline 2 Skill 2; UP S2: *UPGRADE* Skill 2; UG S2: *U-GRADE* Skill 2)

Shawn. When Shawn selected to work on productivity and on-task, he made an increase in all of the non-targeted soft skill areas measured by the JPR. While focusing on productivity and on-task, his attitude and cooperation score improved from 7 at end of baseline to 11 after *U-GRADE*. His reliability score improved from 8 to 9, quality of work improved from 4 to 5, and teamwork and communication improved from 7 to 12 indicated Shawn's performance generalized to other areas. When Shawn selected his second skill, quality of work, he also made increases in all other non-targeted areas. His attitude and cooperation scores improved from 11 to 12, reliability from 9 to 11, and teamwork and communication from 10 to 12. After focusing on both skills his scores increased to mastery level or higher in all non-targeted skill areas.

Anthony. When Anthony selected to work on productivity and on-task, he made an increase in all of the non-targeted soft skill areas measured by the JPR. While focusing on productivity and on-task, his attitude and cooperation score improved from 6 to 10, reliability improved from 7 to 9, quality of work improved from 4 to 7, and his teamwork and communication score improve from 7 to 12. When Anthony selected his second skill, quality of work, he also made increases in all other non-targeted areas. His attitude and cooperation scores improved from 11 to 13, reliability from 9 to 12, and teamwork and communication from 10 to 13. After focusing on both skills his scores increased to above mastery level in all other non-targeted areas.

Research Question 4: Are students with IDD able to acquire skills to graph other data as a result of the intervention as measured by a pre-test, midpoint assessment, and post-test on graphing skills?

Results of acquisition of non-targeted graphing skills measured by a pre-test,

midpoint assessment, and post-test are displayed in Table 5. Results indicated participants did not improve their graphing skills as a result of participating in *UPGRADE Your Performance* instruction.

Table 5

Student Acquisition of Non-Targeted Graphing Skills

Student	Pre-Test	Midpoint Assessment	Post-Test	Difference
Shawn	0	0	0	0
Anthony	0	0	0	0

Shawn. During pre-test of graphing skills, Shawn was not able to graph any of the data points correctly and did not demonstrate any skills for graphing points on a graph (e.g., drawing circles for data points, drawing lines to connect data points). During the midpoint assessment, he was also unable to graph any of the data points correctly and did not demonstrate any improvement in his ability to graph in the correct format. Post-test results indicated Shawn did not demonstrate any improvement in his ability to graph points on a graph. His pre-test, midpoint test, and post-test all looked very similar, he continued to color in boxes across the graph instead of drawing circles to plot points and connecting them with a line.

Anthony. During pre-test of graphing skills, Anthony was not able to correctly graph any of the data points and did not demonstrate any skills for graphing points on a graph (e.g., drawing circles for data points, drawing lines to connect data points). During the midpoint assessment, he was not able to graph the point correctly, however he did demonstrate improvement in being able to attempt to graph points on a graph in the correct format. He drew circles for data points and connected data points using a line; however, none of the data points graphed were correct. Post-test results indicated

Anthony still was unable to graph any of the points correctly; however, during the post-test he selected to use two different colored pencils to graph the points by drawing circles and connecting the circles with a line.

Research Question 5: To what extent do soft skills acquired by students with IDD generalize to skills measured by Vocational Rehabilitation Work Adjustment rubric?

The generalized effects of *UPGRADE Your Performance* on skills measured by the VRWA rubric are represented in Table 6. Results indicated participants were able to generalize their newly acquired soft skills to skills measured by the VRWA rubric.

Table 6

Student Performance on VRWA rubric

Student	Pre-Assessment	Post-Assessment	Difference
Shawn	46	75	+29
Anthony	49	80	+31

Shawn. Shawn's score during pre-assessment was 46 out of a possible 88 points (52%). After Shawn completed *UPGRADE* and *U-GRADE* instruction on both selected skill areas his score was 75 out of a possible 88 points. The difference in his score before and after participation in *UPGRADE Your Performance* was an increase of 29 points.

Anthony. Anthony's score during pre-assessment was 49 out of a possible 88 points. After Anthony completed *UPGRADE* and *U-GRADE* instruction on both selected skill areas his score was 80 out of a possible 88 points. The difference in his score before and after participation in *UPGRADE Your Performance* was an increase of 31 points.

Research Question 6: What are the teachers' and job coach's perceptions of the impact of *UPGRADE Your Performance* on the soft skills of their students with

IDD?

Two teachers and one job coach completed social validity surveys to indicate their perception of the intervention. The first social validity survey was only completed by the teachers and determined their perception of the goals and outcomes of the study. Results from this survey shown in Table 7 indicate Teacher 1 (T1) and Teacher 2 (T2) rated the items asking about their perception of the goals of the study as 4, demonstrating they strongly agreed it was important for students to learn employment skills, to set their own goals, and to combine soft skill instruction, self-monitoring, and goal-setting instruction within one intervention. On items pertaining to the outcomes of the intervention their scores ranged from 3 to 4, with a mean of 3.8, indicating they agreed or strongly agreed *UPGRADE Your Performance* instruction helped their students improve their employment soft skills, evaluate their own performance, improve behavior in the classroom, and was overall helpful for their students. They also both indicated they would like to *UPGRADE Your Performance* instruction in the future.

Table 7

Teacher's Perceptions of Goals and Outcomes

Area	Item	T1	T2
Goals	1. It is important for students to be able to learn employment skills	4	4
	2. It is important to students to learn to set their own goals	4	4
	3. It is important and helpful to have an intervention that combines soft skill instruction with goal setting and self-monitoring skills.	4	4
Outcomes	4. <i>UPGRADE Your Performance</i> instruction helped students improve their soft skills for employment	4	3
	5. <i>UPGRADE Your Performance</i> instruction helped students evaluate their own performance and behavior	4	4
	6. <i>UPGRADE Your Performance</i> instruction helped	3	3

students improve their behavior in the classroom too		
7. Overall I think <i>UPGRADE Your Performance</i> was helpful for my students	4	4
8. I would like to use <i>UPGRADE Your Performance</i> instruction in the future	4	4

Note. (1 = I strongly disagree, 2 = I disagree, 3 = I agree, 4 = I strongly agree)

Both teachers and a job coach completed a second survey in order to evaluate their perception of the outcomes of the study for each participant. Tables 8 and 9 show the second social validity surveys completed by both teachers (i.e., T1 and T2) and one job coach for each student.

Table 8

Teachers' and Job Coach's Perceptions of Outcomes for Shawn

Item	T1	T2	Job Coach
1. The student showed improvement in their work performance while participating in <i>UPGRADE</i> instruction	5	4	5
2. The student showed improvement in Attitude and Cooperation	4	4	5
3. The student showed improvement in Reliability	5	4	3
4. The student showed improvement in Productivity and On-Task	5	4	3
5. The student showed improvement in Quality of Work	5	4	4
6. The student showed improvement in Teamwork and Communication	4	4	5

Note. (1 = I strongly disagree, 2 = I disagree, 3 = Neutral, 4 = I agree, 5 = I strongly agree)

Findings from surveys for perceived outcomes for Shawn indicated T1's scores ranged from 4 to 5 and T2's scores were all 4 indicating she agreed Shawn improved his

job performance in each area and overall after participating in *UPGRADE Your Performance* instruction. The job coach's scores for attitude and cooperation, quality of work, teamwork and communication, and overall job performance ranged from 4 to 5 indicating he agreed or strongly agreed Shawn improved in this areas after participating in *UPGRADE Your Performance* instruction. Two areas he answered with a 3 for neutral including reliability and productivity and on-task and provided comments on those two areas. His comment for reliability included "I feel that the student is reliable and remained at the same level of reliability." His comment for productivity and on-task indicated "The student was already a focused and task-orientated individual. I feel the program allowed him to demonstrate those strengths."

Table 9

Teachers' and Job Coach's Perceptions of Outcomes for Anthony

Item	T1	T2	Job Coach
1. The student showed improvement in their work performance while participating in UPGRADE instruction	5	5	5
2. The student showed improvement in Attitude and Cooperation	5	4	5
3. The student showed improvement in Reliability	5	4	3
4. The student showed improvement in Productivity and On-Task	5	5	3
5. The student showed improvement in Quality of Work	4	4	4
6. The student showed improvement in Teamwork and Communication	5	5	5

Note. (1 = I strongly disagree, 2 = I disagree, 3 = Neutral, 4= I agree, 5= I strongly agree)

Findings from surveys for perceived outcomes for Anthony demonstrated T1 agreed or strongly agreed Anthony improved in all skills measured by the JPR. T1 also provided comments for Anthony for each question with the following statements organized by question number (1) “the student not only improved, but became a team leader,” (2) “the student became more aware of his attitude and how he should behave at work,” (3) “the student become more aware not only of his work but his team’s work,” (4) “the student increased his productivity and become more independent,” (5) “the student’s quality of work was appropriate,” and (6) “the student became more aware of his team members and how to work with them.”

T2’s scores ranged from 4 to 5 in each area indicating she agreed or strongly agreed Anthony increased his skills in each area after participating in *UPGRADE Your Performance* instruction, she did not provide any comments. The job coach’s scores ranged from 4 to 5 for four of the questions indicating he felt Anthony improved his work performance, attitude and cooperation, quality of work, and teamwork and communication. Two areas he answered as neutral including reliability and productivity and on-task. He provided comments on his perception of the student’s improvement in the area of attitude and cooperation stating “The student has shown an improvement in teamwork and group communication. He has show capabilities of delegating tasks and task management.” For the question concerning reliability he stated “I feel the student is reliable and remained at the same level of reliability.”

Research question 7: What are students’ perceptions of *UPGRADE Your Performance* and *U-GRADE* on its ability to help them (a) reach their goals, (b) gain soft skills, and (c) increase their employability?

At the conclusion of the final maintenance phase for the second soft skill, each participant completed a social validity survey that evaluated their perception of the procedures, outcomes and goals of the study. Each student's results are displayed in Table 10.

Table 10

Students' Perception of UPGRADE Your Performance

Area	Item	Students	
		Shawn	Anthony
Procedures	1. The job skills rubric was fair	3	2
	2. The training was not too hard	4	3
	3. I like grading my own performance	3	4
	4. I liked using technology during <i>U-GRADE</i>	3	3
Outcomes	5. I think this will help me get a job in the future	3	3
	6. This was a good way for me to learn how to set goals for myself	4	4
	7. The training I received would be good for other students who want to get a job	4	3
Goals	8. I think learning how to behave on a job will help me with my behavior at school too	4	4
	9. I think learning these skills are important for being a good employee	4	3

Note. (1 = I strongly disagree, 2 = I disagree, 3 = I agree, 4 = I strongly agree)

Each student completed a social validity survey at the completion of maintenance sessions. Students indicated overall they agreed with the procedures with scores from 2 to 4, with a mean of 3.1. One student indicated he disagreed that the job skill rubric was fair, when asked why he disagreed; he said he was not sure if he knew. Both students indicated they agreed or strongly agreed with the outcomes and goals of the intervention

with scores from 3 to 4, with a mean of 3.6. They both strongly agreed the intervention was a good way for them to learn how to set goals for themselves and learning how to behave on the job would help them with their behavior at school too.

Research Question 8: What are employers’ perceptions of the (a) JPR and (b) employability of students’ based on their scores before and after participating in *UPGRADE Your Performance*?

Four employers from the community (i.e., hiring specialist for large hospital [E1], manager of a large chain drug and convenience store [E2], large chain grocery store manager [E3], manager of a shipment center for a large online retailer [E4] reviewed student scores on the JPR from baseline, *U-GRADE*, and maintenance; then, indicated which they would hire or not hire by placing a blue sticker on those they would hire and a red sticker on those they would not. These results are displayed in Table 11.

Table 11

Employer’s Review of Rubrics

Employers	Would Not Hire		Would Hire		Would Consider	
	Baseline	UG/M	Baseline	UG/M	Baseline	UG/M
E1	100%	0%	0%	63%	0%	37%
E2	100%	0%	0%	71%	0%	29%
E3	100%	0%	0%	100%	0%	0%
E4	100%	0%	0%	100%	0%	0%

Note. UG= *U-GRADE*, M=Maintenance

E1 indicated she would not hire 100% of the students with rubric scores from baseline, she would hire 63% of students with rubric scores from *U-GRADE* or maintenance, and she “would consider hiring or interviewing” for 37% of students with rubric scores from *U-GRADE* or maintenance and her comments for those rubrics stated “more consistency is needed, the candidate meets all standards on an inconsistent basis,

but shows great potential for growth in consistency under strong leadership with clear expectations. In my opinion, whether or not this candidate would be considered is greatly dependent on strengths/weaknesses of other candidates.” E2 indicated he would not hire 100% of the students with rubric scores from baseline, would hire 71% of students with rubric scores from *U-GRADE* or maintenance, and wrote “maybe hire or interview” on 29% of the students with rubric scores from *U-GRADE* or maintenance, and provided comments stating, “these potential employees seemed to be focused on work, to work at a good pace, and take pride in their work. I feel there is the possibility of “coaching up” the other areas.” He also mentioned the importance of attitude and cooperation and teamwork and communication for employees working in their stores. E3 indicated he would not hire 100% of the students with rubric scores from baseline and would hire 100% of the students with rubric scores from *U-GRADE* and Maintenance phases. He mentioned while reviewing the rubrics that if an employee could do these skills well, he would be willing to teach them other “technical” skills needed, but that he could not teach these skills to employees. E4 indicated he would not hire 100% of the students with rubric scores from baseline and would hire 100% of the students with rubric from *U-GRADE* and maintenance phases. Findings from all four employers indicated they would not hire 100% of students with rubric scores from baseline, would hire between 67%-100% of students with rubric scores from *U-GRADE* and maintenance, and responded with maybe or potentially hire or interview between 29% and 37% of students with rubric scores from *U-GRADE* and maintenance phases.

Additionally, all four employers completed a social validity survey to determine their perception of the acceptability of the goals of this study. These findings are displayed in Table 12.

Table 12

Employer's Perceptions of UPGRADE Your Performance

Area	Item	E1	E2	E3	E4
Goals	1. It is important for students to be able to learn employment skills	4	4	4	4
	2. The skills on the Job Performance Rubric are important for employees to have	4	4	4	4
	3. It is important for students to learn these skills during high school	4	4	4	4
	4. The Job Performance Rubric is a good way to evaluate soft skills for employment	4	3	4	4
	5. Learning these skills will help students obtain employment	4	4	4	4

Note. (1 = I strongly disagree, 2 = I disagree, 3 = I agree, 4 = I strongly agree)

Results from surveys indicated employers agreed or strongly agreed it was important for students to learn employment skills during high school, skills on the JPR were important for employees to have, the JPR was a good way to evaluate soft skills, and learning these skills could help students obtain employment.

CHAPTER 5: DISCUSSION

The purpose of this study was to investigate the generalized effects of *UPGRADE Your Performance* instruction on the acquisition of soft skills (e.g., attitude, cooperation, reliability, productivity, on-task behavior, quality of work, and teamwork) of high school students with IDD using a multiple baseline across behaviors design with two participants. Specifically, this study sought to determine students' ability to generalize across soft skills, graphing skills, and skills measured by VRWA rubric. Effects on students' acquisition of soft skills were measured by their score on the JPR while working on a job site on campus. Generalized effects were measured on: (a) students' graphing skills using a pre-test, midpoint test, and post-test of their ability to graph a data set; and (b) students' employability skills measured by the VRWA. Participants, their special education teachers, and job coach completed social validity surveys on their perception of the intervention and its effect on students' skills across skill areas. Employers from the community were surveyed on their perception of the intervention and skills measured by the rubric; they were also asked to view rubrics from students before and after the intervention and indicate which students they would hire. In this chapter, outcomes from this study and themes that emerged will be discussed according to each research question. Finally, limitations, suggestions for future research, and implications for practice will be discussed.

Effects of Intervention on Dependent Variables

Research Question 1: What is the effect of *UPGRADE Your Performance* on two student-selected soft skill areas of students with IDD?

Research Question 2: Are students with IDD able to maintain their performance in

the targeted soft skills areas during *U-GRADE*?

Findings from this study indicate both students were able to increase their performance in two targeted soft skill areas and maintain their performance at mastery or higher throughout all remaining phases of the study. Findings did not indicate a functional relation between the intervention and students' increase in their performance in targeted soft skills since there were only two demonstrations of effect. This occurred because students generalized their skills to non-targeted soft skill areas to mastery after completing intervention phases for the second targeted soft skill area and were unable to target a third skill. However, since this study was focused on investigating generalization of targeted soft skills to non-targeted soft skills so this outcome was a possibility the researcher understood. The results from this study indicate *UPGRADE Your Performance* was able to assist students in increasing and maintaining their skills in two targeted areas, as well as three non-targeted areas at mastery level over time.

Job performance and soft skills have been recognized as essential skills for students with disabilities when pursuing future employment (Lindsay et al., 2014) and research indicates individuals with IDD experience some of the poorest employment outcomes (Lipscomb et al., 2017; Newman et al., 2011). Previous studies investigating the effectiveness of *UPGRADE Your Performance* included participants with ASD, mild ID, LD, OHI, EBD, and participants who were HI. This study extends those findings by including students with IDD such as moderate ID and ASD. These students were also able to make improvements to their soft skills after participating in *UPGRADE Your Performance* instruction, suggesting this could be an effective way to teach soft skills to students with IDD to prepare them to obtain employment after high school. These results

also provide additional support for the effectiveness of *UPGRADE Your Performance* instruction (Clark, Konrad, et al., in press; Clark, Test, et al., in press) as an effective intervention for teaching soft skills to students with disabilities.

Additionally, this study supports using multiple components of self-determination combined within a single intervention to teach students with disabilities employment skills. For example, one study found when individuals with disabilities set their own goals, helped create a plan of action, and self-monitored their behavior they were able to make progress toward their goal (Devlin, 2008). Results from another study, indicated combining goal setting with self-management components led to meaningful changes in student's job performance and task completion while working (Nitttrouer et al., 2016). Findings from this study extend those findings since all three participants in this study did not show significant increases in their performance after participating in goal setting instruction (GSI) alone; however, once students participated in *UPGRADE* instruction that included goal setting, self-monitoring, self-graphing, and self-evaluation they were able to increase their performance and maintain at that level over time. These findings support using multiple components of self-determination within a single intervention to get strong results with students with disabilities.

In addition, self-monitoring with student and interventionist matching appeared to be effective in assisting students in self-evaluating themselves and accurately monitoring their own performance. Across previous studies (Clark, Konrad, et al., in press, Clark, Test, et al., in press) and results from this study indicate students averaged differences 0 to 4 points between their score and the interventionist's score while performing at mastery level. Table 13 shows differences across all three studies.

Table 13

Differences in Teacher and Student Scores from Previous UPGRADE studies

Sessions (Clark, Konrad et al., in press)													
UPGRADE Job 1						UPGRADE Job II							
Productivity & On-Task	1	2	3	4	5	1	2	3	Difference				
									R	M			
MaKayla	8	6	3	2	N/A	5	1	0	0-3	1.5			
Robert	8	3	1	0	1	3	1	2	0-2	1			
Amelia	2	0	1	0	N/A	0	1	1	0-1	.75			
Quality of Work	1	2	3	4		1	2	3	4	Difference			
										R	M		
Deondra	6	1	1	0		3	1	0	0	0-1	.25		
Sessions (Clark, Test et al., in press)													
Lindsey													
Quality of Work	UPGRADE								U- GRADE				
	1	2	3	4	5	6	7	8	1	2	3		
School Job	7	1	1	2	1	0	2	2	0	1	1		
Community Job	0	0	0	1	0	1	N/A	N/A	1	1	0		
Brendan													
Teamwork & Communication	UPGRADE								U- GRADE				
	1	2	3	4	5	6	7	8	1	2	3		
School Job	9	5	2	3	2	1	2	N/A	2	2	2		
Community Job	4	2	1	1	N/A	N/A	N/A	N/A	1	2	2		
Ayana													
Productivity & On-Task	UPGRADE								U- GRADE				
	1	2	3	4	5	6	7	8	1	2	3		
School Job	7	0	0	2	2	0	1	1	1	1	1		
Community Job	1	2	1	1	N/A	N/A	N/A	N/A	1	0	1		
Antwoine													
Reliability	UPGRADE								U- GRADE				
	1	2	3	4	5	6	7	8	1	2	3		
School Job	8	1	4	1	2	1	0	0	2	2	2		
Community Job	2	1	0	1	N/A	N/A	N/A	N/A	2				
Shawn													
Sessions (Current Study)													
Soft Skill Area	UPGRADE										U-GRADE		
	1	2	3	4	5	6	7	8	9	10	1	2	3
Productivity & On-Task	6	2	3	5	4	2	2	2	2	1	1	3	1

Quality of Work	3	0	3	1	1	1	N/A	N/A	N/A	N/A	0	1	1
<hr/>													
Anthony													
Productivity & On-Task	3	2	2	0	0	1	1	1	1		1	0	1
<hr/>													
Quality of Work	5	0	1	1	1	1	N/A	N/A	N/A		1	2	1
<hr/>													
<i>Note.</i> Bold=Difference when score was at mastery level													

Results from Clark, Konrad, et al. (in press) demonstrated students' scores differed between 0 and 3 points, with averages of 1.5, 1, 0.75, and 0.25 while students were performing at mastery level in their self-selected soft skill area. They were also able to generalize their skills across environments (i.e., Job I, Job II). Findings from Clark, Test, et al. (in press) indicated a range of 0 to 4 points for differences in scores with averages of 0.8, 1.9, and 1 during students' performance at mastery level and students maintained their performance over time, generalized to other soft skill areas, and across settings (i.e., school, community). Results from the current study indicate Shawn averaged a difference of 1.4 points between his scores and the interventionist's scores and Anthony averaged a 1-point difference between his scores and the interventionist's scores when performing at mastery level for both self-selected soft skills. This demonstrated they averaged between a 1 or 2 point difference in matching the interventionists score each day and were able to maintain at mastery level or higher, as well as generalize their skills to other soft skill areas. Findings from all three studies indicate similar results and were consistent with previous findings on the effectiveness of self-recording with teacher matching to increase maintenance and generalization of newly acquired skills (Hoff & DuPual, 1998; Young et al., 2006).

Additionally, across all studies, students' ranges and average differences were

smaller as they began to perform at mastery level. In Clark, Konrad, et al. (in press) prior to meeting mastery level, differences ranged from 1 to 8 points, with a mean of 3.9; however, once they reached mastery level, differences across students ranged from 0 to 3 points, with a mean of 1 point difference. In Clark, Test, et al. (in press) before getting to mastery level, differences across all four students ranged from 0 to 9 points, with a mean of 3 points. Then, once students began to perform at mastery level differences across all four students ranged from 0 to 4, with a mean of 1.2 points. These results indicate as students reached mastery level, they began to more closely match the interventionist's scores. Also, once students were at their second job or second setting they began to match the interventionist sooner than during the first job or setting. These same results were found in this study where the average of difference was lower as students entered mastery level and they were closer to matching the interventionist when they achieved mastery.

Next, these findings also add to the research supporting TAI in conjunction with self-determination skills to assist students with IDD with job training and support (Smith et al., 2016) and addressed the suggestion for more research on using technology to self-monitor students behavior (Bruhn et al., 2015). In this study, during the *U-GRADE* phase for both targeted soft skill areas students used TAI to follow the steps after they finished working each day using a smart phone or handheld device to self-monitor and self-evaluate their performance and input their own data. During *U-GRADE* phases for both targeted soft skill areas, students maintained their performance at mastery or higher when the interventionist observed them every third day.

In addition, results from this study extend findings from previous literature supporting the use of a handheld device (i.e., iPod Touch) while working to increase

students with disabilities' independence and decrease their need for support from a job coach (Gentry et al., 2015). Although independence level was not directly measured, students in this study were able to independently monitor their performance using TAI during *U-GRADE* phases and maintain their performance at mastery or higher indicating a reduced need for individualized instruction daily. These findings affirm support for the use of TAI on the job to increase independence for students with disabilities while working and reduce their need for job coach support.

Lastly, results from this study add to research supporting mnemonic instruction for students with IDD. Previous studies indicated mnemonic instruction could be beneficial for students with IDD (Lee et al., 2006) and several researchers found positive results when using mnemonic instruction with students with IDD (Konrad, Clark, et al., in press; Konrad, Trela, et al., 2006; Test & Ellis, 2005). However, only one previous study used mnemonic instruction to teach employment related skills to students with learning disabilities (Nelson et al., 1994). The current study extends those findings by using mnemonic instruction within the intervention to teach students with IDD employment soft skills. During this study, students with IDD were able to learn the mnemonic *UPGRADE* and use it daily to evaluate their performance after working on their job site.

Research Question 3: What is the generalized effect of *UPGRADE Your Performance* on the overall performance on the Job Performance Rubric of students with IDD?

Previous *UPGRADE* studies found students were able to generalize their skills to make improvements to other soft skill areas when focusing on one soft skill area;

however, they were unable to reach mastery criteria for each non-targeted soft skill area (Clark, Konrad, et al., in press; Clark, Test, et al., in press). One primary focus of this study was to measure student's ability to generalize to non-targeted soft skill areas measured by the JPR. Table 14 shows generalization across all three studies.

Table 14

Generalization By Selected Soft Skill Area of Students Across All UPGRADE Studies

Selected-Soft Skill Area	Non-Targeted Soft Skill Areas	Number of Students Who Generalized to Mastery Out of Total Number of Students
Reliability	Attitude & Cooperation	1/1
	Productivity & On-Task	1/1
	Quality of Work	1/1
	Teamwork & Communication	0/1
Productivity & On-Task	Attitude & Cooperation	4/6
	Reliability	5/6
	Quality of Work	2/6
	Teamwork & Communication	3/6
Quality of Work	Attitude & Cooperation	2/3
	Reliability	2/3
	Productivity & On-Task	2/3
	Teamwork & Communication	2/3
Teamwork & Communication	Attitude & Cooperation	0/1
	Reliability	1/1
	Productivity & On-Task	1/1
	Quality of Work	0/1

Note. Previous studies include Clark, Konrad, et al. (in press), Clark, Test, et al. (in press)

Across all three studies six students selected to focus on productivity and on-task, three chose to target quality of work, one chose reliability, and one selected teamwork and communication. Data across all three studies indicate when students chose to work on productivity and on-task they demonstrated generalization to mastery 4 out of 6 times

in attitude and cooperation (67%), 5 out of 6 times in reliability (83%), 2 out of 6 times in productivity and on-task (33%), and 3 out of 6 times in teamwork and communication (50%). Next, when students chose to work on quality of work increases occurred to mastery 2 out of 3 times in attitude and cooperation (67%), 2 out of 3 times in reliability (67%), 2 out of 3 times in productivity and on-task (67%), and 2 out of 3 times in teamwork and communication (67%). When a student chose to work on reliability there were increases to mastery in all other soft skill areas except teamwork and communication. Lastly, when a student chose to work on teamwork and communication there were increases to mastery in reliability and productivity and on-task. However, since only one student from a previous study chose reliability and only one student chose teamwork and communication, there is not enough data to draw conclusions from those results. This study extends findings from previous studies by having students select a second soft skill area to focus on after reaching mastery in their first selected soft skill area. This was conducted in order to examine generalization on other skill areas and determine if participants would be able to reach mastery to all soft skill areas measured by the JPR since students in previous studies were unable to achieve or maintain at mastery criteria in all other soft skill areas. These data add to previous results and inform which soft skills measured by the JPR may generalize to others. Table 15 shows increases from this study when students focused on two soft skill areas.

Table 15

Results by Students in This Study Targeting Two Soft Skills

Selected-Soft Skill Area	Non-Targeted Soft Skill Areas	Generalization to Mastery
Productivity & On-Task (1 st Skill)	Attitude & Cooperation Reliability	0/2 2/2

	Quality of Work	0/2
	Teamwork & Communication	2/2
Quality of Work (2 nd Skill)	Attitude & Cooperation	2/2
	Reliability	2/2
	Productivity & On-Task	N/A
	Teamwork & Communication	2/2

Results indicated students were able to increase their performance on non-targeted soft skill areas and maintain those skills at that level over time after instruction on a second soft skill. Both students chose to work on productivity and on-task first and were able to generalize to mastery in all other skills except for attitude and cooperation and quality of work. They chose quality of work as their second soft skill area and after focusing on that soft skill area, they were able to increase their skills in attitude and cooperation to mastery and maintain mastery for all other skills including productivity and on-task

These findings suggest when students selected a second soft skill to focus on after achieving and maintaining mastery on the first skill; they were able to generalize their skills to mastery in all soft skill areas that were measured. There are several possible reasons generalization to mastery in all other skill areas was demonstrated in this study. For example, this study utilized strategies to program for generalization including (a) teaching relevant behaviors, (b) using sufficient response exemplars, and (c) self-mediated instruction (Stokes & Osnes, 1988). Specifically, this study differed from previous studies investigating the effectiveness of *UPGRADE Your Performance* instruction by using sufficient response exemplars. Using sufficient response exemplars includes using a variety of response training in which multiple related behaviors are

targeted as the outcome of the intervention and various examples of each behavior are included in the training (Stokes & Osnes, 1988). This study incorporated this strategy by having students target two skill areas and by providing several examples of how to perform each behavior appropriate during goal-setting instruction focused only on one soft skill area through role-play, discussion, and video instruction. They were not taught examples for the non-targeted soft skill areas. In addition, the study continued to utilize teaching relevant behaviors and self-mediated instruction to program for generalization (Stokes & Osnes, 1988). The skills measured by the JPR are relevant behaviors that are likely to be viewed as positive in other settings other than just on their job site, including others the students have contact with outside of the interventionist (e.g., teacher, job coach, parent). Lastly, using self-mediated instruction includes self-management strategies such as self-evaluation and self-monitoring (Stokes & Osnes, 1988). Students in this study practiced self-monitoring their skills and self-evaluating their performance throughout all phases of the intervention. The use of these three strategies together could explain the generalization that occurred in this study.

Research Question 4: Are students with IDD able to acquire skills to graph other data as a result of the intervention as measured by a pre-test, midpoint assessment, and post-test on graphing skills?

Students in this study learned to graph their own scores and the interventionist's scores of their behavior during *UPGRADE Your Performance* instruction by plotting data points on a graph using the x- and y-axis. They did not receive explicit or direct instruction on this skill daily, there was one day where the skill was modeled for them. In order to determine if they were able to generalize the graphing skills they learned to

another data set, they were given a pre-test, midpoint test, and post-test. Results from the pre-test demonstrated that all students were unable to graph any of the data points correctly, both students drew pictures, wrote numbers, or colored in the boxes on the graph. During the mid-point test both Shawn and Anthony were unable to graph any points correctly; however, Anthony did attempt to draw circles to graph points and lines to connect those points on the graph which demonstrated he knew that he now should be putting circles on a graph for the points and using a line to connect points. Despite this knowledge, he was unable graph any of the data points correctly. Post-test results indicated Shawn and Anthony were still unable to graph any data points correctly, however, Anthony did draw circles on the graph and use lines to connect those points. Different from the mid-point test, he also chose to use two different colored pencils to graph points on the graph indicating he remembered the basic functions of plotting points on a graph and used two different colors to show different data sets; despite being unable to graph any of the points correctly.

Even though students were unable to acquire graphing skills by self-graphing their own data, embedding NTI within an intervention addresses the need described by Lee et al. (2009) on the importance of combining transition and academic instruction. Results from this study do not replicate findings from previous studies where students with IDD acquired NTI through memorization of facts (Jones & Collins, 1993), sight words (Taylor et al., 2002), and reading, math, and science content (Karl et al., 2013); as well as results from one study where students with LD were able to learn NTI skills of computing percentages, plotting points on a graph, and analyzing graph through self-monitoring their performance by self-graphing. Findings from this study differ from

those, since students in this study were unable to correctly graph any data points on a graph. However, one student did demonstrate retention of the correct way to plot points on a graph using circles to show data points, and using different colors to show the two different data sets. Ultimately, he was unable to graph any points correctly. The assessment used only measured if students could correctly graph points, therefore documenting the acquisition of any other graphing skills (e.g., the ability to draw circles, lines, and use different colors to show different data sets) was not directly measured. In other studies of students with IDD, they were able to memorize steps, words, and facts, but were not asked to demonstrate an applied skill such as graphing. This may indicate students with IDD may need explicit instruction to increase their skills in an applied skill such as graphing a novel data set and a different type of assessment such as a task analysis or rubric may be more appropriate for measuring the acquisition of graphing skills for students with IDD.

Research Question 5: To what extent do soft skills acquired by students with IDD generalize to skills measured by Vocational Rehabilitation Work Adjustment rubric?

Previous research suggests involving vocational rehabilitation (VR) can link individuals with disabilities to community and workplace resources (Wehman & Targett, 2002). In this study, a rubric used by VR was used to assess each participant's ability to generalize skills learned during *UPGRADE Your Performance* instruction to employability skills measured by the VRWA rubric. Findings of the pre-intervention and post-intervention scores indicated students were able to generalize their skills and make improvements to their scores on the VRWA rubric. Shawn's score before intervention

was 48 out of 88 (55%) and his score after intervention was 75 out of 88 (85%) indicating a 29-point increase. Anthony's score before intervention was 49 out of 88 (56%) and his score after intervention was 80 out of 88 (91%) indicating a 31-point increase.

Discussion of Social Validity Findings

Research Question 6: What are the teachers' and job coach's perceptions of the impact of *UPGRADE Your Performance* on the soft skills of their students with IDD?

Wolf (1978) described social validity as investigating the social importance and relevance of the intervention's goals, procedures, and outcomes. The social significance of goals examines if the goals of the intervention are aligned with what society views as important, and the relevance of procedures determines if participants, instructors (e.g., teachers, job coaches) and others (e.g., employers) consider intervention procedures as acceptable. The social significance of the outcomes of the intervention determines if participants and others are content with the results and perceive meaningful changes occurred as a result of the individual participating in the intervention (Wolf, 1978). Assessing the social validity of an intervention is important because if teachers, students, and others do not view the behavior change or intervention as important or acceptable it is unlikely they will want to use the intervention and it is also unlikely the intervention would be replicated by others. Several methods were used to assess the social validity of *UPGRADE Your Performance* instruction including measuring teacher, student, and employer perceptions.

Teacher perceptions of the intervention indicated they agreed or strongly agreed with the goals and outcomes of the study. Both teachers indicated they felt *UPGRADE*

Your Performance instruction made a positive impact on their students, the goals of the study were important, and both indicated they would like to use *UPGRADE Your Performance* instruction in the future. These findings suggest social validity of *UPGRADE Your Performance* because typical intervention agents (e.g., teachers) indicated they felt this instruction was useful, important, effective with their students, and something they would like to use in the future.

Teachers' perception of outcomes of the intervention indicated they agreed or strongly agreed that Shawn and Anthony increased their skills in all soft skill areas measured by the JPR as a result of their participation *UPGRADE Your Performance* instruction. One teacher provided comments indicating he felt Anthony increased his leadership skills, awareness of his attitude and behavior at work, independence, and awareness of how to work with his team members. These results provide support for the outcomes of this study for Shawn and Anthony in their acquisition of self-selected soft skills, as well as generalization of those skills to non-targeted areas. Both teachers indicated they saw an increase by their students in all of the soft skill areas and not just the ones they selected to focus on.

The job coach's perception of outcomes of the intervention for Shawn and Anthony indicated he agreed or strongly agreed they increased their soft skills in the areas of attitude and cooperation, quality of work, and teamwork and communication. He remained neutral on the areas of reliability and productivity and on-task. He indicated in comments he felt Shawn was already a reliable student and that the program allowed Shawn to demonstrate his strengths in productivity and on-task. His comments for Anthony indicated he also felt Anthony was a reliable student and noted that he felt

Anthony demonstrated an improvement in teamwork and group communication, showed task management, and the ability to delegate tasks to others. His answers also provide additional support for the generalization of skills to other areas on the JPR. He did indicate he did not think the students improved on reliability and productivity and on-task even though both students chose to work on productivity and on-task. He mentioned that he did not directly supervise either of these students at the jobs on campus; he was only able to see them when another student he was supervising was working in a similar area. He said he based some of his perception on what he saw at their high school, as well as what he saw on campus.

Research question 7: What are students' perceptions of *UPGRADE Your Performance* and *U-GRADE* on its ability to help them (a) reach their goals, (b) gain soft skills, and (c) increase their employability?

Student perceptions of the intervention indicated they agreed or strongly agreed with the goals and outcomes of the study. Shawn and Anthony determined they agreed or strongly agreed with the procedures *UPGRADE Your Performance* instruction indicating it was not too hard, they enjoyed grading their own performance, and liked using technology during *U-GRADE* phases. Anthony indicated he disagreed with the job skills rubric being fair, when he was asked why he disagreed he said he was not sure. The teacher felt he might not understand what the word “fair” meant. They also both agreed or strongly agreed with the outcomes and goals *UPGRADE Your Performance* instruction. They reported they felt this would help them get a job, was a good way to learn to set goals, would be good for other students, and felt learning how to behave on a job would help with their behavior in school too. These findings suggest social validity of

UPGRADE Your Performance because both participants (e.g., students) indicated they felt this instruction was not too hard, was a good way to learn skills that would help them in the future, and felt it was good for other students to learn as well.

Research Question 8: What are employers' perceptions of the (a) JPR and (b) employability of students' based on their scores before and after participating in *UPGRADE Your Performance*?

Employer perceptions across all three studies included various professions and their perceptions are represented in Tables 16 and 17.

Table 16

Employers' Perception of the Goals of UPGRADE Your Performance Across All Studies

Employer	Perception
<u>Study One (Clark, Konrad et al., in press)</u>	
Service Industry	4
Event Industry	4
<u>Study Two (Clark, Test, et al., in press)</u>	
Banking Industry	4
Computer Technology Service Company	4
Sporting Goods Store	4
<u>Current Study</u>	
Hospital hiring specialist	4
Chain Drug and Convenience Store	3.8
Chain Grocery Store	4
Shipment Center for Online Retailer	4

Note. (1 = I strongly disagree, 2 = I disagree, 3 = I agree, 4 = I strongly agree)

Employers' perceptions of the goals of *UPGRADE Your Performance* instruction across all three studies indicates they all agreed or strongly agreed with the acceptability of the goals of *UPGRADE Your Performance*. Lindsay et al. (2014) found employers and employment counselors emphasized the importance of job readiness, practical skills, and soft skills for youth in obtaining employment. Results from all studies extend those

findings. Employers from all three studies and across industry areas consistently responded they agreed or strongly agreed (a) students should learn employment skills, (b) skills measured by the JPR were important for employees to have, (c) it was important for students to learn those skills during high school, (d) the JPR was a good way to evaluate soft skills for employment and (e) learning soft skills would help students gain employment.

Table 17

Employers' Review of Rubrics Across All UPGRADE Studies

Employers	Not Hire		Hire		Consider	
	BL	UG/M	BL	UG/M	BL	UG/M
Study One						
Service Industry	75%	0%	0%	100%	25%	0%
Event Industry	100%	0%	0%	100%	0%	0%
Study Two						
Banking Industry	100%	0%	0%	70%	0%	30%
Computer Technology Service Company	100%	0%	0%	100%	0%	0%
Sporting Goods Store	100%	0%	0%	100%	0%	0%
Current Study						
Hospital hiring department	100%	0%	0%	63%	0%	37%
Chain Drug and Convenience Store	100%	0%	0%	71%	0%	29%
Chain Grocery Store	100%	0%	0%	100%	0%	0%
Shipment Center for Online Retailer	100%	0%	0%	100%	0%	0%

Note. Study One=Clark, Konrad, et al. (in press); Study Two=Clark, Test, et al. (in press)

Employers' review of student rubric scores from baseline, *U-GRADE* phases, and maintenance provide data to support the validity of the skills measured by the JPR, as well as for *UPGRADE Your Performance*. Employers across all studies consistently chose student rubric scores from baseline as those they would not hire (range: 75-100%, mean: 96%) indicating that prior to participating in *UPGRADE Your Performance* instruction students soft skills levels were not acceptable for competitive employment in

these industries. Additionally, some professions (i.e., service industry, event industry, computer technology service company, sporting goods store, chain grocery store, shipment center for a large online retailer) selected 100% of student rubric scores from after intervention as those they would hire indicating that after students improved their soft skills they became more employable. One employer (chain grocery store) in this study commented while completing the review of the rubrics that if an employee could perform soft skills well, he would be willing to teach them other “technical” skills needed, but that he could not teach these skills to employees extending findings from Bailey (2014) where some employers indicated they would hire individuals who possessed minimum technical skills as long as they demonstrated solid soft and business skills.

Several employees selected some student rubric scores from either baseline or after intervention and indicated they would “maybe” or “consider interviewing or hiring.” One employer from the first study (Clark, Konrad, et al., in press) chose 25% of student rubric scores from baseline as those he would consider going through a longer interview process with because they had higher scores in reliability, attitude and cooperation, and teamwork and communication and those were all skills he felt were valuable in his industry so he would consider working with the potential employee on their other skill areas.

Three employers (i.e., banking, hospital hiring specialist, large chain drug and convenience store) chose between 29% and 37% of student rubric scores from after intervention as those they would consider interviewing or hiring. The individual from the banking industry indicated he selected those because they did not have as high of scores

in teamwork and communication and in his industry those are essential skills needed in an employee. The hospital hiring specialist indicated skills were more inconsistent across those rubrics and they may be able to become more consistent with strong leadership, but that it would depend on other candidates and if they were more consistent. The manager of a large chain drug and convenience store shared he felt they were strong in some areas, but may need “coaching” to bring up their skills in other areas. He also shared customer service including having a good attitude, being cooperative, teamwork, and communication were key skills needed in employees working in their stores. These results provide social validity of the intervention and JPR indicating across various industries these skills are considered important and valuable for an entry level employee at their company.

Limitations and Implications for Future Research

There were several limitations of this study. First, instruction was delivered in a one-to-one format, but this may not be practical for teacher implementation. Future research should investigate if *UPGRADE Your Performance* instruction can be delivered to a small group of students. Second, researchers did not measure if skills generalized to other environments or settings such as the classroom or a second job site. Future studies should investigate if students can generalize behaviors to other settings such as a second job site, a paid employment job, or classroom.

Third, previous research suggests a student’s level of self-determination is correlated to positive post-school outcomes (Test, Mazzotti, et al., 2009). *UPGRADE Your Performance* instruction used components of self-determination to teach soft skills; however, none of the studies conducted so far have measured the impact on student’s

level of self-determination. Future research should investigate if there is an impact on student's level of self-determination after participating in *UPGRADE Your Performance* instruction using the Self-Determination Inventory Student Report (SDI-SR) evaluation.

In addition, this study was implemented by a researcher, which makes it difficult to determine if a teacher, job coach, or vocational rehabilitation counselor could implement this intervention effectively. Future research should be conducted using a teacher, job coach, or vocational rehabilitation counselor as the interventionist to determine if practitioners working with individuals with disabilities can use this intervention.

Next, measurement of the NTI of graphing skills in this study was collected by measuring if students were able to correctly graph the points on the graph as counting them as either correct or incorrect. This method of measurement did not allow for the researcher to record or measure other graphing skills students demonstrated retaining such as drawing circles and lines to demonstrate data points. Future studies investigating the acquisition of non-targeted graphing skills should consider using a rubric or task analysis in order to be able to document any other graphing skills students may retain after participating in the intervention.

Additionally, employers reported skills measured by JPR are important and students should learn these skills during high school to increase their employability. Employers across all studies consistently indicated acceptability of the goals of the intervention and skills measured by JPR. Certain employers indicated specific soft skill areas (e.g., attitude and cooperation) were highly valued with their company. Future studies should consider asking employers to rank skills important to their profession as

part of a social validity survey and suggest any other skills they feel are important but not included in the JPR. A survey, mixed methods, or qualitative design could be used to further investigate employers' perceptions of skills needed for employment. This may assist in understanding what skills specific careers value most and add any skills that are missing to the JPR to ensure valued skills are being taught.

Lastly, since this was a replication of previous studies, extending results from previous studies, and adding to the evidence base of *UPGRADE Your Performance*, additional replications are needed across different participants, settings, and other variations to extend findings from these studies. Replications of studies can assist in determining the efficacy of an intervention across different participants, settings, and other dimensions of the study and assist in establishing the validity and generalizability of the intervention (Coyne et al., 2016). Specifically more replications are needed focusing on two or three specific soft skill areas to determine generalization to other non-targeted areas.

Implications for Practice

Results from this study provide several implications for practice. First, since students input their own data while self-monitoring, *UPGRADE Your Performance* instruction could potentially assist teachers in collecting and monitoring student progress toward their employment IEP goals using a shared Google spreadsheet to record data; as well as, create graphs that could be shared among teachers, job coaches, outside agencies (e.g., VR), families, and other members of the IEP team.

Second, since students assisted in collecting and graphing their own data, teachers could allow students to share their performance data at their IEP meetings and continue to

track their own performance. This could be a tool to assist teachers involving students in the IEP process by allowing them to show their graphs, goals, and progress. This data could be included as a part of their transition assessments and provide a way to monitor student's progress on their postsecondary goals.

Third, findings from this study indicated students were able to self-monitor themselves independently and reduced the need for assistance while working; therefore, school or outside agency job coaches could utilize *UPGRADE Your Performance* instruction while supervising students during work based learning experiences across environments (e.g., school, community). This may provide a systematic way for data collection and data sharing between job coaches, outside agency providers, and teachers.

Fourth, students compared their ratings to the interventionist's ratings during intervention and the difference while students were performing at mastery level across both skills averaged between 1 and 2 point difference. These findings were consistent with previous *UPGRADE* studies (Clark, Konrad, et al., in press; Clark, Test, et al., in press) and provide implications for teachers when implementing *UPGRADE Your Performance* instruction. Based on these results, students were within 1 to 2 points of the instructor's score when they were performing at mastery level. This appears to be an acceptable difference level for students to continue to increase or maintain their performance at mastery level or higher and generalize their newly acquired skills to other soft skill areas and other settings (e.g., community, different job). Teachers should encourage student matching between 1 and 2 points of their score and when differences are above that may want to consider additional instruction with the student on self-evaluation until their differences are between 1 and 2 points.

Also, since students were able to generalize their skills to the VRWA rubric, then, *UPGRADE Your Performance* instruction could potentially be implemented by VR counselors to deliver Pre-Employment Transition Services required by WIOA (2014); as well as, assist special education teachers and VR counselors in aligning their instruction and assessment methods for students with disabilities in key skills needed for employment. Additionally, VR counselors and job coaches could utilize *UPGRADE Your Performance* instruction while working with students in competitive employment settings to provide them with feedback and assistance on improving their soft skills and independence while working on the job.

Next, since students were able to generalize skills across soft skill areas, teachers could maximize instructional time by focusing on skill areas where students need to improve the most. This could allow for teachers or job coaches to individualize instruction based on each individual student's needs and at the same time assist them in making progress across skill areas. This could also help students make progress quicker in all skill areas by focusing on one or two skill areas that demonstrate high levels of generalization to other skill areas. Based on the findings to date, it appears that if teachers initially focus on productivity and on-task first, they may see students increase their skills in teamwork and communication and reliability as well. Then, if teachers focused on quality of work second there could be generalization to mastery in attitude and cooperation and maintenance at mastery for all other soft skill areas.

Also, since students were unable to increase their graphing skills without explicit instruction, teachers may need to provide more explicit instruction on graphing skills to get students to gain key graphing concepts. Additionally, teachers may consider using a

different method for assessing student acquisition of non-targeted graphing skills by using a rubric or task analysis to see what skills may have been acquired and using that data to inform what explicit instruction may still be needed. Additional skills that could be measured include (a) writing correct sentences when writing their goal, (b) vocabulary instruction using words from the JPR, and (c) math calculation skills by adding up their total scores.

In addition, the job coach reported during the social validity survey that he was not sure if students increased in their skills in two areas because he was not always supervising them on the job site and based his perception on what he saw them do at school and when he did see them working on campus. This provides implications for providing training for job coaches on collecting and analyzing data on students while they are working on job sites and in the school building. Practitioners should provide training to job coaches and paraeducators, as well as share data with job coaches so they are aware of students' progress both in the classroom and on the job site.

Additionally, results from employer surveys and rubric selection process indicate the importance of these skills, as well as employers' views of what skills are essential for their industry. These results provide implications for practitioners (e.g., teachers, job coaches, VR counselors, community service agency providers) working with individuals with disabilities pursuing competitive employment. Based on an employer's perception of skills needed for their industry, a practitioner may want to select those skills for that student to focus on first. For example, if an individual's goal is to work at a drug or convenience store during or after high school, their instructor may want to have them focus on getting consistently higher scores in the areas of attitude and cooperation, and

teamwork and communication in order to ensure those skills are at above mastery for that job since those skills are highly valued by that employer.

Lastly, all employers across studies and industries indicated skills measured by the JPR were important for employees to have and learn during high school, the JPR was a good way to assess soft skills for employment, and if an individual possesses these skills it would increase their employability. This provides validity for using *UPGRADE Your Performance* and assessing students using the JPR and suggests school-level practitioners should provide instruction on soft skills for employment to students with and without disabilities during high school to ensure they have the skills they need to be employable.

Summary

Post-school employment outcomes remain dismal for individuals with IDD (Lipscomb et al., 2017). Research indicates a lack of employment soft skills could be a major factor affecting employment for individuals with disabilities (Riesen et al., 2014) and identified by employers as valuable skills for employees to possess (Bailey, 2014; Casner-Lotto & Barrington, 2006; Ju et al., 2012). Several strategies for instruction and assessment of soft skills have been suggested (Blaszczynski & Green, 2012; Dixon et al., 2010; McEwen, 2010; Williams, Wattam, & Evans, 2007), however, these suggestions focused primarily on what skills to teach rather than how to teach those skills. One identified intervention for teaching soft skills to students with IDD, *UPGRADE Your Performance* instruction (Clark, Konrad, et al., in press; Clark, Test, et al., in press), includes: (a) multiple components of self-determination such as goal setting, self-evaluation, and self-management; (b) TAI for self-monitoring during *U-GRADE* phases,

and (c) a mnemonic to teach soft skills for employment.

Previous studies found positive results including generalization from a targeted soft skill area to other non-targeted soft skill areas measured by the JPR. Therefore, the purpose of this study was to examine the generalized effects of *UPGRADE Your Performance* on the acquisition of soft skills of secondary students with IDD and determine if there were patterns in generalization across specific skills in order to provide implications for practitioners that would allow them to maximize instruction. Results indicated students were able to increase their skills to mastery in self-selected soft skill and non-targeted skills measured by the JPR, as well as generalize their skills to those measured by the VRWA rubric. Findings from this study add to the evidence base for *UPGRADE Your Performance* instruction and preliminary evidence for using this intervention to teach employment soft skills to individuals with IDD.

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APPENDIX A

Teacher Consent



The University of North Carolina at Charlotte
9201 University City Boulevard
Charlotte, NC 28223-0001

Special Education Teacher Informed Consent

The Effects *UPGRADE Your Performance* instruction the Acquisition of Employment Soft Skills of students with disabilities

Project Title and Purpose:

This letter is to ask your permission for you to participate in a project called, “The Effects *UPGRADE Your Performance* instruction the Acquisition of Employment Soft Skills of students with disabilities” This is a project to see if goal-setting and attainment instruction along with instruction on soft skills for employment using a rubric in order to increase student’s employability skills or “soft skills”. They will learn the components of the rubric, set a goal based on their performance during baseline, then graph their performance daily to monitor their progress. They will learn to perform these skills across three soft skill areas.

Researchers:

This study is being conducted by Ms. Kelly Clark, Doctoral Student, Department of Special Education and Child Development, as part of the requirements for a doctoral degree. The responsible faculty member is Dr. David Test, Professor, Department of Special Education and Child Development.

Description of Participation:

As the teacher participant, you will be asked to:

- (a) Allow Ms. Clark to use a room at the school to implement the intervention.
- (b) Complete an anonymous paper-pencil survey on each student after they finish intervention and describe anything you saw as a result of the intervention. The survey will take 5 minutes to complete.
- (c) Complete an anonymous paper-pencil survey at the end of the study to indicate your opinions of the intervention and the impact on the students. The survey will take 5 minutes to complete.

Should you give your consent for this study, a student in your class will be identified by you as identified as having an intellectual disability. The students should be participating in community based job sites located on the university’s campus, have an IEP goal of obtaining employment after high school, a record of good attendance (10 days of less missed in the previous school year), parent consent, and give their assent to participate. The selected students will participate in the goal setting and attainment instruction on soft skills and self-monitor their progress through self-graphing.

Length of Participation:

Your participation in this project will begin in November 2017 and end in March 2018.

Risks and Benefits of Participation:

There is no known risk associated with this study. There may be risks, which are currently unforeseeable. The benefits of participation in this study include improved soft skills for employment and improved job performance skills.

Volunteer Statement:

You are a volunteer. The decision to participate in this study is completely up to you. If you decide to be in the study, you may stop at any time. You will not be treated any differently if you decide not to participate or if you stop once you have started.

Confidentiality:

Any information about your participation, including your identity, will be kept confidential. The following steps will be taken to ensure confidentiality:

- Pseudonyms will be used in all reports.
- All educational record information and data sheets collected will be stored in a locked file cabinet in a locked office of the UNC Charlotte responsible faculty. All educational record information for potential participants who were not selected will be destroyed immediately after the selection process.
- All data maintained by the researchers will be destroyed 5 years after the study has ended.

UNC Charlotte wants to make sure that you are treated in a fair and respectful manner. Contact the University's Office of Research Compliance (704-687-1871) if you have any questions about how you are treated as a study participant. If you have any questions about the project, please contact **Ms. Kelly Clark at 704-785-7774**, or **Dr. David Test at 704-687-8853**.

This form was approved for use on _____, _____, 2017 for a period of one (1) year.

Participant Consent

I have read the information in this consent form. I have had the chance to ask questions about this study, and those questions have been answered to my satisfaction. I am at least 18 years of age, and I agree to participate in this research project. I understand that I will receive a copy of this form after it has been signed by me and the Principal Investigator.

Participant Name (Print)

Participant Signature

Date

Investigator Signature

Date

APPENDIX B

Parental Consent

**Parental Informed Consent for Target Students**

The Effects *UPGRADE Your Performance* instruction the Acquisition of Employment Soft Skills of students with disabilities

Project Title and Purpose:

This letter is to ask your permission for you and your student to participate in a project called, “The Effects *UPGRADE Your Performance* instruction the Acquisition of Employment Soft Skills of students with disabilities. This is a project to see if goal-setting and attainment instruction along with instruction on employment soft skills using a rubric will increase student’s employability skills. They will learn the components of the rubric, set a goal based on their performance during baseline, then graph their performance daily to monitor their progress. They will learn to perform these skills across three different soft skill areas. The first phase of the study will take place during your student’s job site and last for three days. During this phase I will observe your student for 25 minutes while they work and grade them on the job performance rubric. The second phase of the study will include instruction that will take place in a conference room at the university where your student participates in community based job sites. This will take place for two instructional sessions lasting between 30-45 minutes. The third phase will be just like the first phase where I will observe your student while they work for 25 minutes and rate them on the rubric for three days. Then, the next part of the of study will take place first on your student’s job site where I will observe them for 25 minutes and the second part will occur in the same conference room we did during phase two for 20 minutes of instruction where students will complete the steps of the intervention. The next phase of the study will require your student to use a handheld device such as a smart phone, iPod, or iPad to monitor his or her own performance after working. The student’s will be learning content that aligns to their Individual Education Program (IEP) goal of gaining employment after high school.

Researchers:

This study is being conducted by Ms. Kelly Clark, Doctoral Student, Department of Special Education and Student Development, as part of the requirements for a doctoral degree. The responsible faculty member is Dr. David Test, Professor, Department of Special Education and Student Development.

Description of Participation:

We ask that you read this letter and ask any questions you may have before agreeing to allow you and your student to be in this study. Your student was nominated by his/her classroom teacher to participate because improving employment soft skills may be beneficial to him or her. The soft skills they will be learning include positive attitude and cooperation, reliability, productivity and on-task behavior, quality of work (work ethic), and teamwork and communication. Not all students with parental permission will be selected to participate in the study. Once parental consent is granted, I will conduct a pre-intervention session with your student.

If your student is not selected to participate in the study, the research team will destroy (shred) all collected data immediately after the selection process has concluded. If selected for the study, your student will meet with me daily for 45 minutes to receive goal-setting and attainment instruction on the rubric. During this instruction they will learn how to set goals based on things they want to work on. They will also learn how to grade themselves and make new goals based on how they performed. Additionally, they will learn how to graph their scores on a graph and how to improve their soft skills for employment. They will participate in 25-30 sessions and then sessions to monitor their performance after intervention. At the end of the study, your student will be asked to complete a paper-pencil survey to give his/her opinions of the program. The survey will take about 5 minutes and if they are unable to read the survey, the survey will be read to them. They will be asked not to put their names on the survey. All data collected from this study will only be shared with the research team (listed above). After the completion of the study, the research team will share the results with your student's teacher. The researcher will also see educational records of your student to ensure the student meets the inclusion criteria for the study, which includes having an IEP with a diagnosed disability. You and your student's participation will be kept confidential at all times from all other individuals.

Length of Participation:

Your student's participation in this project will begin in October 2017 and end around March 2018. If you decide to provide consent for your student to participate, your student will be one of three student participants in this study.

Risks and Benefits of Participation:

There is no known risk associated with this study. There may be risks, which are currently unforeseeable. The benefits of participation for your student in this study include improved soft skills, goal setting skills, and increased knowledge of how to assess their own performance.

Volunteer Statement:

You and your student are volunteers. The decision to participate in this study is completely up to you and your student. If you decide to grant permission for you and your student to participate in the study, you may stop at any time. Your student will not be treated any differently if you and your student decide not to participate, or if your student stops once he or she has started. The study will not affect any existing services and education your student is currently receiving.

Confidentiality:

The data collected by the researchers will be kept confidential. The following steps will be taken to ensure this confidentiality:

- No real names will be reported in the results of this project.
- Your and your student's identifiers will be separated from data reporting.
- All educational record information and data sheets collected will be stored in a locked file cabinet in the office of the UNC Charlotte responsible faculty.
- All educational record information for potential participants who were not selected will be destroyed immediately after the selection process.
- All data maintained by the researchers will be destroyed 5 years after the study has ended.

UNC Charlotte wants to make sure that you are treated in a fair and respectful manner. Contact the University's Office of Research Compliance (704-687-1871) if you have any questions about how you are treated as a study participant. If you have any questions about the project, please contact **Ms. Kelly Clark 704-785-7774**, or **Dr. David Test at 704-687- 8853**.

This form was approved for use on _____ for a period of one (1) year.

Participant Consent

I have read the information in this consent form. I have had the chance to ask questions about this study, and those questions have been answered to my satisfaction. I am at least 18 years of age, and I agree to participate in this research project.

Permission Form

☐ **I AGREE** to allow my student to participate in the study, *The Effects of Goal-Setting and Attainment Instruction on the Acquisition of Employment Social Skills of students with disabilities*

OR

☐ **I DO NOT AGREE** to allow my student to participate in the research study.

Student's Name (Print)

Parent's Name (Print)

Parent's Signature

Date

Investigator Signature

Date

APPENDIX C

Student Assent

**Student Assent for Targeted Students**

The Effects *UPGRADE Your Performance* instruction the Acquisition of Employment Soft Skills of students with disabilities

Dear Student:

My name is Ms. Kelly Clark. I am a doctoral student and researcher at The University of North Carolina at Charlotte. I am working on a study teaching students how to use a strategy to improve their soft skills, set goals, and learn about their strengths and weaknesses on the job.

You will be working with me on the following skills: positive attitude and cooperation, reliability, productivity and on-task behavior, quality of work (work ethic), and teamwork and communication.

You will meet with me everyday, for about 45 minutes to learn about the rubric we will be using to learn these skills. You will set a goal based on what you think you need to work on. Then you will go do a job task and I will grade you on the rubric. Then you will grade yourself. Then we will compare how we graded your performance and see how you did on meeting your goal. We will discuss your strengths and needs, and write goals on areas you think you need to improve on. We will do this for three areas you will get to choose that you want to work on. You will also get to use your smart phone or own device during the second part of the study to grade yourself after working on the job. At the end of the study, I will ask you to complete a survey and to let me know if you think this helped you improve your soft skills. It will take about 5 minutes to complete the survey.

If at any time, you decide that you no longer want to participate in the study, you can stop and no one will be angry with you. I hope this study will show others how to improve their soft skills, set goal, and learn how to become a better employee. When we are finished, I will write a report, but I will not put your name in the report.

If you want to participate in this study, please sign your name below.

Participant Signature

Date

Investigator Signature

Date

Student Consent

**Student Consent for Targeted Students**

The Effects *UPGRADE Your Performance* instruction the Acquisition of Employment Soft Skills of students with disabilities

Dear Student:

My name is Ms. Kelly Clark. I am a doctoral student and researcher at The University of North Carolina at Charlotte. I am working on a study teaching students how to use a strategy to improve their soft skills, set goals, and learn about their strengths and weaknesses on the job.

If you want to help me with my study, you would work with me on the following skills: positive attitude and cooperation, reliability, productivity and on-task behavior, quality of work (work ethic), and teamwork and communication.

We would meet together everyday for about 45 minutes to learn about the rubric we will be using to learn these skills. You will get to set a goal based on what you think you need to work on. Then you will go to work on a job on campus and I will grade you on the rubric. When you finish working you will grade yourself. Then, we will compare how we graded your performance and see how you did on meeting your goal. We will discuss your strengths and needs, and write goals on areas you think you need to improve on. We will do this for three areas you will get to choose that you want to work on. You will also get to use your smart phone or own device during the second part of the study to grade yourself after working on the job. At the end of the study, I will ask you to complete a survey and to let me know if you think this helped you improve your soft skills. It will take about 5 minutes to complete the survey.

Length of Participation:

Your participation in this project would begin in October 2017 and end around March 2018. If you decide to provide consent so you can participate, you will be one of three participants in the study.

Risks and Benefits of Participation:

There is no known risk associated with this study. There may be risks, which are currently unforeseeable. The benefits of participation for you in this study include improved soft skills, goal setting skills, and increased knowledge of how to assess your own performance.

Volunteer Statement:

You are a volunteer. The decision to participate in this study is completely up to you. If you decide to grant permission for you to participate in the study, you may stop at any time. You will not be treated any differently if you decide not to participate, or if you stop participating once we get started. The study will not affect any existing services and education you currently receive.

Confidentiality:

The data collected by the researchers will be kept confidential. The following steps will be taken to ensure this confidentiality:

- No real names will be reported in the results of this project.
- Your identifiers will be separated from data reporting.
- All educational record information and data sheets collected will be stored in a locked file cabinet in the office of the UNC Charlotte responsible faculty.
- All educational record information for potential participants who were not selected will be destroyed immediately after the selection process.
- All data maintained by the researchers will be destroyed 5 years after the study has ended.

UNC Charlotte wants to make sure that you are treated in a fair and respectful manner. Contact the University's Office of Research Compliance (704-687-1871) if you have any questions about how you are treated as a study participant. If you have any questions about the project, please contact **Ms. Kelly Clark 704-785-7774**, or **Dr. David Test at 704-687- 8853**.

This form was approved for use on _____ for a period of one (1) year.

Participant Consent

I have read the information in this consent form. I have had the chance to ask questions about this study, and those questions have been answered to my satisfaction. I am at least 18 years of age, and I agree to participate in this research project.

Permission Form

☐ **I AGREE** to participate in the study, *The Effects of Goal-Setting and Attainment Instruction on the Acquisition of Employment Social Skills of students with disabilities*

OR

☐ **I DO NOT AGREE** to participate in the research study.

If you want to participate in this study, please sign your name below.

Participant Signature

Date

Investigator Signature

Date

APPENDIX D

Job Performance Rubric Components (Tables 1-5)

Table 1

Attitude and Cooperation

Attitude and Cooperation Subcomponent Areas	Scoring Criteria			
	Level Four	Level Three	Level Two	Level One
Shows Respect for self, others, and work	Always shows respect to others, self, and work (e.g., when asked to do something responds with “yes mam or yes sir” with 0 prompts)	Usually respectful (e.g., 1 prompt or assistance to respond appropriately when asked to perform a task or with co-workers)	Needs to improve being respectful (i.e., 2 prompts or assistance to respond appropriately when asked to perform a task or with co-workers)	Disrespectful (when ask to do a task does it after 3 or more prompts or at refuses to do a task or listen to their supervisor)
Has a good attitude toward learning and performing work	Always shows an excellent attitude (Shows a good attitude 100% of the time)	Usually has a good attitude (shows a good attitude 80% of the time)	Needs to improve having a good attitude (shows a good attitude 60% of the time)	Poor attitude (demonstrates a good attitude less than 50% of the time while working)
Accepts Constructive Criticism	Always accepts constructive criticism (e.g., listens and accepts feedback and improves their performance)	Usually accepts constructive criticism (listens and accepts feedback with at least 1 prompt, tries to improve)	Needs to improve on accepting constructive criticism (listens and accepts feedback with at least 2 prompts, tries to improve)	Refuses to listen to feedback and makes no effort to improve, makes excuses, or tries to improve after 3 or more prompts)

Shows initiative	Always shows initiative (i.e., gets started with 0 prompts, if they finish a task they ask for another task or see something that needs to be done and does it without being told)	Usually shows initiative (gets started with 1 or less prompts and when they finish a task has to be told to get started on something else or redirected 1 or less times)	Needs to improve on showing initiative (gets started with 2 or less prompts and when they finish a task has to be told to get started on something else or redirected 2 or less times)	Has to be told to get started with 3 or more prompts or is not trying (e.g., low effort). Any disciplinary action results in a 1
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Table 2

Reliability

Reliability Subcomponent Areas	Scoring Criteria			
	Level Four	Level Three	Level Two	Level One
On time and begins promptly upon arrival	On time and begins right away without prompting, arrives and leaves work on time	On time and begins with 1 or less prompts, arrives and leaves work on time with prompting or assistance (i.e., 1 prompt)	Needs to improve getting started, being on time for work and leaving on time (i.e., gets started with 2 or less prompts, late more 2 days a week)	Inconsistent tardiness (i.e., tardy 3 out of 5 days); Leaves work early or late consistently, needs a lot of prompting to get started (3 or more prompts)
Work attendance is acceptable	Perfect attendance, follows proper procedure for reporting to work, communicates when they will be absent or tardy in	Good attendance, communicates when they will be absent or tardy with 1 prompt (i.e., misses 2 days per month and tardy 1 day or	Needs to improve attendance (misses 3 days a month and tardy 2 days or less a week)	Inconsistent attendance (more than 4 days a month)

advance. less a week)

Comes to work prepared and has neat clean uniform	Clean, Neat, Prepared with all items needed for work (e.g., wears uniform every day without prompting, has all needed items for work every day without prompting)	Clean, Neat, Prepared with items needed for work (e.g., wears uniform correctly with 1 or less prompts, has needed items for work with prompting or does not have items once per week)	Needs to improve appearance and having items needed for work (i.e., wears uniform appropriately with two or less prompts, does not have needed items for work 2 times a week)	Unprepared to work (i.e., does not have what they need for the job and needs 3 or more prompts to obtain materials) Poor hygiene (i.e., wears uniform appropriately with 3 or more prompts)
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Table 3

Productivity and On-Task

Productivity and On-Task Subcomponent Areas	Scoring Criteria			
	Level Four	Level Three	Level Two	Level One
Works without assistance, reassurance, or reminders	Independent worker (i.e., works without assistance, 0 prompts)	Mostly independent (i.e., 1 prompt or assistance to get started or to do their job)	Tries to be independent (i.e., 2 prompts or assistance to get started or to do their job)	Not Independent (i.e., 3 or more prompts or assistance needed to do their job)

Stays focused and attentive	Focused and on-task (i.e., 0 redirections)	Mostly focused and on task (i.e., 1 redirection)	Needs to improve their focus and on-task (i.e., 2 redirections)	Unfocused (i.e., 3 or more redirections to focus on the job)
Works at a pace comparable to other employees	Steady pace (i.e., only stops for schedule breaks, works comparable pace to other employees)	Average pace (i.e., stops 1 time outside of a scheduled break)	Inconsistent pace (i.e., stops 2 times outside of a scheduled break)	Slow pace (i.e., stops 3 or more times outside of a scheduled break)

Table 4

Quality of Work

Quality of Work Subcomponent Areas	Scoring Criteria			
	Level Four	Level Three	Level Two	Level One
Work is completed to job specifications	Completes work to job specifications (i.e., 0 prompts)	Completes work to job specifications (i.e., 1 prompt)	Needs to improve completing work to job specifications (i.e., 2 prompts)	Incomplete work (i.e., incomplete or completes work with 3 or more prompts)
Identifies own mistakes and makes corrections independently	Independently finds mistakes and corrects them, checks over work before finishing (i.e., 0 prompts)	Makes corrections with help and checks over work before finishing (i.e., 1 prompt)	Needs to improve making corrections without help (i.e., needs a lot of assistance, 2 prompts)	Does not attempt to make corrections (i.e., refuses to make corrections or does so with 3 or more prompts)
Takes pride in work	Always shows pride in their work (i.e., checks behind themselves when they finish, 0 prompts)	Usually shows pride in their work (i.e., checks behind themselves when they finish, 1 prompt)	Needs to improve showing pride and checking behind their work (i.e., 2 prompts)	Does not show pride (i.e., does not check behind themselves or does so with 3 or more prompts)

Table 5

Teamwork and Communication

Teamwork and Communication Subcomponent Areas	Scoring Criteria			
	Level Four	Level Three	Level Two	Level One
Interacts and communicates respectfully with co-workers, customers and/or school staff	Always communicates appropriately to adults and coworkers without prompting or redirections (i.e., 0 prompts)	Usually communicates appropriately (i.e., 1 prompt or reminder to communicate appropriately)	Needs to improve communicating appropriately with adults and coworkers (i.e., 2 prompts or reminders to communicate appropriately)	Poor communication (Communicates appropriately to adults and coworkers with 3 or more prompts or reminders or does not at all)
Asks for or offers help/advice as needed	Always asks for help and/or offers to help others when needed without prompting (i.e., 0 prompts)	Usually asks for help and/or offers to help others when needed with prompting or assistance (i.e., 1 prompt)	Needs to improve asking for help and/or offering to help others when needed with prompting or assistance (i.e., 2 prompts or reminders)	Refuses to ask for help or asks for help with 3 or more prompts Does not offer to help others or does so with 3 or more prompts.
Is polite and courteous	Always polite and courteous the entire time they working (i.e., 0 reminders/prompts)	Usually polite and courteous (with 1 or less reminders)	Needs to improve being polite and courteous with 2 or less reminders	Is not polite or courteous or is polite/courteous with 3 or more prompts or reminders.
Conforms to rules and regulations of the job	Follows all rules without prompting or redirections	Follows all rules with 1 or less prompts or redirections	Needs to improve following the rules. Follows the rules (2 or less prompts)	Does not follow the rules or follows the rules with a lot of prompting

or redirections) Is trying, but needs a lot of assistance	and assistance (i.e., 3 or more prompts or redirections) Is not trying (i.e., poor effort)
---	--

APPENDIX E

Total Job Performance Rubric

Student Daily Evaluation

Student: _____

Evaluator: _____ Job Title: _____

Student performance is to be compared to performance expectations of a regular employee using the following rating scale. Please rate the student as follows:

- 1 = Does not meet expectations or well below standards of a regular employee
 2 = Not quite up to the standards of a regular employee
 3 = Inconsistently meets standards of a regular employee
 4 = Consistently meets the standards and expectation of a regular employee

Assessment Criteria	Date	Date	Date	Date	Date	Date	Date	Date	Average
Attitude & Cooperation									
Shows respect for self, others, and work									0.00
Has a good attitude toward learning and performing work									0.00
Willingly accepts constructive criticism									0.00
Shows initiative and motivation									0.00
Reliability									
On time and begins promptly upon arrival									0.00
Work attendance is acceptable									0.00
Comes to work prepared and has neat clean uniform									0.00
Productivity Level/Time on task									
Works without assistance, reassurance or reminders									0.00
Stays focused and attentive									0.00
Works at pace comparable to other employees									0.00
Quality of Work									
Work is completed to job specifications									0.00
Identifies own mistakes and makes corrections independently									0.00
Takes pride in work									0.00
Team Work and Communication									
Interacts and communicates respectfully with co-workers, customers and/or school									0.00
Asks for or offers help/advice as needed									0.00
Is polite and courteous									0.00
Conforms to rules and regulations of the job									0.00
Total Points Earned	0	0	0	0	0	0	0	0	0
Average Score	0	0	0	0	0	0	0	0	0.00
Record Number of Days Absent									

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Kelly Clark

ALL RIGHTS RESERVED

APPENDIX F

Pre-Post Graphing Test

Math Graphing Pre-Test

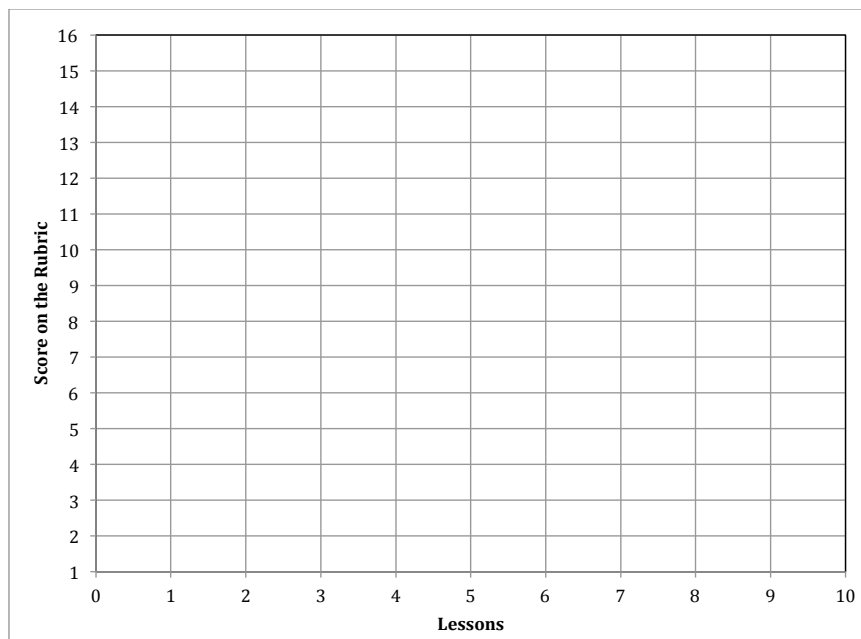
Common Core Standard for Math I: Analyze functions using different representations

HSF.IF.C.7 Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases.

<http://www.corestandards.org/Math/Content/HSF/IF/C/7/>

Graph these points on the graph below:

Total Scores	Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5
Student's Scores	10	8	8	9	12
Teacher's Score	4	6	7	8	10



APPENDIX G

Vocational Rehabilitation Work Adjustment rubric

Rev. 09/01/15

MONTHLY IN-SCHOOL WORK ADJUSTMENT STUDENT EVALUATION FORM
FOR VOCATIONAL REHABILITATION ELIGIBLE STUDENTS

Student: _____

ISWA Site: _____

Work Tasks: _____

Site Supervisor/Title: _____

Month/Year: _____

Current Incentive Amount: _____

Revised Incentive Amount
(if adjustments are required
after evaluation is complete) _____

STUDENT EVALUATION FORM

	Very Good	Satisfactory	Needs Improvement	Unsatisfactory	Comments
APPEARANCE					
Hygiene (is neat and clean)					
Is appropriately dressed for work tasks					
ATTENDANCE					
Arrives and leaves work on time					
Allows proper procedure for reporting to work					
Has good/regular attendance					
Communicates need to be absent/tardy					
PRODUCTIVITY					
Organizes materials for tasks					
Begins tasks as appropriate					
Attends to job tasks					
Limits personal conversation appropriately					
Handles materials/equipment carefully					
Works adequate speed					
Maintains acceptable quality level					
Maintains acceptable quantity level					
Follows directions (verbal/written)					
Retains instructions over time					
Adjusts to variations in assignment					
Self-evaluates performance					
Performs necessary clean-up tasks					
Displays stamina needed for tasks					

**MONTHLY IN-SCHOOL WORK ADJUSTMENT STUDENT EVALUATION FORM
FOR VOCATIONAL REHABILITATION ELIGIBLE STUDENTS**

INTERPERSONAL

Interacts appropriately with coworkers					
Accepts feedback from supervisors					

TOTAL PERFORMANCE

Column Totals (Tally the number of checks in each column)					
Rating Score	4	3	2	1	
Columns Score (Multiply the Column Total times the Rating Score for each column)					
TOTAL PERFORMANCE SCORE	Add the Column Scores from each column above				

TOTAL PERFORMANCE SCORE RANGE	MONETARY INCENTIVE AMOUNT (PER MONTH)
78 – 88	\$ 100
67 – 77	\$ 90
56 – 66	\$ 80
45 – 55	\$ 70
34 – 44	\$ 60
23 – 33	\$ 50
1 – 22	\$ 40

IMPROVEMENT PLAN/COMMENTS:

Student Signature

Date

School Representative Signature

Date

VR Counselor Signature

Date

**A copy of this form shall be sent to the student's parent/guardian (if applicable)*

APPENDIX H

Teacher Social Validity Measure

Special Education Teacher Satisfaction of *UPGRADE Your Performance***Part I: Acceptability of Intervention Goals**

- | | | | | |
|---|--------------------------|-----------------|--------------|-----------------------|
| 1. It is important for students to be able to learn employment skills | 1
I strongly disagree | 2
I disagree | 3
I agree | 4
I strongly agree |
|---|--------------------------|-----------------|--------------|-----------------------|
-
- | | | | | |
|---|--------------------------|-----------------|--------------|-----------------------|
| 2. It is important for students to learn to set their own goals | 1
I strongly disagree | 2
I disagree | 3
I agree | 4
I strongly agree |
|---|--------------------------|-----------------|--------------|-----------------------|
-
- | | | | | |
|---|--------------------------|-----------------|--------------|-----------------------|
| 3. It is important and helpful to have an intervention that combines soft skill instruction with goal setting and self-monitoring skills. | 1
I strongly disagree | 2
I disagree | 3
I agree | 4
I strongly agree |
|---|--------------------------|-----------------|--------------|-----------------------|

Part II: Acceptability of Outcomes

For question 4-6 use this to start each statement:

***UPGRADE Your Performance* instruction helped...**

- | | | | | |
|--|--------------------------|-----------------|--------------|-----------------------|
| 4. Students improve their soft skills for employment | 1
I strongly disagree | 2
I disagree | 3
I agree | 4
I strongly agree |
|--|--------------------------|-----------------|--------------|-----------------------|
-
- | | | | | |
|--|--------------------------|-----------------|--------------|-----------------------|
| 5. Student evaluate their own performance/behavior | 1
I strongly disagree | 2
I disagree | 3
I agree | 4
I strongly agree |
|--|--------------------------|-----------------|--------------|-----------------------|
-
- | | | | | |
|---|--------------------------|-----------------|--------------|-----------------------|
| 6. Students improve their behavior in class too | 1
I strongly disagree | 2
I disagree | 3
I agree | 4
I strongly agree |
|---|--------------------------|-----------------|--------------|-----------------------|
-
- | | | | | |
|--|--------------------------|-----------------|--------------|-----------------------|
| 7. Overall I think <i>UPGRADE Your Performance</i> was helpful for my students | 1
I strongly disagree | 2
I disagree | 3
I agree | 4
I strongly agree |
|--|--------------------------|-----------------|--------------|-----------------------|
-
- | | | | | |
|---|--------------------------|-----------------|--------------|-----------------------|
| 8. I would like to use <i>UPGRADE Your Performance</i> instruction in the future. | 1
I strongly disagree | 2
I disagree | 3
I agree | 4
I strongly agree |
|---|--------------------------|-----------------|--------------|-----------------------|

APPENDIX I

Job Coach Consent Form

**Job Coach Informed Consent**

The Effects *UPGRADE Your Performance* instruction the Acquisition of Employment Soft Skills of students with disabilities

Project Title and Purpose:

This letter is to ask your permission for you to participate in a project called, “The Effects *UPGRADE Your Performance* instruction the Acquisition of Employment Soft Skills of students with disabilities” This is a project to teach students soft skills for employment, how to set goals, how to monitor their own performance on these skills on a rubric, and evaluate students’ progress on their soft skills across different soft skill areas while they are working on a community job site.

Researchers:

This study is being conducted by Ms. Kelly Clark, Doctoral Student, Department of Special Education and Student Development, as part of the requirements for a doctoral degree. The responsible faculty member is Dr. David Test, Professor, Department of Special Education and Student Development.

Description of Participation:

As the job coach participant, you will be asked to:

- (d) Complete an anonymous paper-pencil survey on each student after they finish intervention and describe anything you saw as a result of the intervention. The survey will take 5 minutes to complete.

Should you give your consent for this study, after each student finishes intervention you would complete a short anonymous paper-pencil survey on how you feel the intervention impacted each student.

Length of Participation:

Your participation in this project will begin in November 2017 and end around March 2018.

Risks and Benefits of Participation:

There is no known risk associated with this study. There may be risks, which are currently unforeseeable. The benefits of this study may include improved soft skills for

employment, goal setting skills, and increased knowledge of how students assess their own performance.

Volunteer Statement:

You are a volunteer. The decision to participate in this study is completely up to you. If you decide to be in the study, you may stop at any time. You will not be treated any differently if you decide not to participate or if you stop once you have started.

Confidentiality:

Any information about your participation, including your identity, will be kept confidential. The following steps will be taken to ensure confidentiality:

- Pseudonyms will be used in all reports.
- All educational record information and data sheets collected will be stored in a locked file cabinet in a locked office of the UNC Charlotte responsible faculty. All educational record information for potential participants who were not selected will be destroyed immediately after the selection process.
- All data maintained by the researchers will be destroyed 5 years after the study has ended.

UNC Charlotte wants to make sure that you are treated in a fair and respectful manner. Contact the University's Office of Research Compliance (704-687-1871) if you have any questions about how you are treated as a study participant. If you have any questions about the project, please contact **Ms. Kelly Clark at 704-785-7774**, or **Dr. David Test at 704-687-8853**

This form was approved for use on _____, _____, 2017 for a period of one (1) year.

Participant Consent

I have read the information in this consent form. I have had the chance to ask questions about this study, and those questions have been answered to my satisfaction. I am at least 18 years of age, and I agree to participate in this research project. I understand that I will receive a copy of this form after it has been signed by me and the Principal Investigator.

Participant Name (Print)

Participant Signature

Date

Investigator Signature

Date

APPENDIX J

Teacher and Job Coach Social Validity

Special Education Teacher's and Job Coaches' Perception of Student Performance during and after UPGRADE instruction

Key: 1: I strongly disagree 2: I disagree 3: Neutral 4: I agree 5: I strongly agree

Question	Answer	Comments
1. The student showed improvement in their work performance while participating in UPGRADE instruction	1 2 3 4 5	
2. The student showed improvement in Attitude and Cooperation	1 2 3 4 5	
3. The student showed improvement in Reliability	1 2 3 4 5	
4. The student showed improvement in Productivity and On-Task	1 2 3 4 5	
5. The student showed improvement on Quality of Work	1 2 3 4 5	
6. The student showed improvement on Teamwork and Communication	1 2 3 4 5	

APPENDIX K

Student Social Validity Measure

Student Intervention Rating Profile

Student: _____

Part I: Procedures

1. The job skills rubric was fair.

1 I strongly disagree	2 I disagree	3 I agree	4 I strongly agree
--------------------------	-----------------	--------------	-----------------------

2. The training was not too hard.

1 I strongly disagree	2 I disagree	3 I agree	4 I strongly agree
--------------------------	-----------------	--------------	-----------------------

3. I like grading my own performance

1 I strongly disagree	2 I disagree	3 I agree	4 I strongly agree
--------------------------	-----------------	--------------	-----------------------

4. I liked using technology during
-
- U-GRADE*

1 I strongly disagree	2 I disagree	3 I agree	4 I strongly agree
--------------------------	-----------------	--------------	-----------------------

Part II: Outcomes

5. I think this will help me get a job
-
- in the future.

1 I strongly disagree	2 I disagree	3 I agree	4 I strongly agree
--------------------------	-----------------	--------------	-----------------------

6. This was a good way for me to
-
- learn how to set goals for myself

1 I strongly disagree	2 I disagree	3 I agree	4 I strongly agree
--------------------------	-----------------	--------------	-----------------------

7. The training I received would be
-
- good for other students who want to
-
- get a job.

1 I strongly disagree	2 I disagree	3 I agree	4 I strongly agree
--------------------------	-----------------	--------------	-----------------------

Part III: Goals

8. I think learning how to behave on a
-
- job will help me with my behavior at
-
- school too.

1 I strongly disagree	2 I disagree	3 I agree	4 I strongly agree
--------------------------	-----------------	--------------	-----------------------

9. I think learning these skills are
-
- important for being a good employee.

1 I strongly disagree	2 I disagree	3 I agree	4 I strongly agree
--------------------------	-----------------	--------------	-----------------------

APPENDIX L

Employer Consent Form



The University of North Carolina at Charlotte
9201 University City Boulevard
Charlotte, NC 28223-0001

Employer Informed Consent

The Effects *UPGRADE Your Performance* instruction the Acquisition of Employment Soft Skills of students with disabilities

Project Title and Purpose:

This letter is to ask your permission for you to participate in a project called, “The Effects *UPGRADE Your Performance* instruction the Acquisition of Employment Soft Skills of students with disabilities” This is a project to teach students soft skills for employment, how to set goals, how to monitor their own performance on these skills on a rubric, and evaluate students’ progress on their soft skills across different soft skill areas while they are working on a community job site.

Researchers:

This study is being conducted by Ms. Kelly Clark, Doctoral Student, Department of Special Education and Student Development, as part of the requirements for a doctoral degree. The responsible faculty member is Dr. David Test, Professor, Department of Special Education and Student Development.

Description of Participation:

As the employer participant, you will be asked to:

- (a) After the study is complete, evaluate anonymous student rubric scores to see how they compare.
- (b) After the study is complete, evaluate anonymous student rubric to see which rubric scores show skills of a student would potentially hire.
- (c) After the study is complete, evaluate anonymous student rubric scores and indicate which one shows the score of a good employee.
- (d) Complete a survey at the end of the study to indicate your opinions of the intervention and the impact on the students.

Should you give your consent for this study, after the intervention is complete I will provide you with anonymous rubric scores at your place of employment, blue stickers to indicate which rubrics indicate students you would hire, green stickers to indicate which rubrics are that of a good employee, red stickers to indicate which rubrics are that of a student you would not hire, and a paper-pencil survey for you to complete that will take 5

minutes.

Length of Participation:

Your participation in this project will begin in November 2017 and end around March 2018.

Risks and Benefits of Participation:

There is no known risk associated with this study. There may be risks, which are currently unforeseeable. The benefits of this study may include improved soft skills for employment, goal setting skills, and increased knowledge of how students assess their own performance.

Volunteer Statement:

You are a volunteer. The decision to participate in this study is completely up to you. If you decide to be in the study, you may stop at any time. You will not be treated any differently if you decide not to participate or if you stop once you have started.

Confidentiality:

Any information about your participation, including your identity, will be kept confidential. The following steps will be taken to ensure confidentiality:

- Pseudonyms will be used in all reports.
- All educational record information and data sheets collected will be stored in a locked file cabinet in a locked office of the UNC Charlotte responsible faculty. All educational record information for potential participants who were not selected will be destroyed immediately after the selection process.
- All data maintained by the researchers will be destroyed 5 years after the study has ended.

UNC Charlotte wants to make sure that you are treated in a fair and respectful manner. Contact the University's Office of Research Compliance (704-687-1871) if you have any questions about how you are treated as a study participant. If you have any questions about the project, please contact **Ms. Kelly Clark at 704-785-7774**, or **Dr. David Test at 704-687-8853**

This form was approved for use on _____, _____, 2017 for a period of one (1) year.

Participant Consent

I have read the information in this consent form. I have had the chance to ask questions about this study, and those questions have been answered to my satisfaction. I am at least 18 years of age, and I agree to participate in this research project. I understand that I will receive a copy of this form after it has been signed by me and the Principal Investigator.

Participant Name (Print)

Participant Signature

Date

Investigator Signature

Date

APPENDIX M

Employer Social Validity

Employer's Perception of *UPGRADE Your Performance***Part I: Acceptability of Intervention Goals**

1. It is important for students to be able to learn employment skills	1 I strongly disagree	2 I disagree	3 I agree	4 I strongly agree
2. The skills on the Job Performance Rubric are important for employees to have.	1 I strongly disagree	2 I disagree	3 I agree	4 I strongly agree
3. It is important for students to learn these skills during high school.	1 I strongly disagree	2 I disagree	3 I agree	4 I strongly agree
4. The Job Performance Rubric is a good way to evaluate soft skills for employment.	1 I strongly disagree	2 I disagree	3 I agree	4 I strongly agree
5. Learning these skills will help students obtain employment	1 I strongly disagree	2 I disagree	3 I agree	4 I strongly agree

APPENDIX N

Materials

WS Lesson #1

UPGRADE Your Performance Instruction

A way to help you improve your soft skills

StrategyExplanation

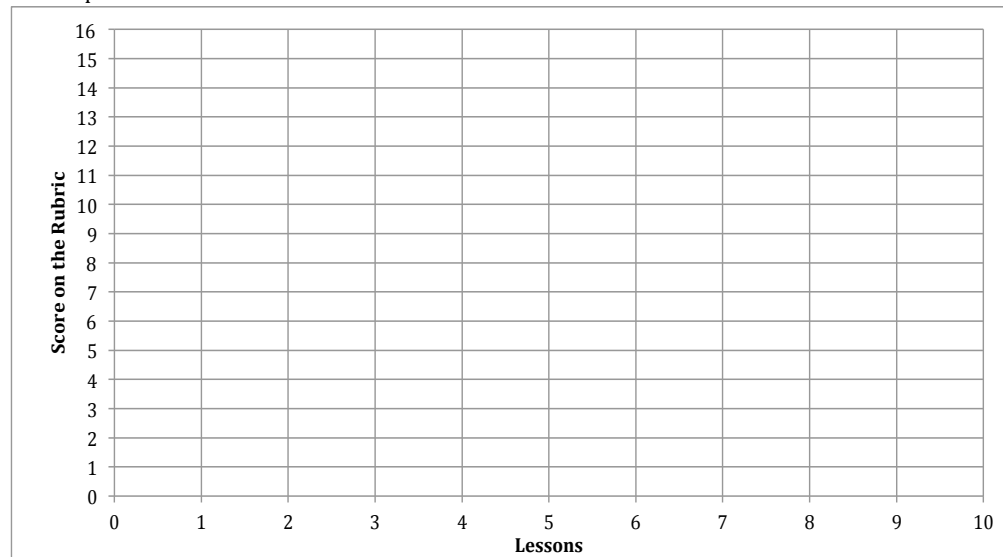
U	You evaluate yourself	Step 1: You will evaluate your performance on the job rubric.
P	Professional evaluates you	Step 2: Your supervisor will evaluate you on the rubric.
G	Graph	Step 3: Graph the scores of both scores and compare them.
R	Restate	Step 4: Restate your goal and determine if you met it.
A	Acknowledge	Step 5: Acknowledge what you did well.
D	Decide	Step 6: Decide what you can do better in order to meet your goal.
E	Execute	Step 7: Execute improvements tomorrow to meet your goal.

UPGRADE Your Job Performance Graphing Sheet

Name: _____

Total Scores on:

Total Scores	Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5	Lesson 6	Lesson 7	Lesson 8	Lesson 9	Lesson 10
U -Your Scores										
P -Professional's scores										

G= Graph both scores**R** = Restate your goal and determine if you met it**MY GOAL:** _____

UPGRADE Your Job Performance Daily Worksheet

Name: _____

U= You Evaluate Yourself (Your scores)

Assessment Criteria	
Quality of Work	Rating
Work is completed to job specifications	
Identifies own mistakes and makes corrections independently	
Takes pride in work	

TOTAL: _____

P= Professional Evaluates You (Teacher's scores)

Assessment Criteria	
Quality of Work	Rating
Work is completed to job specifications	
Identifies own mistakes and makes corrections independently	
Takes pride in work	

TOTAL: _____

G= Graph both scores –Graphing Worksheet**R** = Restate your goal and determine if you met it: Look at the goal on your graphing worksheetDid I meet my goal today? **Yes** **No****A**= Acknowledge what you did well**D**= Decide what you need to do better

+ 😊 What did I do Well?	^ What do I need to do better?
1.	1.
2.	2.

E=Execute improvement tomorrow to meet your goal

What is one thing I need to do to meet my goal tomorrow?

UPGRADE your job performance tomorrow and meet your goal!

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Kelly Clark
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UPGRADE Your Performance Daily Worksheet

Name: _____

U= You Evaluate Yourself (Your scores)

Assessment Criteria				
Quality of Work	Rating			
Work is completed to job specifications	1	2	3	4
Identifies own mistakes and makes corrections independently	1	2	3	4
Takes pride in work	1	2	3	4

TOTAL: _____

P= Professional Evaluates You (Teacher's scores)

Assessment Criteria				
Quality of Work	Rating			
Work is completed to job specifications	1	2	3	4
Identifies own mistakes and makes corrections independently	1	2	3	4
Takes pride in work	1	2	3	4

TOTAL: _____

G= Graph both scores –[Graphing Worksheet](#)**R** = Restate your goal and determine if you met it: Look at the goal on your graphing worksheetDid I meet my goal today? **Yes** **No****A**= Acknowledge what you did well**D**= Decide what you need to do better

+ 😊 What did I do Well?	^ What do I need to do better?
1. Completed work to job specifications	1. Completing my work completely
2. Identified my own mistakes and made corrections on my own	2. Identifying my own mistakes and making corrections on my own
3. Took pride in my work by checking behind myself	3. Taking pride in my work and checking behind myself

E=Execute improvement tomorrow to meet your goal

What is one thing I need to do to meet my goal tomorrow?

UPGRADE your job performance tomorrow and meet your goal!

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APPENDIX O

Goal Setting Instruction Lesson Plans

Day 1 (Lesson 1)

Lesson Plan #1

Teacher Preparation

- ☐ Ensure the PowerPoint is ready
- ☐ Make sure you have all materials (listed below).
- ☐ Display Rubric

Materials

- ☐ Students' 3-Ring 1 inch Notebooks
- ☐ Students' baseline scores on the rubric
- ☐ Copies of the checklist you used to evaluate them
- ☐ Copies of explanation of the *UPGRADE Your Performance*
- ☐ PowerPoint of an overview of the job rubric and why it is important.
- ☐ Highlighters
- ☐ Sample highlighted rubric for modeling
- ☐ Projector to display the PowerPoint

Objective

I will state why the job rubric is important.

I will identify the parts of UPGRADE instruction.

I can identify the area of the rubric I want to improve on.

General Feedback Procedures

- When student makes correct response, provide enthusiastic affirmation/praise (e.g., “Correct,” “Excellent,” “Yes, you got it.”)
- When student makes a correct response that is not quite complete, provide enthusiastic affirmation/praise (e.g., “Correct,” “Excellent,” “Yes, you got it.”) followed by a statement of the FULL correct answer.
- When student makes an incorrect response or does not respond, prompt using a model-test format (e.g., “To get a level 4 on the rubric for attitude and cooperating an employee should do the right things every day. What does an employee need to do in order to get a level 4 on the rubric for attitude and cooperation? And then follow the feedback procedures based on student’s prompted response).

Opening (5 minutes)

_____ **Teacher:** [Pull up PowerPoint titled Lesson 1 to Slide 1 to start the lesson]

_____ **Teacher:** *“Today we are going to begin learning about a job performance rubric and a new strategy called **UPGRADE Your Performance**. Over the next few weeks you will be learning how to improve your job performance, set goals, and track your own progress. But before we start, we need to get organized, so our lessons will run smoothly.”*

_____ **Teacher:** *“Our lessons over the next several weeks are going to follow a specific routine, so you will always know what to expect. For today and tomorrow you will come in and get out the notebook I have given you today. We will store these in this crate. So when you come in tomorrow you will go to the crate and get your notebook before sitting down. Starting tomorrow, _____ (student’s name), what should you do when you come into the room, before you sit down?”*

_____ **Student:** [Solicit response like, “Go to the crate and take out my notebook and then go sit at my desk.”]

_____ **Teacher:** [Deliver feedback according to general feedback procedures. Then, once students understand go to Slide 2 for the objectives]

Statement of Objective/Purpose (5 minutes)

_____ **Teacher:** *“Let’s look at the objectives for today’s lesson. What is the first objective for today?”* [Point to the day’s objective and ask student to read aloud]

_____ **Student:** [Student reads aloud.]

_____ **Teacher:** [Provide student with help on words he/she gets stuck on.]

_____ **Teacher:** *“What are the next two objectives?”* [Point to the day’s objective and ask student to read aloud.]

_____ **Student:** [Student reads aloud.]

_____ **Teacher:** [Provide student with help on words he/she gets stuck on.]

_____ **Teacher:** *“Today you will be learning about a job performance rubric and **UPGRADE Your Performance** instruction. You can ask questions at any time during the lesson if you are unsure and if you do not understand.”*

_____ **Teacher:** [Go to the next slide (Slide 3) for an introduction to the rubric]

Input/Practice (35 minutes) [Explanation of the components of the rubric (15 minutes)]

____ **Teacher:** [Pass out a copy of the rubric handout and display the rubric on the PowerPoint or with a poster] *“First, let’s talk about why the rubric is important. The rubric is an example of how an employer may rate an employees performance on the job. Instead of getting a grade like an A, B, C, D, or F, employers may give employees a rating. Did you know that teachers and principals get ratings instead of grades? They get rated on a rubric as part of their evaluation for their job. On this rubric, the best score an employee can get is a four, next best is a three, okay is a two, and not very good is a 1. Why do you think learning about this rubric is important?”*

____ **Student:** [Provides an answer or says “I don’t know”]

____ **Teacher:** [Deliver feedback according to general feedback procedures, then go to Slide 4 to show the reasons]

____ **Teacher:** *“There are several reasons learning the job rubric is important. First, it can help you get a job in the future. If you can get better on these skills you may have a better chance at getting a paid job. What is the first reason the job rubric is important?”* [Make sure the PowerPoint is on the slide 4 to show the first reason]

____ **Student:** *“It can help you get a job.”*

____ **Teacher:** [Deliver feedback according to general feedback procedures]

____ **Teacher:** *“We all want to be able to get a job in the future so that we can make money to do the things we want to do such as live on our own or with our family, do things for fun, and buy things we want or need.”* [Go to slide 5 for the categories of the rubric]

____ **Teacher:** *“Let’s read through the categories of the rubric together.”* [Point to the left side of the rubric that says each category of the rubric on the PowerPoint]

____ **Student and Teacher:** [Read rubric components] *“Attitude and Cooperation, Reliability, Productivity/On Task, Quality of Work, Teamwork and Communication”*

____ **Teacher:** [Deliver feedback according to general feedback procedures]

____ **Teacher:** *“These are some of the skills are going to learn more about and work on over the next few weeks.”* [Go to next slide (Slide 6)]

____ **Teacher:** *“The second reason these skills are important is because these are all skills employers want employees to have. What is the second reason these skills are important?”* [Make sure reason two is displayed on the PowerPoint]

____ **Student:** *“They are all skills employers want employees to have.”* [If student does not know, prompt by pointing to the PowerPoint]

____ **Teacher:** [Deliver feedback according to general feedback procedures]

____ **Teacher:** *“These skills are important to employers and they want future employees to be able to have a good attitude, be cooperative, be on time and reliable by coming to work everyday. They want someone who can be on task while working, do quality work, communicate appropriately with others, work with other people by helping out when needed, and get along with their co-workers.”* [Go to next slide for the scoring sheet (Slide 7)]

____ **Teacher:** *“The good thing about each of these areas is that they are all things you can on any job you do and they are skills that anyone can do! Here is an example of the scoring sheet based on the rubric that you will be graded on while working on your jobs. You will also get to grade yourself on this scoring sheet. On the scoring guide there are key skills areas under each part of the rubric. Each of these areas under the big area will be used to grade you and you will grade yourself. We will learn more about how to do that in our future lessons.”* [Make sure the scoring guide is displayed on the PowerPoint]

____ **Teacher** [Go to next slide (Slide 8)]

____ **Teacher:** *“The third reason these skills are important is they can help you keep a job once you have it. If you can learn to do these skills well you will be a great employee and employers will want to keep working for them. What is the third reason these skills are important?”* [Make sure slide 8 with the third reason is displayed]

____ **Student:** *“They can help you keep a job once you have one.”* [If student does not know, prompt by pointing to the PowerPoint]

____ **Teacher:** [Deliver feedback according to general feedback procedures, then go to slide 9]

____ **Teacher:** *“Let’s review what we have learned so far. What are the reasons these skills are important? Can anyone remember the first reason?”* [Make sure slide 9 is displayed]

____ **Student:** *“It can help you get a job.”* [If they need help remembering, click and the first reason will appear on the slide].

____ **Teacher:** [Deliver feedback according to general feedback procedures]

____ **Teacher:** *“Can anyone remember the second reason?”*

____ **Student:** *“They are skills employers want you to have”* [If they need help remembering, click and the second reason will appear on the slide].

____ **Teacher:** [Deliver feedback according to general feedback procedures]

____ **Teacher:** *“Can anyone remember the third reason?”*

____ **Student:** *“They can help you keep a job once you have one.”* [If they need help remembering, click and the second reason will appear on the slide].

____ **Teacher:** [Deliver feedback according to general feedback procedures, then go to slide 10 for the scoring guide]

____ **Teacher:** *“Let’s look at the grading scale for these areas of the rubric.”* [Point to the top of the scoring guide]

____ **Teacher:** *“Can you read what it says it means to be a 1 on the rubric.”*

____ **Student:** [Reads “Does not meet expectations or well below the standards of a regular employee”]

____ **Teacher:** [Deliver feedback according to general feedback procedures]

____ **Teacher:** *“Can you read what it says it means to be a 2 on the rubric.”*

____ **Student:** [Reads “Not quite up to the standards of a regular employee.”]

____ **Teacher:** [Deliver feedback according to general feedback procedures]

____ **Teacher:** *“Can you read what it says it means to be a 3 on the rubric.”*

____ **Student:** [Reads “Inconsistently meets the standards of a regular employee.”]

____ **Teacher:** [Deliver feedback according to general feedback procedures]

____ **Teacher:** *“Can you read what it says it means to be a 4 on the rubric.”*

____ **Student:** [Reads “Consistently meets the standards and expectations of a regular employee.”]

____ **Teacher:** [Deliver feedback according to general feedback procedures]

____ **Teacher:** *“Tomorrow we will go into more of what that means for a specific area of the rubric so you really understand how to score yourself and how you will be scored.”* [Go to Slide 11 to go over *UPGRADE Your Performance* instructions]

Explanation of the *UPGRADE Your Performance* instruction (10 minutes)

____ **Teacher:** *“Put your rubric and scoring guides aside. We are now going to talk about *UPGRADE Your Performance* instruction. I’m going to hand out a sheet that*

explains the UPGRADE strategy. This instruction is going to help you learn how to improve your performance on the rubric." [Pass out worksheet explaining the UPGRADE instruction]

____ **Teacher:** *"When you can get an upgrade on your phone or an upgrade on a seat at a concert is that a good or a bad thing?"*

____ **Student:** ["A good thing"]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *"Yes, when you get an upgrade on something like a cell phone, you get a newer or better phone. This instruction is going to help you upgrade, or improve, your job performance so you can get a job, do well on your in school jobs, and get all of your job hours complete. Look at your worksheet, it explains what each letter in UPGRADE stands for."*

[Read the information to the students by going through each of the steps]

____ **Teacher:** *"Let's review. What does the U stand for?"*

____ **Student:** ["You evaluate yourself."]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *"Now what does the P stand for?"*

____ **Student:** ["Professional evaluates you."]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *"What does the G stand for?"*

____ **Student:** ["Graph."]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *"What does the R stand for?"*

____ **Student:** ["Restate."]

____ **Teacher:** *"What does the A stand for?"*

____ **Student:** ["Acknowledge."]

____ **Teacher:** *"What does the D stand for?"*

____ **Student:** ["Decide."]

____ **Teacher:** *"What does the E stand for?"*

____ **Student:** ["Execute."]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *"Each day after working on your job, you will follow these steps."* [Go to slide 12]

Evaluation of their scores and choosing a section of the rubric (15-20 minutes)

____ **Teacher:** *"Now we are going to look at how I scored you on the past three days while you were working on your job. Do not worry about any of your scores; this is just to see how we can work together to improve your scores."* [Pass out student's score sheets from baseline and highlighter]

____ **Teacher:** *"Let's look at your scores. I want you to highlight any areas where you got a score of a 1 or a 2. Before you start, let's do the first section together. Let's look at the areas under attitude and cooperation. Put your finger on the title of attitude and cooperation. Underneath it, it says shows respect for self, others, and work; has a good attitude toward learning and performing work; willingly accepts constructive criticism; and shows initiative and motivation. Highlight any of those sections where you got a score of a 1 or a 2."* [Demonstrate this for the students on a teacher demonstration copy. Make sure students are only highlighting the areas they scored a 1 or a 2 in]

____ **Student:** [Highlights any areas they have a score of a 1 or a 2]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *"Now go down to the next section of Reliability and highlight any areas under that title where you received a score of a 1 or a 2."* [Make sure students are only highlighting the areas they scored of a 1 or a 2]

____ **Student:** [Highlights any areas they have a score of a 1 or a 2]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *"Now go down to the next section of Productivity/ On Task and highlight any areas under that title where you received a score lower than a level 3 or 4."* [Make sure students are only highlighting the areas they scored a 1 or a 2 in]

____ **Student:** [Highlights any areas they have a score of a 1 or a 2]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“Do the same thing for the last two parts of the rubric.”* [Make sure students are only highlighting the areas they scored a 1 or a 2 in]

____ **Student:** [Highlights any areas they have a score of a 1 or a 2]

____ **Teacher:** [Deliver feedback according to general feedback procedures, then go to slide 13.]

____ **Teacher:** *“Now look at your score sheet. I want you to pick one area of the rubric that you want to work on. Usually this would mean the part of the rubric you did not do as well on as the other areas. It also should be something you think you need to work on to upgrade your job performance. Take a few minutes to look through the areas you highlighted and then when you decide on your area use your pencil to circle the area of the rubric you want to focus on.”* [Walk around to make sure students are choosing their area, if they need help, you can help them choose the area. It needs to be something they pick and want to work on so it is important not to choose for them, go to slide 14]

Closing (5 minutes)

____ **Teacher:** *“Today we learned about a rubric that can be used to rate employees on the job. We learned about UPGRADE Your Performance instruction and you chose a part of the rubric you want to work on. Do you think this rubric can help you become a better employee when you go to work a job?”*

____ **Student:** [Hopefully, the student will say ‘yes.’]

____ **Teacher:** *“Tomorrow you will do another lesson with me just on the part of the rubric you have chosen to work on. Thank you for working so hard today. Now you can put all the materials back in your notebook and your notebooks back in the crate.”*
[Transition student back to the classroom]

Goal Setting Instruction Lesson Day 2 (2a-2e)

Lesson 2a: Attitude and Cooperation

Lesson Plan #2a

Teacher Preparation

- ❑ Ensure objective is in the PowerPoint
- ❑ Make sure you have all materials (listed below).
- ❑ Display Rubric

Materials

- ❑ Students' 3-Ring 1 inch Notebooks (in crate) with the Lesson Objectives Sheet inside.
- ❑ Students' baseline scores on the rubric just in attitude and cooperation
- ❑ The attitude and cooperation part of the rubric
- ❑ Attitude and cooperation worksheet for each student
- ❑ Scripts for Attitude and Cooperation
- ❑ PowerPoint of lesson on Attitude and Cooperation

Objective

I can identify what attitude and cooperation are like for a level 1, 2, 3, and 4.
I can identify what I need to improve on and set a goal for myself.

General Feedback Procedures

- When student makes correct response, provide enthusiastic affirmation/praise (e.g., "Correct," "Excellent," "Yes, you got it.")
- When student makes a correct response that is not quite complete, provide enthusiastic affirmation/praise (e.g., "Correct," "Excellent," "Yes, you got it.") followed by a statement of the FULL correct answer.
- When student makes an incorrect response or does not respond, prompt using a model-test format (e.g., "To get a level 4 on the rubric for attitude and cooperating an employee should do the right things every day. What does an employee need to do in order to get a level 4 on the rubric for attitude and cooperation? And then follow the feedback procedures based on student's prompted response.

Statement of Objective/Purpose (5 minutes)

Teacher: *"Remember to copy down the objectives for today in the log at the front of your notebook titled Lesson Objectives."* [Give student a minute to fill in the blanks for the objectives on their worksheet.]

____ **Student:** [writes]

____ **Teacher:** [Check to be sure student is following directions. Prompt, assist, redirect as needed. Praise when complete.]

____ **Teacher:** *Today we will be learning about the first part of the rubric, attitude and cooperation."*

Input/Practice (35 minutes)

Examples/Non-Examples of Attitude and Cooperation (15-20 minutes)

____ **Teacher:** *"First, let's examine the rubric and see what it means for attitude and cooperation on the job. [Pass out a copy of the attitude and cooperation worksheet]. When you are working a job you will not get a grade like A, B, C, D, or F, instead you will get a rating. The rubric is an example of how an employer may rate an employees performance on the job. Even teachers and principals get ratings instead of grades. The best score an employee can get is a four, next best is a three, okay is a two, and not very good is a 1."* [Read the rubric aloud to the student under each part (e.g., under a one or poor, attitude and cooperation means... under two or okay, attitude and cooperation means... under three or good, attitude and cooperation means... under four or awesome, attitude and cooperation means...]

____ **Teacher:** *"Now lets read it together."* [Student and Teacher read the rubric together]

____ **Student:** [Reads the rubric with the teacher]

____ **Teacher:** [Deliver feedback according to general feedback procedures]

____ **Teacher:** *"There are three key terms we are going to define that are in the rubric. These three terms are respect, constructive criticism, and initiative. First we will define the word respect."* [Show the definition for respect on the PowerPoint]

____ **Teacher:** *"The definition of respect is to listen to your teacher or supervisor and respond by showing them consideration. It also means to show consideration to your co-workers and your work. Example: saying "yes mam or yes sir" when you are asked to do something. Another example is to treat others you work with in the same way you would want to be treated. Can you think of an example of respect?"*

____ **Student:** [Gives their own example of respect]

____ **Teacher:** [Deliver feedback according to general feedback procedures]

____ **Teacher:** *"Now write the definition of respect on your worksheet."*

____ **Teacher:** *“The opposite of respect is disrespect. The definition of disrespect is to treat someone rudely or ignore when your teacher or supervisor asks you to do something. An example would be your supervisor asks you to clean the tables in the dining room at your job at McDonalds. You don’t like cleaning so you tell them, that you don’t want to do that. Can you think of an example of disrespect?”*

____ **Student:** [Gives their own example of disrespect]

____ **Teacher:** [Deliver feedback according to general feedback procedures]

____ **Teacher:** *“Now write the definition of disrespect.”* [Make sure the definition is displayed on the PowerPoint]

____ **Teacher:** *“The next key word is constructive criticism. Constructive criticism means to give feedback or advice that is intended to help someone improve. Example: Your teacher or supervisor tells you they want you to do something in a different way. They may say “I like that you are cleaning the table, but I want you to make sure that you clean the whole table and if there is anything on the table pick it up and move it so you can make sure you get the whole table.” They are telling you something that will help you get better at your job. How you respond to constructive criticism is part of attitude and cooperation. Make sure you accept their feedback and respond appropriately and try to make improvements. We will work on this together.”*

____ **Teacher:** *“Now write the definition of constructive criticism on your worksheet.”* [Make sure it is displayed on the PowerPoint]

____ **Teacher:** *“The last key word is initiative. To have initiative means to take action without having to be told to. This means if you are at your job and you finish your job task, look around and see if anything else needs to be done, and if there are other things you can do you go and do them without being told to. For example, if you are cleaning tables in the cafeteria and you finish early with the tables you are cleaning, look around and see if there are other tables you can help clean and go help or see if there is trash on the ground you could go pick up.”*

____ **Teacher:** *“Now write the definition of initiative on your worksheet.”* [Make sure it is displayed on the PowerPoint]

____ **Teacher:** *“We are going to practice what it looks like to be each type of person on the rubric. First lets practice what it looks like to be a one. You read the script as the employer and I will be the employee. Then we will switch.”* Student and Teacher read script and then switch.

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“Next lets practice what it means to be a two. You read the script as the employer and I will be the employee. Then we will switch.”* Student and Teacher read script and then switch.

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“Now let’s stop before we go to three and four. What was the difference between being a one and being a two?”*

____ **Student:** [“A one is not trying and is very disrespectful, a two is trying to do better, but still may have a hard time.” (or something similar to this response)]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“Next lets practice what it means to be a three. You read the script as the employer and I will be the employee. Then we will switch.”* Student and Teacher read script and then switch

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“Next lets practice what it means to be a four. You read the script as the employer and I will be the employee. Then we will switch.”* Student and Teacher read script and then switch.

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“What was the difference between being a three and being a four?”*

____ **Student:** [“A three does pretty good most of the time, but still has to be reminded at times, a four does the right things all of the time for the whole time and is respectful without being told. (or something similar to this response)]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“Now, We are going to watch a short video clip of an employee working. During the video I want to you list anything you see the employee doing that relates to attitude and cooperation. Such as, his or her body language, how they talk to others, and anything else you see them do in the video that you think may not be good. After the video, I want you to rate him or her on the rubric for attitude and cooperation. I will also rate them as well and then we will compare our ratings.”* [Show video clip of Bon Qui Qui]

After video clip is finished

____ **Teacher:** *“Rate the employee in the video on your worksheet and then write 1 sentence explaining why you rated the employee that way.”* [Give the student 5 minutes to complete this]

____ **Teacher:** *“So tell me how you rated the employee in the video and why you rated them that way.”*

____ **Student:** [Students should have rated her as a 1 or a 2 so a response may be, “I gave her a 1 because she did not have a good attitude or cooperate. I did this because she did not listen to her boss and was not nice to the customers.” (Or something similar to this response, students may also rate her as a 2 and that is okay. You will discuss the rating next.)]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“I rated Bon Qui Qui with a one, because she was rude to customers and she did not listen to her supervisor when he asked her to do something. She also lied to her supervisor and was acting disrespectful. What are some things you noticed she did in the video?”*

____ **Student:** [Some possible answers might include, “Talking on her phone at work, not listening to her boss, being mean to customers, dancing instead of doing her job, not listening to customers, lying to her boss, rolling her eyes...”]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“Lets look at the rubric again, look under the column for one and the column for two. Which score do you think she should have?”*

____ **Student:** [“One”]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“What could Bon Qui Qui have done differently in order to get a better score?”*

____ **Student:** [“Listened to her boss, not been on her phone, not rolled her eyes, listened to what the customers wanted...etc.”]

Student Goal Setting (10-15 minutes)

____ **Teacher:** *“For our last activity I want you to look again at how I rated you on attitude and cooperation for the days before. Do not worry if your score was not very high, that is why were are learning about the rubric so we can work on getting a better score in the future.”* [Pass out only the portion of the rating sheet that shows their scores from attitude and cooperation]

____ **Teacher:** *“You saw these scores yesterday and decided this was the area of the rubric you wanted to work on. Today you are going to set a goal for yourself in this area. The last part of your worksheet is going to help you set a goal for yourself in attitude and cooperation. [Point them to the goal setting part of their worksheet] “First, I want you to write down two things you want to work on to get better on attitude and cooperation. Look at your ratings, think about which sub areas you need to work on. An example for me would be: I want to work on accepting constructive criticism. (go from a 1 to a 3 or 4). I want to say “yes mam or yes sir” when I am asked to do something even if I don’t want to do it to show more respect (go from a 1 to a 3 or 4) Now, you write the two things you want to work on to get better on attitude and cooperation.”*

____ **Student:** [Let them write down two things they want to work on]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“Now, let’s look at those things and see if you can create a goal to help you improve your scores. What do you think your goal should be? Based on those two things, write a goal for yourself on attitude and cooperation. An example is: My goal is improve my ability to accept constructive criticism and show respect to others even when I do not want to do something. On your worksheet you will see a template for your goal that says ‘My goal is _____’ Fill in the blank with what you want your goal to be.”*

____ **Student:** [Let them write their goal, if students are struggling help them look at the two areas they want to work on and help them come up with a goal. However, make sure the goal is their idea]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

Closing (5 minutes)

____ *“Today you learned about Attitude and Cooperation. Do you think this rubric can help you become a better employee when you go to work a job? [Hopefully, the students will say ‘yes.’] Thank you for working so hard today. Now you can put all the materials back in your notebook.” [Transition student back to the classroom]*

Worksheet for Lesson 2a

Attitude & Cooperation	4-Excellent	3-Strong	2-Good	1-Poor
	Always* Shows respect Accepts constructive criticism Shows initiative Has an excellent attitude * 0 prompts or reminders	Usually* Respectful Accepts constructive criticism Shows initiative Has a good attitude *1 prompt or reminder	Needs to improve* Being respectful Accepting criticism Showing initiative Having a good attitude *2 prompts or reminders	Needs to improve* Being respectful Accepting constructive criticism Showing initiative Having a good attitude *3 or more prompts or reminders * Any discipline referral results in a 1

Key Terms**Respect:**

Example: Saying _____ when your teacher or supervisor _____ you to do something _____ if you _____ to do it.

Your own example: _____

Disrespect:

Example: Your supervisor asks you to clean the tables in the dining room at your job at McDonalds. You don't like cleaning so you tell them, that you don't want to do that.

Your own example: _____

Constructive Criticism:

Example: Your teacher or supervisor tells you they want you to do something in a different way. They may say "I like that you are cleaning the table, but I want you to make sure that you clean the whole table and if there is anything on the table pick it up and move it so you can make sure you get the whole table."

*** How you _____ to _____ is part of attitude and cooperation. Make sure you _____ their _____ and _____ and _____ to make _____.

Initiative:

Example: If you are cleaning tables in the cafeteria and you finish early with the tables you are in charge of cleaning, look around and

see if there are other tables you can help clean or if there is anything else that needs to be done.

***This means if you are at your job and you finish your job task, look around and see if anything else needs to be done, and if there are other things you can do you go and do them without being told to.

VIDEO

Rating Chart:

Attitude & Cooperation	Rating of a 1,2, 3, 4
Shows respect for self, others, and work	
Has a good attitude toward learning and performing work	
Willingly accepts constructive criticism	
Shows initiative and motivation	

Why did you rate him or her that way?

What could he or she have done differently?

Goal Setting

Based on your scores, what are two things you want to work on to get better on attitude and cooperation?

1. _____

2. _____

Attitude and Cooperation Goal

My goal is _____
_____.

Adapted Version

Attitude & Cooperation	4-Excellent	3-Strong	2-Good	1-Poor
	Always* Shows respect Accepts constructive criticism Shows initiative Has an excellent attitude * 0 prompts or reminders	Usually* Respectful Accepts constructive criticism Shows initiative Has a good attitude *1 prompt or reminder	Needs to improve* Being respectful Accepting criticism Showing initiative Having a good attitude *2 prompts or reminders	Needs to improve* Being respectful Accepting constructive criticism Showing initiative Having a good attitude *3 or more prompts or reminders * Any discipline referral results in a 1

Key Terms

Respect:

Treating **others, yourself, and work** in an **appropriate** way that shows **consideration** and your attention

Example: Saying “yes mam” or “yes sir” when your teacher or supervisor **asks** you to do something **even** if you **don’t** want to do it.

Your own example: _____

Disrespect:

Treat someone **rudely**, respond **negatively** or **ignore**

your teacher or supervisor when they **ask** you to do something.

Example: Your supervisor asks you to clean the tables in the dining room at your job at McDonalds. You don’t like cleaning so you tell them, that you don’t want to do that.

Your own example: _____

Constructive Criticism:

To give feedback or advice that is intended to **help** someone improve.

Example: Your teacher or supervisor tells you they want you to do something in a different way. They may say “I like that you are cleaning the table, but I want you to make sure that you clean the whole table and if there is anything on the table pick it up and move it so you can make sure you get the whole table.”

*** How you **respond** to **constructive criticism** is part of attitude and cooperation. Make sure you **accept** their **feedback** and

respond appropriately and try to make improvements.

Your own example: _____

Initiative:

To take **action** without having to be told to.

Example: If you are cleaning tables in the cafeteria and you finish early with the tables you are in charge of cleaning, look around and see if there are other tables you can help clean or if there is anything else that needs to be done.

***This means if you are at your job and you finish your job task, look around and see if anything else needs to be done, and if there are other things you can do you go and do them without being told to.

Your own example: _____

Cooperation:

Being **willing** to **assist** and do the job that is **needed** to be done.

Example: Jake's boss asked if he could work an extra hour after he was supposed to get off because of how busy they were at the store. He agreed to stay and work the extra hour and help out.

Your own example: _____

VIDEO

Rating Chart:

Attitude & Cooperation	Rating of a 1,2, 3, 4
Shows respect for self, others, and work	
Has a good attitude toward learning and performing work	
Willingly accepts constructive criticism	
Shows initiative and motivation	

Why did you rate him or her that way?

What could he or she have done differently?

How could he or she improve their attitude and cooperation?

Goal Setting

Based on your scores, what are two things you want to work on to get better on attitude and cooperation? Circle or highlight two things you want to get better at.

Showing respect for self, others, and work

Having a good attitude toward learning and performing work

Willingly accept constructive criticism

Showing initiative and motivation

Attitude and Cooperation Goal

My goal is to

to improve my score in attitude and cooperation to a

Lesson Plan #2

Teacher Preparation

- ☐ Ensure objective is in the PowerPoint
- ☐ Make sure you have all materials (listed below).
- ☐ Display Rubric

Materials

- ☐ Students' 3-Ring 1 inch Notebooks (in crate)
- ☐ Reliability part of the rubric
- ☐ Reliability worksheet
- ☐ PowerPoint of lesson on Reliability

Objective

I can identify what being reliable looks like for a level 1, 2, 3, and 4.
I can

General Feedback Procedures

- When student makes correct response, provide enthusiastic affirmation/praise (e.g., "Correct," "Excellent," "Yes, you got it.")
- When student makes a correct response that is not quite complete, provide enthusiastic affirmation/praise (e.g., "Correct," "Excellent," "Yes, you got it.") followed by a statement of the FULL correct answer.
- When student makes an incorrect response or does not respond, prompt using a model-test format (e.g., "To get a level 4 on the rubric for attitude and cooperating an employee should do the right things every day. What does an employee need to do in order to get a level 4 on the rubric for attitude and cooperation? And then follow the feedback procedures based on student's prompted response.

Statement of Objective/Purpose (5 minutes)

____ **Teacher:** *"Remember to copy today's objectives."* [Give student a minute to fill in the blanks for the objectives on their worksheet.]

____ **Student:** [writes]

____ **Teacher:** [Check to be sure student is following directions. Prompt, assist, redirect as needed. Praise when complete.]

____ **Teacher:** *"Today you will be learning about the next part of the job performance rubric. This part of the rubric has to do with being reliable."*

Input/Practice (35 minutes)

Examples/Non-Examples of Reliability (15-20 minutes)

____ **Teacher:** *“First, let’s examine the rubric and see what it means for an employee to be reliable. [Pass out a copy of the reliable worksheet]. When you are working a job you will not get a grade like A, B, C, D, or F, instead you will get a rating. The rubric is an example of how an employer may rate an employees performance on the job. Even teachers and principals get ratings instead of grades. The best score an employee can get is a four, next best is a three, okay is a two, and not very good is a 1.”* [Read the rubric aloud to the student under each part (e.g., Under a one or poor reliable means..., Under two or okay reliable means..., Under three or good reliable means..., Under four or awesome reliable means...]

____ **Teacher:** *“Now lets read it together.”* [Student and Teacher read the rubric together]

____ **Student:** [Reads the rubric with the teacher]

____ **Teacher:** [Deliver feedback according to general feedback procedures]

____ **Teacher:** *“There are several key terms we are going to define that are in the rubric. These three terms are reliable, prepared, and begin promptly. First we will define the word reliable.”* [Show the definition for reliable on the PowerPoint]

____ **Teacher:** *“The definition of reliable someone that can be trusted or depended on. An example is an employee that comes to work on time and each time they are scheduled to work. The opposite of reliable is unreliable. The definition of unreliable is someone who you cannot depend on. Can you think of an example of unreliable?”*

____ **Student:** [Gives their own example of someone who is unreliable]

____ **Teacher:** *“Now write the definition of reliable on your worksheet and the definition of unreliable.”* [Make sure they are displayed on the PowerPoint]

____ **Teacher:** *“The next key word is prepared. Being prepared means to be organized and ready to work. Example: An employee who shows up with their uniform on properly and has their nametag and anything they need for work is prepared. Can you think of any other examples of being prepared?”*

____ **Student:** [Gives their own example of someone who is prepared]

____ **Teacher:** *“Now write the definition of prepared on your worksheet.”* [Make sure it is displayed on the PowerPoint]

____ **Teacher:** *“The last key words are begin promptly. This means that when you get to your job you get to work quickly without being told to or reminded. Being prompt means to get started right away.”*

____ **Teacher:** *“Now write the definition of begin promptly on your worksheet.”* [Make sure it is displayed on the PowerPoint]

____ **Teacher:** *“We are going to practice what it looks like to be each type of person on the rubric. First lets practice what it looks like to be a one. You read the script as the employer and I will be the employee. Then we will switch.”* Student and Teacher read script and then switch.

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“Next lets practice what it means to be a two. You read the script as the employer and I will be the employee. Then we will switch.”* Student and Teacher read script and then switch.

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“Now let’s stop before we go to three and four. What was the difference between being a one and being a two?”*

____ **Student:** [“A one is not trying and is very unreliable and a two is trying to do better, but still may not be very reliable and needs a lot of reminders.” (or something similar to this response)]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“Next lets practice what it means to be a three. You read the script as the employer and I will be the employee. Then we will switch.”* Student and Teacher read script and then switch

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“Next lets practice what it means to be a four. You read the script as the employer and I will be the employee. Then we will switch.”* Student and Teacher read script and then switch.

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“What was the difference between being a three and being a four?”*

____ **Student:** [“A three does pretty good most of the time, but still has to be reminded at times, a four does the right things all of the time for the whole time and is reliable and prepared without being told. (or something similar to this response)]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“Now, We are going to watch a short video clip of several employees working. During the video I want you list anything you see the employee doing that relates to being reliable. Such as, if they are prepared for work, if they are on-time or late, if they keep having to be reminded of what to do, and anything else you see them do in the video that you think may not be good. After the video, I want you to rate one of the employees on the rubric for being reliable. I will also rate them as well and then we will compare our ratings.”* [Show video clip]

After video clip is finished

____ **Teacher:** *“Rate the employee in the video on your worksheet and then write 1 sentence explaining why you rated the employee that way.”* [Give the student 5 minutes to complete this]

____ **Teacher:** *“So tell me how you rated the employee in the video and why you rated them that way.”*

____ **Student:** [Students should have rated him as a 1 or a 2 so a response may be, “I gave her a 1 because she was late for work and then did not get started even when her employer asked her to. She also was not wearing the right uniform and did not change even when the supervisor asked her to. I rated her this way because she did not listen to her boss and was not trying to be more reliable.” (Or something similar to this response, students may also rate her as a 2 and that is okay. You will discuss the rating next.)]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“I rated the employee with a one, because she was late and did not get started working even after her employer asked her to several time. She also was not wearing the right uniform and when her supervisor asked her to change into the right clothing, she refused to do so. Her hair also did not look very neat and clean and her clothing was very wrinkled. She also did not have the stuff she needed for work that day so she had to borrow from one of her co-workers. What are some things you noticed she did in the video?”*

____ **Student:** [Some possible answers might include, “Talking on her phone at work, not listening to her boss, messy clothes and hair, wanting to know if she could leave early from work even after she got there late, not changing into her uniform when she was asked to...”]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“Lets look at the rubric again, look under the column for one and the column for two. Which score do you think she should have?”*

____ **Student:** ["One"]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *"What could this employee have done differently in order to get a better score?"*

____ **Student:** ["Listened to her boss, not been on her phone, apologized for being late or calling ahead when she realized she would be late, changed into the right clothing when she was asked...etc."]

Student Goal Setting (10-15 minutes)

____ **Teacher:** *"For our last activity I want you to look again at how I rated you on reliability for the days before. Do not worry if your score was not very high, that is why we are learning about the rubric so we can work together to help you get a better score in the future."* [Pass out only the portion of the rating sheet that shows their scores from reliability]

____ **Teacher:** *"You saw these scores yesterday and decided this was the area of the rubric you wanted to work on. Today you are going to set a goal for yourself in this area. The last part of your worksheet will help you set a goal for yourself in reliability."* [Point them to the goal setting part of their worksheet] *"First, I want you to write down two things you want to work on to get better on reliability?"*

____ **Student:** [Let them write down two things they want to work on]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *"Now, let's look at those things and see if you can create a goal to help you improve your scores. What do you think your goal should be? On your worksheet you will see a template for your goal that says 'My goal is _____' Fill in the blank with what you want your goal to be."*

____ **Student:** [Let them write their goal, if students are struggling help them look at the two areas they want to work on and help them come up with a goal. However, make sure the goal is their idea]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

Closing (5 minutes)

____ *"Today you learned about Reliability. Do you think this rubric can help you become a better employee when you go to work a job?"* [Hopefully, the students will say

‘yes.’] *Thank you for working so hard today. Now you can put all the materials back in your notebook.*” [Transition student back to the classroom]

Lesson 2b Worksheet

	4-Excellent	3-Strong	2-Good	1-Poor
Reliability	Always* Comes on time & begins promptly Has perfect attendance Appears clean, neat, & has good hygiene Dresses appropriately Is prepared Lets someone know if they will be out if they know in advance *Does all without any prompts or reminders	Usually* Comes on time & begins promptly Has good attendance Appears neat, clean, & has good hygiene Dresses appropriately Is prepared Lets someone know if they will be out if they know in advance *1 prompt or reminder	Needs to improve* Coming on time and beginning promptly Attendance Appearing neat, clean, & having good hygiene Dressing appropriately Being prepared Letting someone know if they will be out if they know in advance *2 prompts or reminders	Needs to improve* Coming on time and beginning promptly Attendance Appearing neat, clean, & having good hygiene Dressing appropriately Being prepared Letting someone know if they will be out if they know in advance *3 or more prompts or reminders *Any discipline referral

				results in 1
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Key Terms**Reliable:**

Unreliable:

Prepared:

Begins Promptly:

VIDEO**Rating Chart:**

<u>Reliability</u>	<u>Rating of a 1,2, 3, 4</u>
On time and begins promptly upon arrival	
Work attendance is acceptable	
Comes to work prepared and has neat clean uniform	

Why did you rate him or her that way?

Goal Setting

Based on your scores, what are two things you want to work on to get better at reliability?

1. _____

2. _____

Reliability Goal

My goal is _____

_____.

Adapted Version

	4- Excellent	3-Strong	2-Good	1-Poor
Reliability	Always* Comes on time & begins promptly Has perfect attendance Appears clean, neat, & has good hygiene Dresses appropriately Is prepared Lets someone know if they will be out if they know in advance *Does all without any prompts or reminders	Usually* Comes on time & begins promptly Has good attendance Appears neat, clean, & has good hygiene Dresses appropriately Is prepared Lets someone know if they will be out if they know in advance *1 prompt or reminder	Needs to improve* Coming on time and beginning promptly Attendance Appearing neat, clean, & having good hygiene Dressing appropriately Being prepared Letting someone know if they will be out if they know in advance *2 prompts or reminders	Needs to improve* Coming on time and beginning promptly Attendance Appearing neat, clean, & having good hygiene Dressing appropriately Being prepared Letting someone know if they will be out if they know in advance *3 or more prompts or reminders *Any discipline referral

				results in a 1
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Key Terms

Reliable:

To be trusted, dependable, and honest.

Example: A student who is on time, prepared, and comes to work every day and if they can't they let their supervisor know.

Your Own Example:

Unreliable:

Can not be trusted or depended on

Example: You are planning to get eat pizza with your friend. You get to the pizza place and they don't show up. Then, they tell you they forgot. The next time, they are going to pick you up to take you to a UNC Basketball game, you have tickets. You said you could meet them there, but they wanted to pick you up. They never show up and you miss the game. They are unreliable.

Your Own Example of Unreliable:

Prepared:

Organized and ready with everything you need.

Example: if you are going to your job you need to have everything you need to be prepared, such as your snack, your

uniform/name tag, and anything else you need to be prepared to work.

Your Own Example:

Begins Promptly:

Get started right away as soon as you get there.

Example: When Tim goes to a job, as soon as he get there he clocks in and then looks at his list and gets right to work without being told to.

Your Own Example:

VIDEO

Rating Chart:

<u>Reliability</u>	<u>Rating of a 1,2, 3, 4</u>
On time and begins promptly upon arrival	
Work attendance is acceptable	
Comes to work prepared and has neat clean uniform	

Why did you rate him or her that way?

Goal Setting

Based on your scores, what are two things you want to work on to get better at reliability? Circle or highlight at least 2 things.

On Time

Beginning Promptly

Work Attendance

Prepared for Work

Neat & Clean Uniform

Reliability Goal

My goal is _____

_____ to improve my score in reliability
to a _____.

Lesson 2c: Productivity and On-Task

Lesson Plan #2c**Teacher Preparation**

- ❑ Ensure objective is in the PowerPoint
- ❑ Make sure you have all materials (listed below).
- ❑ Display Rubric

Materials

- ❑ Students' 3-Ring 1 inch Notebooks (in crate) with the Lesson Objectives Sheet inside.
- ❑ Students' baseline scores on the rubric just in productivity and on-task
- ❑ Productivity and On-task worksheet for each student
- ❑ Scripts for Productivity and On-task
- ❑ PowerPoint of lesson on Productivity and On-Task

Objective

I can identify what productivity and on-task means for a level 1, 2, 3, and 4.
I can identify what I need to work on and set a goal for myself.

General Feedback Procedures

- When student makes correct response, provide enthusiastic affirmation/praise (e.g., "Correct," "Excellent," "Yes, you got it.")
- When student makes a correct response that is not quite complete, provide enthusiastic affirmation/praise (e.g., "Correct," "Excellent," "Yes, you got it.") followed by a statement of the FULL correct answer.
- When student makes an incorrect response or does not respond, prompt using a model-test format (e.g., "To get a level 4 on the rubric for attitude and cooperating an employee should do the right things every day. What does an employee need to do in order to get a level 4 on the rubric for attitude and cooperation? And then follow the feedback procedures based on student's prompted response.

Statement of Objective/Purpose (5 minutes)

____ **Teacher:** *"Can you read the objectives for today?"*

____ **Student:** [reads the objectives]

____ **Teacher:** [Check to be sure student is following directions. Prompt, assist, redirect as needed. Praise when complete.]

____ **Teacher:** *Today we will be learning about the productivity and on-task part of the rubric.*

Input/Practice (35 minutes)

Examples/Non-Examples of Productivity and On-Task (15-20minutes)

____ **Teacher:** *“First, let’s examine the rubric and see what it means for productivity and on-task means on the job. [Pass out a copy of the productivity and on-task worksheet]. When you are working a job you will not get a grade like A, B, C, D, or F, instead you will get a rating. The rubric is an example of how an employer may rate an employees performance on the job. Even teachers and principals get ratings instead of grades. The best score an employee can get is a four, next best is a three, okay is a two, and not very good is a 1.”* [Read the rubric aloud to the student under each part (e.g., under a one or poor, productivity/on-task means... under two or okay, productivity/on-task means... under three or good, productivity/on-task means... under four or awesome, productivity/on-task means...]

____ **Teacher:** *“Now lets read it together.”* [Student and Teacher read the rubric together]

____ **Student:** [Reads the rubric with the teacher]

____ **Teacher:** [Deliver feedback according to general feedback procedures]

____ **Teacher:** *“There are four key terms we are going to define that are in the rubric. These key terms are Independent, Focused, On-Task, and Pace First we will define the word Independent.”* [Show the definition for respect on the PowerPoint]

____ **Teacher:** *“The definition of independent is to think, act, and work on your own without needing help from someone else. For example: A student who can do a job by themselves without need helping from a job coach or supervisor is independent. Can you think of another example of being independent?”*

____ **Student:** [Gives their own example of being independent]

____ **Teacher:** [Deliver feedback according to general feedback procedures]

____ **Teacher:** *“Now write the definition of independent on your worksheet* [Make sure it is displayed on the PowerPoint]

____ **Teacher:** *“The next key word is focused. Focused means to concentrate and give attention to what you are doing. For example many athletes are very focused when they play a game, in basketball when a player is shooting a free throw they focus on the*

basketball goal and shooting the basketball correctly. Can you think of an example of being focused on a job?"

____ ***Student:*** [Gives their own example of being focused on the job]

____ ***Teacher:*** [Deliver feedback according to general feedback procedures]

____ ***Teacher:*** ***"Now write the definition of focused on your worksheet."*** [Make sure it is displayed on the PowerPoint]

____ ***Teacher:*** ***"The next key word is on task. To be on task means to stick with a task you are doing until it is done and without doing something you are not supposed to be doing. For example, if you are going to pick up recycling around the school you should stay on task to make sure you collect recycling from each classroom. Can you think of your own example of being on task?"***

____ ***Student:*** [Gives their own example of being on task]

____ ***Teacher:*** [Deliver feedback according to general feedback procedures]

____ ***Teacher:*** ***"Now write the definition of on task on your worksheet."*** [Make sure it is displayed on the PowerPoint]

____ ***Teacher:*** ***"The last key word is pace. Pace means the rate of movement or how fast or slow you perform a job task. For example, Tina and Shauna are cleaning tables in the cafeteria, Tina cleans 6 tables and Shauna only cleans 3. Tina worked faster than Shauna and at a faster pace. Can you think of your own example of pace?"***

____ ***Student:*** [Gives their own example of pace]

____ ***Teacher:*** [Deliver feedback according to general feedback procedures]

____ ***Teacher:*** ***"One key thing to remember about pace is that you should not rush through a job task to get it done quickly, it still needs to be done the right way. Now write the definition of on task on your worksheet."*** [Make sure it is displayed on the PowerPoint]

____ ***Teacher:*** ***"We are going to practice what it looks like to be each type of person on the rubric. First lets practice what it looks like to be a one. You read the script as the employer and I will be the employee. Then we will switch."*** Student and Teacher read script and then switch.

____ ***Teacher:*** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“Next lets practice what it means to be a two. You read the script as the employer and I will be the employee. Then we will switch.”* Student and Teacher read script and then switch.

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“Now let’s stop before we go to three and four. What was the difference between being a one and being a two?”*

____ **Student:** [“A one is not trying and is very disrespectful, a two is trying to do better, but still may have a hard time.” (or something similar to this response)]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“Next lets practice what it means to be a three. You read the script as the employer and I will be the employee. Then we will switch.”* Student and Teacher read script and then switch

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“Next lets practice what it means to be a four. You read the script as the employer and I will be the employee. Then we will switch.”* Student and Teacher read script and then switch.

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“What was the difference between being a three and being a four?”*

____ **Student:** [“A three does pretty good most of the time, but still has to be reminded at times, a four does the right things all of the time for the whole time and is respectful without being told. (or something similar to this response)]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“Now, We are going to watch a short video clip of an employee working. During the video I want to you list anything you see the employee doing regarding productivity/on task behavior. Such as, what does her pace look like, is she on task? What do you see? After the video, I want you to rate her on the rubric for productivity and on task. I will also rate them as well and then we will compare our ratings.”*

[Show video clip of I Love Lucy at the Chocolate Factory]

After video clip is finished

____ **Teacher:** *“Rate the employee in the video on your worksheet and then write 1 sentence explaining why you rated the employee that way.”* [Give the student 5 minutes to complete this]

____ **Teacher:** *“So tell me how you rated the employee in the video and why you rated them that way.”*

____ **Student:** [Students should have rated her as a 1 or a 2 so a response may be, “I gave her a 1 because she did not keep up with the pace of the job. She also started eating the chocolate rather than letting her boss know she needed it to go slower” (Or something similar to this response, students may also rate her as a 2 and that is okay. You will discuss the rating next.)]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“I rated Lucy with a one, because she could not keep up with the pace of the job and then was not very productive. She also started eating the chocolate and that also affected her productivity. What are some things you noticed she did in the video?”*

____ **Student:** [Some possible answers might include, “Could not keep up, kept talking to Ethel, did not listen, ate the chocolate, or lied to her boss”]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“Let’s look at the rubric again, look under the column for one and the column for two. Which score do you think she should have?”*

____ **Student:** [“One”]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“What could Lucy have done differently in order to get a better score?”*

____ **Student:** [“Kept up with the pace of the job, stayed on task, asked for help if she needed it to go slower.”]

Student Goal Setting (10-15 minutes)

____ **Teacher:** *“For our last activity I want you to look again at how I rated you on productivity/on task for the days before. Do not worry if your score was not very high, that is why we are learning about the rubric so we can work on getting a better score in the future.”* [Pass out only the portion of the rating sheet that shows their scores from productivity/on task]

____ **Teacher:** *“You saw these scores yesterday and decided this was the area of the rubric you wanted to work on. Today you are going to set a goal for yourself in this area. The last part of your worksheet is going to help you set a goal for yourself in productivity/on task.* [Point them to the goal setting part of their worksheet] *“First, I*

want you to write down two things you want to work on to get better in productivity/on task?”

____ **Student:** [Let them write down two things they want to work on]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“Now, let’s look at those things and see if you can create a goal to help you improve your scores. What do you think your goal should be? On your worksheet you will see a template for your goal that says ‘My goal is _____’ Fill in the blank with what you want your goal to be.”*

____ **Student:** [Let them write their goal, if students are struggling help them look at the two areas they want to work on and help them come up with a goal. However, make sure the goal is their idea]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

Closing (5 minutes)

____ *“Today you learned about Productivity and On-Task. Do you think this rubric can help you become a better employee when you go to work a job? [Hopefully, the students will say ‘yes.’] Thank you for working so hard today. Now you can put all the materials back in your notebook.”* [Transition student back to the classroom]

Worksheet Lesson 2c

	4-Excellent	3-Strong	2-Good	1-Poor
Productivity On-Task	Always* Independent worker Focused and on-task Steady pace *0 prompts, assistance, or redirections *Only stops for scheduled breaks	Usually* Independent Focused and on-task Average pace *1 prompt, assistance, or redirections *Stops 1 or less times outside of a scheduled break	Needs to improve* Being independent Being focused & on-task Their pace * 2 prompts, assistance, or redirections *Stops 2 times or less outside of a scheduled break	Does Not Try* To be independent To be focused On-Task Slow pace *3 or more prompts, assistance, or redirections *Stops 3 or more times outside of scheduled breaks *Any discipline referral results in

				a 1
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Key Terms

Independent:

Focused:

On-Task :

Pace:

VIDEO

Rating Chart:

Productivity/On Task	Rating of a 1,2, 3, 4
Works without assistance, reassurance or reminders	
Stays focused and attentive	
Works at pace comparable to other employees	

Why did you rate him or her that way?

Goal Setting

Based on your scores, what are two things you want to work on to get better at productivity/on task?

1.

2.

Productivity/On Task Goal

My goal is

.

Adapted Version

	4-Excellent	3-Strong	2-Good	1-Poor
Productivity On-Task	Always* Independent worker Focused and on-task Steady pace *0 prompts, assistance, or redirections *Only stops for scheduled breaks	Usually* Independent Focused and on-task Average pace *1 prompt, assistance, or redirections *Stops 1 or less times outside of a scheduled break	Needs to improve* Being independent Being focused & on-task Their pace * 2 prompts, assistance, or redirections *Stops 2 times or less outside of a scheduled break	Does Not Try* To be independent To be focused On-Task Slow pace *3 or more prompts, assistance, or redirections *Stops 3 or more times outside of scheduled breaks *Any discipline referral results in a 1

Key Terms

Independent:

To think, act, and work on your own without needing help from someone else.

Example: A student who can do a job by themselves without needing help from a job coach or supervisor is independent

Your Own Example:

Focused:

To concentrate and give attention to what you are doing

Example: Athletes are very focused when they play a game, in basketball when a player is shooting a free throw they focus on the basketball goal and shooting the basketball correctly

Your Own Example:

On-Task :

Stick with a task until it is done

Example: if you are doing a job, you should not stop working to look at your phone or to do something else. You should stay on task with that job until you get a break to do those things.

Your Own Example:

*****Being on-task also means to keep working without getting distracted and stopping to do other things instead of your job.**

Pace:

Rate of movement or how fast or slow you perform a job task.

Example: Tina and Shauna are cleaning tables in the cafeteria, Tina cleans 6 tables and Shauna only cleans 3. Tina worked faster than Shauna and at a faster pace.

Your Own Example:

*****This means to keep working at a good pace, you may be slower at the beginning of the job but then you will pick up your pace so you can work faster.**

VIDEO

What do you see happening?

Rating Chart:

Productivity/On Task	Rating of a 1,2, 3, 4
Works without assistance, reassurance or reminders	
Stays focused and attentive	

Works at pace comparable to other employees	
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Why did you rate him or her that way?

Goal Setting

Based on your scores, what are two things you want to work on to get better at productivity & on-task? Circle or highlight 2 things

Working without help or reminders

Staying focused and attentive

Working at a faster pace like other employees

Productivity & On-Task Goal

My goal is _____

_____ to improve my score in
productivity and on-task to a _____.

Lesson Plan 2d: Quality of Work

Lesson Plan #2d**Teacher Preparation**

- ☐ Ensure objective is in the PowerPoint
- ☐ Make sure you have all materials (listed below).
- ☐ Display Rubric

Materials

- ☐ Students' 3-Ring 1 inch Notebooks (in crate) with the Lesson Objectives Sheet inside.
- ☐ Students' baseline scores on the rubric just in Quality of Work
- ☐ Quality of Work worksheet for each student
- ☐ Scripts for Quality of Work
- ☐ PowerPoint of lesson on Quality of Work

Objective

I can identify what quality of work means for a level 1, 2, 3, and 4.
 I can identify what I need to work on and set a goal for myself.

General Feedback Procedures

- When student makes correct response, provide enthusiastic affirmation/praise (e.g., "Correct," "Excellent," "Yes, you got it.")
- When student makes a correct response that is not quite complete, provide enthusiastic affirmation/praise (e.g., "Correct," "Excellent," "Yes, you got it.") followed by a statement of the FULL correct answer.
- When student makes an incorrect response or does not respond, prompt using a model-test format (e.g., "To get a level 4 on the rubric for attitude and cooperating an employee should do the right things every day. What does an employee need to do in order to get a level 4 on the rubric for attitude and cooperation? And then follow the feedback procedures based on student's prompted response.

Statement of Objective/Purpose (5 minutes)

____ **Teacher:** *"Remember to copy down the objectives for today in the log at the front of your notebook titled Lesson Objectives."* [Give student a minute to fill in the blanks for the objectives on their worksheet.]

____ **Student:** [writes]

____ **Teacher:** [Check to be sure student is following directions. Prompt, assist, redirect as needed. Praise when complete.]

____ **Teacher:** *Today we will be learning about quality of work part of the rubric.*

Input/Practice (35 minutes)

Examples/Non-Examples of Attitude and Cooperation (15-20 minutes)

____ **Teacher:** *“First, let’s examine the rubric and see what quality of work means on the job. [Pass out a copy of the quality of work worksheet]. When you are working a job you will not get a grade like A, B, C, D, or F, instead you will get a rating. The rubric is an example of how an employer may rate an employees performance on the job. Even teachers and principals get ratings instead of grades. The best score an employee can get is a four, next best is a three, okay is a two, and not very good is a 1.”* [Read the rubric aloud to the student under each part (e.g., under a one or poor, quality of work means... under two or okay, quality of work means... under three or good, quality of work means... under four or awesome, quality of work means...]

____ **Teacher:** *“Now lets read it together.”* [Student and Teacher read the rubric together]

____ **Student:** [Reads the rubric with the teacher]

____ **Teacher:** [Deliver feedback according to general feedback procedures]

____ **Teacher:** *“There are two key terms we are going to define that are in the rubric. These key terms are quality and pride. First we will define the word quality.* [Show the definition for quality on the PowerPoint]

____ **Teacher:** *“The definition of quality is high grade or excellence. For example: A quality product is made well and lasts a long time. As an employee, if you do a quality job on a task you are doing the task the right way and with your best effort. Can you think of another example of quality?”*

____ **Student:** [Gives their own example of quality]

____ **Teacher:** [Deliver feedback according to general feedback procedures]

____ **Teacher:** *“Now write the definition of quality on your worksheet* [Make sure it is displayed on the PowerPoint]

____ **Teacher:** *“The next key word is pride. Pride means to be proud of what you are doing. For example, on a job this means that you are proud of the work you are doing and are doing it to the best of your ability. It is something you are proud of. Can you think of an example of showing pride in your work on the job?”*

____ **Student:** [Gives their own example of showing pride in their work on the job]

____ **Teacher:** [Deliver feedback according to general feedback procedures]

____ **Teacher:** *“Now write the definition of pride on your worksheet.”* [Make sure it is displayed on the PowerPoint]

____ **Teacher:** *“We are going to practice what it looks like to be each type of person on the rubric. First lets practice what it looks like to be a one. You read the script as the employer and I will be the employee. Then we will switch.”* Student and Teacher read script and then switch.

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“Next lets practice what it means to be a two. You read the script as the employer and I will be the employee. Then we will switch.”* Student and Teacher read script and then switch.

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“Now let’s stop before we go to three and four. What was the difference between being a one and being a two?”*

____ **Student:** [“A one is not trying and is very disrespectful, a two is trying to do better, but still may have a hard time.” (or something similar to this response)]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“Next lets practice what it means to be a three. You read the script as the employer and I will be the employee. Then we will switch.”* Student and Teacher read script and then switch

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“Next lets practice what it means to be a four. You read the script as the employer and I will be the employee. Then we will switch.”* Student and Teacher read script and then switch.

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“What was the difference between being a three and being a four?”*

____ **Student:** [“A three does pretty good most of the time, but still has to be reminded at times, a four does the right things all of the time for the whole time and is respectful without being told. (or something similar to this response)]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“Now, We are going to watch a short video clip of an employee working. During the video I want to you list anything you see the employee doing regarding their quality of work. Such as, do they do a good job? Are they checking behind their work to make sure it is done correctly? Are they showing pride in their work? What do you see? After the video, I want you to rate the employee on the rubric for Quality of Work. I will also rate them as well and then we will compare our ratings.”* [Show video clip]

After video clip is finished

____ **Teacher:** *“Rate the employee in the video on your worksheet and then write 1 sentence explaining why you rated the employee that way.”* [Give the student 5 minutes to complete this]

____ **Teacher:** *“Tell me how you rated the employee in the video and why you rated them that way.”*

____ **Student:** [Students will explain how they rated the employee in the video]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** [Tell the student how you rated the employee in the video] *“What are some things you noticed she did in the video?”*

____ **Student:** [Let them tell you what they observed in the video]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“Lets look at the rubric again, look under the column for one and the column for two. Which score do you think they should have?”*

____ **Student:** [“One or Two”]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“What could the employee have done differently in order to get a better score?”*

____ **Student:** [“Checked behind themselves, tried to fix their mistakes, finished their job without being told”]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

Student Goal Setting (10-15 minutes)

____ **Teacher:** *“For our last activity I want you to look again at how I rated you on quality of work for the days before. Do not worry if your score was not very high, that is why we are learning about the rubric so we can work on getting a better score in the future.”* [Pass out only the portion of the rating sheet that shows their scores from productivity/on task]

____ **Teacher:** *“You saw these scores yesterday and decided this was the area of the rubric you wanted to work on. Today you are going to set a goal for yourself in this area. The last part of your worksheet is going to help you set a goal for yourself in quality of work.* [Point them to the goal setting part of their worksheet] *“First, I want you to write down two things you want to work on to get better in quality of work?”*

____ **Student:** [Let them write down two things they want to work on]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“Now, let’s look at those things and see if you can create a goal to help you improve your scores. What do you think your goal should be? On your worksheet you will see a template for your goal that says ‘My goal is _____’ Fill in the blank with what you want your goal to be.”*

____ **Student:** [Let them write their goal, if students are struggling help them look at the two areas they want to work on and help them come up with a goal. However, make sure the goal is their idea]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

Closing (5 minutes)

____ *“Today you learned about quality of work. Do you think this rubric can help you become a better employee when you go to work a job? [Hopefully, the students will say ‘yes.’] Thank you for working so hard today. Now you can put all the materials back in your notebook.”* [Transition student back to the classroom]

Worksheet for Lesson 2d

	4-Excellent	3-Strong	2-Good	1-Poor
Quality of Work	Always* Completes work correctly Finds mistakes and corrects them independently Checks over work before finishing independently Shows pride in their work * 0 prompts or reminders	Usually* Completes work correctly Makes corrections with help Checks over work before finishing Shows pride in their work *1-2 prompts or reminders	Needs to improve* Completing work without help Making corrections independently Checking behind themselves before finishing work Showing pride *2-3 prompts or reminders	Does Not Try* To complete work To attempt corrections To check behind themselves before finishing To show pride *3 or more prompts or reminders *Refusing to do any of the skills or a disciplinary referral results in a 1

Key Terms**Quality:**

Pride:

VIDEO

Rating Chart:

Quality of Work	Rating of a 1,2, 3, 4
Work is completed to job specifications	
Identifies own mistakes and makes corrections independently	
Takes pride in work	

Why did you rate him or her that way?

Goal Setting

Based on your scores, what are two things you want to work on to get better at quality of work?

1. _____

2. _____

Quality of Work Goal

My goal is _____.

Adapted Version

	4-Excellent	3-Strong	2-Good	1-Poor
Quality of Work	Always* Completes work correctly Finds mistakes and corrects them independently Checks over work before finishing independently Shows pride in their work * 0 prompts or reminders	Usually* Completes work correctly Makes corrections with help Checks over work before finishing Shows pride in their work *1-2 prompts or reminders	Needs to improve* Completing work without help Making corrections independently Checking behind themselves before finishing work Showing pride *2-3 prompts or reminders	Does Not Try* To complete work To attempt corrections To check behind themselves before finishing To show pride *3 or more prompts or reminders *Refusing to do any of the skills or a disciplinary referral results in a 1

Key Terms

Quality:

High grade or **excellence**

Example: A quality product is made well and lasts a long time. As an employee, if you do a quality job on a task you are doing the task the right way and with your best effort

Your Own Example:

Pride:

Means to be proud of what you are doing.

Example: on a job this means that you are proud of the work you are doing and are doing it to the best of your ability

Your Own Example:

Diligent:

Working hard the entire time to complete the job while paying attention to detail.

Example: on a job this means that you are working the entire time and paying close to attention to make sure you are doing your best work and doing the job the right way.

Your Own Example:

Complete:

All of the required parts of the job are finished and nothing was missed.

Example: on a job this means that you are complete your entire job task and do not miss any parts of your job. You may

go back and check over your work to make sure or keep a list that you check off of what you are required to do.

Your Own Example:

VIDEO

Rating Chart:

Quality of Work	Rating of a 1,2, 3, 4
Work is completed to job specifications	
Identifies own mistakes and makes corrections independently	
Takes pride in work	

Why did you rate him or her that way?

How could he or she improve their quality of work?

Goal Setting

Based on your scores, what are two things you want to work on to get better at quality of work? Circle or highlight 2 things

Completing work to job specifications

Identifying mistakes and making corrections independently

Taking pride in work

Quality of Work Goal

My goal is _____

_____ **to improve my score in**
quality of work to a _____.

Lesson Plan 2e: Teamwork and Communication
Lesson Plan #2e

Teacher Preparation

- ❑ Ensure objective is in the PowerPoint
- ❑ Make sure you have all materials (listed below).
- ❑ Display Rubric

Materials

- ❑ Students' 3-Ring 1 inch Notebooks (in crate) with the Lesson Objectives Sheet inside.
- ❑ Students' baseline scores on the rubric on Teamwork and Communication
- ❑ Teamwork and Communication worksheet for each student
- ❑ Scripts for Teamwork and Communication
- ❑ PowerPoint of lesson on Teamwork and Communication

Objective

I can identify what Teamwork and Communication means for a level 1, 2, 3, and 4.
I can identify what I need to work on and set a goal for myself.

General Feedback Procedures

- When student makes correct response, provide enthusiastic affirmation/praise (e.g., "Correct," "Excellent," "Yes, you got it.")
- When student makes a correct response that is not quite complete, provide enthusiastic affirmation/praise (e.g., "Correct," "Excellent," "Yes, you got it.") followed by a statement of the FULL correct answer.
- When student makes an incorrect response or does not respond, prompt using a model-test format (e.g., "To get a level 4 on the rubric for attitude and cooperating an employee should do the right things every day. What does an employee need to do in order to get a level 4 on the rubric for attitude and cooperation? And then follow the feedback procedures based on student's prompted response.

Statement of Objective/Purpose (5 minutes)

____ **Teacher:** *"Can you reach the objectives for today?"* [Have student read objectives]

____ **Student:** [reads]

____ **Teacher:** [Check to be sure student is following directions. Prompt, assist, redirect as needed. Praise when complete.]

____ **Teacher:** *Today we will be learning about the teamwork and communication part of the rubric.*

Input/Practice (35 minutes)

Examples/Non-Examples of Teamwork and Communication (15-20 minutes)

____ **Teacher:** *“First, let’s examine the rubric and see what teamwork and communication means on the job. [Pass out a copy of the quality of work worksheet]. When you are working a job you will not get a grade like A, B, C, D, or F, instead you will get a rating. The rubric is an example of how an employer may rate an employees performance on the job. Even teachers and principals get ratings instead of grades. The best score an employee can get is a four, next best is a three, okay is a two, and not very good is a 1.”* [Read the rubric aloud to the student under each part (e.g., under a one or poor, teamwork and communication means... under two or okay, teamwork and communication means... under three or good, teamwork and communication means... under four or awesome, teamwork and communication means...]

____ **Teacher:** *“Now lets read it together.”* [Student and Teacher read the rubric together]

____ **Student:** [Reads the rubric with the teacher]

____ **Teacher:** [Deliver feedback according to general feedback procedures]

____ **Teacher:** *“There are three key terms we are going to define that are in the rubric. These key terms are teamwork, communication, and polite. First we will define the word teamwork. [Show the definition for quality on the PowerPoint]*

____ **Teacher:** *“The definition of teamwork is working with others for a common cause or to complete something. For example: A basketball team works together to try to beat the other team and score points. As an employee, you will have to work with other people at the job. You have to be able to work with them even if you do not like them. Can you think of another example of teamwork?”*

____ **Student:** [Gives their own example of quality]

____ **Teacher:** [Deliver feedback according to general feedback procedures]

____ **Teacher:** *“Now write the definition of teamwork on your worksheet [Make sure it is displayed on the PowerPoint]*

____ **Teacher:** *“The next key word is communication. Communication is the exchange of thoughts, feelings, or information. This can be done verbally, non-verbally, in writing, or with signs. For example, on a job if you do not understand what you are supposed to be doing, you should ask your supervisor to explain it to you. Another*

example, is if you see someone else who needs help, offer to answer any questions they have if you can. It is important to remember to communicate appropriately with your co-workers and supervisors. Can you think of an example of communication on the job?"

____ **Student:** [Gives their own example of communication on the job]

____ **Teacher:** [Deliver feedback according to general feedback procedures]

____ **Teacher:** *"Now write the definition of communication on your worksheet."* [Make sure it is displayed on the PowerPoint]

____ **Teacher:** *"The last key word is polite. To be polite it means to show regard for others or to show that you care about others feelings. Sometimes this is done through having good manners. To have good manners has to do with how you talk with others, your non-verbal communication as well as your verbal communication. One example is to say "yes or yes mam" instead of "yeah". Another word that means the same thing is courteous. Another example of these words is to be considerate of others while working this may mean your voice level, what you talk about with your co-workers, and your actions. Can you think of an example of being polite or courteous on the job?"*

____ **Student:** [Gives their own example of being polite on the job]

____ **Teacher:** [Deliver feedback according to general feedback procedures]

____ **Teacher:** *"Now write the definition of polite on your worksheet."* [Make sure it is displayed on the PowerPoint]

____ **Teacher:** *"We are going to practice what it looks like to be each type of person on the rubric. First lets practice what it looks like to be a one. You read the script as the employer and I will be the employee. Then we will switch."* Student and Teacher read script and then switch.

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *"Next lets practice what it means to be a two. You read the script as the employer and I will be the employee. Then we will switch."* Student and Teacher read script and then switch.

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *"Now let's stop before we go to three and four. What was the difference between being a one and being a two?"*

____ **Student:** ["A one is not trying and a two is trying to do better, but still may have a hard time." (or something similar to this response)]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“Next lets practice what it means to be a three. You read the script as the employer and I will be the employee. Then we will switch.”* Student and Teacher read script and then switch

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“Next lets practice what it means to be a four. You read the script as the employer and I will be the employee. Then we will switch.”* Student and Teacher read script and then switch.

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“What was the difference between being a three and being a four?”*

____ **Student:** [“A three does pretty good most of the time, but still has to be reminded at times, a four does the right things all of the time for the whole time and is doing the right things without being told. (or something similar to this response)]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“Now, We are going to watch a short video clip of an employee working. During the video I want to you list anything you see the employee doing regarding their quality of work. Such as, are they working well with others? Are they asking for help when they need it? Are they talking about things that are appropriate at work? What do you see? After the video, I want you to rate the employee on the rubric for Teamwork and Communication. I will also rate them as well and then we will compare our ratings.”* [Show video clip]

After video clip is finished

____ **Teacher:** *“Rate the employee in the video on your worksheet and then write 1 sentence explaining why you rated the employee that way.”* [Give the student 5 minutes to complete this]

____ **Teacher:** *“Tell me how you rated the employee in the video and why you rated them that way.”*

____ **Student:** [Students will explain how they rated the employee in the video]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *[Tell the student how you rated the employee in the video] “What are some things you noticed the employee did in the video?”*

____ **Student:** [Let them tell you what they observed in the video]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“Lets look at the rubric again, look under the column for one and the column for two. Which score do you think they should have?”*

____ **Student:** [“One or Two”]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“What could the employee have done differently in order to get a better score?”*

____ **Student:** [“Checked behind themselves, tried to fix their mistakes, finished their job without being told”]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

Student Goal Setting (10-15 minutes)

____ **Teacher:** *“For our last activity I want you to look again at how I rated you on teamwork and communication for the days before. Do not worry if your score was not very high, that is why were are learning about the rubric so we can work together to help you get a better score in the future.”* [Pass out only the portion of the rating sheet that shows their scores from productivity/on task]

____ **Teacher:** *“You saw these scores yesterday and decided this was the area of the rubric you wanted to work on. Today you are going to set a goal for yourself in this area. The last part of your worksheet is going to help you set a goal for yourself in quality of work.* [Point them to the goal setting part of their worksheet] *“First, I want you to write down two things you want to work on to get better in teamwork and communication?”*

____ **Student:** [Let them write down two things they want to work on]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“Now, let’s look at those things and see if you can create a goal to help you improve your scores. What do you think your goal should be? On your worksheet you will see a template for your goal that says ‘My goal is _____’ Fill in the blank with what you want your goal to be.”*

____ **Student:** [Let them write their goal, if students are struggling help them look at the two areas they want to work on and help them come up with a goal. However, make sure the goal is their idea]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

Closing (5 minutes)

____ ***“Today you learned about teamwork and communication. Do you think this rubric can help you become a better employee when you go to work a job? [Hopefully, the students will say ‘yes.’] Thank you for working so hard today. Now you can put all the materials back in your notebook.”*** [Transition student back to the classroom]

Worksheet for Lesson 2e

	4-Excellent	3-Strong	2-Good	1-Poor
Teamwork & Communication	Always* Communicates appropriately with adults and coworkers Asks for help when needed Offers to help others Polite and courteous the whole time Follows all rules *0	Usually* Communicates appropriately with adults and coworkers Asks for help when needed Offers help to others Polite and courteous Follows rules *1 prompt or	Needs to improve* Communicating appropriately with adults and coworkers Asking for help Offering help to others Being polite and courteous Following rules *2	Needs to improve* Communicating appropriately with adults and coworkers Asking for help Offering help to others Being polite and courteous Following rules *3 or more

	prompts or redirections	redirection	prompts or redirections	prompts or redirections *Refuses to do any of the above or any discipline referral results in a 1
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Key Terms

Teamwork:

Communication:

Polite:

VIDEO

Rating Chart:

Teamwork and Cooperation	Rating of a 1,2, 3, 4
Interacts and communicates respectfully with co-workers, customers and/or school	
Asks for or offers help/advice as need	

Is polite and courteous	
Conforms to the rules and regulations of the job	

Why did you rate him or her that way?

Goal Setting

Based on your scores, what are two things you want to work on to get better at teamwork and cooperation?

1. _____
2. _____

Teamwork and Cooperation Goal

My goal is _____
 _____.

Adapted Version

	4-Excellent	3-Strong	2-Good	1-Poor
Teamwork & Communication	Always* Communicates appropriately with adults and coworkers Asks for help when needed Offers to help others Polite and courteous the whole time Follows all rules *0 prompts or redirections	Usually* Communicates appropriately with adults and coworkers Asks for help when needed Offers help to others Polite and courteous Follows rules *1 prompt or redirection	Needs to improve* Communicating appropriately with adults and coworkers Asking for help Offering help to others Being polite and courteous Following rules *2 prompts or redirections	Needs to improve* Communicating appropriately with adults and coworkers Asking for help Offering help to others Being polite and courteous Following rules *3 or more prompts or redirections *Refuses to do any of the above or any discipline referral results in a 1

Key Terms

Teamwork:

A group of persons working together as a team

Example: Working with other people to get a job done. Jimmy is working with Sam to stack chairs, they help each other get the job done.

Your Own Example:

Communication:

The exchange of thoughts, feelings, or information. This can be done verbally, non-verbally, in writing, or with signs

Example: On a job if you do not understand what you are supposed to be doing, you should ask your supervisor to explain it to you. Another example is if you see someone else who needs help, offer to answer any questions they have if you can. It is important to remember to communicate appropriately with your co-workers and supervisors.

Your Own Example:

Polite:

To show regard for others or to show that you care about others feelings

Example: is to say “yes or yes mam” instead of “yeah”. Another word that means the same thing is courteous. Another example of these words is to be considerate of others while working this may mean your voice level, what you talk about with your co-workers, and your actions.

*****Sometimes this is done through having good manners. To have good manners has to do with how you talk with others, your non-verbal communication as well as your verbal communication**

Your Own Example:

VIDEO

Rating Chart:

Teamwork and Cooperation	Rating of a 1,2, 3, 4
Interacts and communicates respectfully with co-workers, customers and/or school	
Asks for or offers help/advice as need	
Is polite and courteous	
Conforms to the rules and regulations of the job	

Why did you rate him or her that way?

Goal Setting

Based on your scores, what are two things you want to work on to get better at teamwork and cooperation? Circle or highlight 2 things

Interacting and communicating respectfully with co-workers, customers, and/or school staff

Asking for help

Offering help to others

Being polite and courteous

Following the rules and regulations of the job

Teamwork and Cooperation Goal

**My goal is _____
_____ improve my score in teamwork and
communication to a _____.**

APPENDIX P

UPGRADE Your Performance Lesson Plans 3-7 (Intervention days 1-5)**Lesson Plan #3-Intervention Day 1****Teacher Preparation**

- ❑ Make sure you have all materials (listed below).

Materials

- ❑ Students' 3-Ring 1 inch Notebooks
- ❑ Copy of the student rating sheet for the area they are focusing on
- ❑ Copy of the UPGRADE worksheet for Intervention
- ❑ Graphing Worksheet (this sheet will go in their notebook for them to continue to graph on daily)
- ❑ Teacher worksheet to model for them how to graph
- ❑ Worksheet with their goal on it from Lesson 2.
- ❑ Colored pencils (at least two different colors)

General Feedback Procedures

- When student makes correct response, provide enthusiastic affirmation/praise (e.g., "Correct," "Excellent," "Yes, you got it.")
- When student makes a correct response that is not quite complete, provide enthusiastic affirmation/praise (e.g., "Correct," "Excellent," "Yes, you got it.") followed by a statement of the FULL correct answer.
- When student makes an incorrect response or does not respond, prompt using a model-test format (e.g., "To get a level 4 on the rubric for attitude and cooperating an employee should do the right things every day. What does an employee need to do in order to get a level 4 on the rubric for attitude and cooperation? And then follow the feedback procedures based on student's prompted response.

Before instruction: Observe student working on job site for 20-30 minutes**Review the steps for UPGRADE instruction (5 minutes)**

____ **Teacher:** *"Get out the UPGRADE instruction sheet from the first lesson we did together. Let's review the steps for UPGRADE instruction."* [Give students a chance to get out their worksheet]

____ **Teacher:** *"Let's review. What does the U stand for?"*

____ **Student:** ["You evaluate yourself."]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“Now what does the P stand for?”*

____ **Student:** [“Professional evaluates you.”]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“What does the G stand for?”*

____ **Student:** [“Graph.”]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“What does the R stand for?”*

____ **Student:** [“Restate.”]

____ **Teacher:** *“What does the A stand for?”*

____ **Student:** [“Acknowledge.”]

____ **Teacher:** *“What does the D stand for?”*

____ **Student:** [“Decide.”]

____ **Teacher:** *“What does the E stand for?”*

____ **Student:** [“Execute.”]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“We are going to follow these steps each day when we come back from the job you are working. What is the first step we need to follow?”*

____ **Student:** [“You evaluate yourself.”]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

Student grades themselves on the rubric (5 minutes)

____ **Teacher:** *“You are going to evaluate yourself as the first step after we come to this room each day. At the top of your sheet is a the grading scale for your performance on the job, go ahead rate yourself on how you think you did today while you were working this morning. Here is a key for you to look at to help you decide how to rate yourself.”*
[Give the student the descriptive rating sheet and time fill in the rating sheet]

____ **Student:** [writes]

____ **Teacher:** [Check to be sure student is following directions. Prompt, assist, redirect as needed. Praise when complete.]

____ **Teacher:** *“What is the next step in UPGRADE?”*

____ **Student:** [“Professional evaluates you.”]

____ **Teacher:** *“That is correct, here is how I graded you, I graded you this way because...”* [Show the student how you graded them and let them look at both grades next to each other, explain why you graded them the way that you did]

____ **Teacher:** *“What is the next step in UPGRADE?”*

____ **Student:** [“Graph.”]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“Here is the graphing sheet we will use each day, to show who did each score you will use two different colors to graph the scores. First we need to add up the scores of each area to get your total score for today.* [Model for the student how to add up the scores to get their total score] *Next, we need to make sure you go to “1” for today on the x-axis and you will graph both of the total points on the graph.* [Model for the student how to graph two points on a graph on your sheet]. *Go ahead and graph the points on the graph.”*

____ **Student:** [graphs the scores]

____ **Teacher:** [Prompt and assist until this is complete.]

____ **Teacher:** *“How are our scores different? Or are they same?”*

____ **Student:** [“responds based on the graph”]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“Why do you think we got different scores or the same scores?”*

____ **Student:** [responds based on the graph]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“We will work on hopefully getting our scores to be the same. This is important because you want to be able to self-evaluate yourself in the same way your employer will so you can make improvements to yourself without having to be told.”*

____ **Teacher:** *“What is the next step in UPGRADE?”*

____ **Student:** [“Restate your goal and determine if you met it.”]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“Let’s look at the goal you set during Lesson 2. [Pass out Goal sheet from lesson 2] Read your goal out loud”*

____ **Student:** [“Student reads their goal.”]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“Based on your scores, did you meet your goal?”*

____ **Student:** [Student answers based on if they met their goal or not]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“What is the next step in UPGRADE?”*

____ **Student:** [“Acknowledge what you did well.”]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“What did you do well today? List two or three things you did well under the plus sign on the chart.”*

____ **Student:** [writes]

____ **Teacher:** [Check to be sure student is following directions. Prompt, assist, redirect as needed. Praise when complete.]

____ **Teacher:** *“What is the next step in UPGRADE?”*

____ **Student:** [“Decide what you can do better to meet your goal.”]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“What do you think you need to do better on in order to reach your goal? List two or three things under the triangle part of the chart on your worksheet.”*

____ **Student:** [writes]

____ **Teacher:** [Check to be sure student is following directions. Prompt, assist, redirect as needed. Praise when complete.]

____ **Teacher:** *“What is the last step in UPGRADE?”*

____ **Student:** [“Execute improvements tomorrow to meet your goal.”]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“What is one thing you can do tomorrow to get closer to meeting your goal?”*

____ **Student:** [Gives an example of something they can do better]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“List that one thing on your worksheet.”*

____ **Student:** [writes]

Closing (5 minutes)

____ **Teacher:** *“Today we reviewed how you did while you were working on the job. We followed the UPGRADE instruction steps and you evaluated your performance. Tomorrow we will do the same thing and see how you improve. Thank you for working so hard today.* [Transition student back to classroom]

Lesson Plan #4 -Intervention Day 2

Teacher Preparation

- ❑ Make sure you have all materials (listed below).

Materials

- ❑ Students' 3-Ring 1 inch Notebooks (in crate)
- ❑ Copy of the student rating sheet for the area they are focusing on
- ❑ Copy of the UPGRADE worksheet for Intervention
- ❑ Schedule of the intervention for them on a calendar
- ❑ Graphing Worksheet (this sheet will go in their notebook for them to continue to graph on daily)
- ❑ Teacher worksheet to model for them how to graph
- ❑ Worksheet with their goal on it from Lesson 2.
- ❑ Colored pencils (at least two different colors)
- ❑ Calculator depending on student's math level

General Feedback Procedures

- When student makes correct response, provide enthusiastic affirmation/praise (e.g., "Correct," "Excellent," "Yes, you got it.")
- When student makes a correct response that is not quite complete, provide enthusiastic affirmation/praise (e.g., "Correct," "Excellent," "Yes, you got it.") followed by a statement of the FULL correct answer.
- When student makes an incorrect response or does not respond, prompt using a model-test format (e.g., "To get a level 4 on the rubric for attitude and cooperating an employee should do the right things every day. What does an employee need to do in order to get a level 4 on the rubric for attitude and cooperation? And then follow the feedback procedures based on student's prompted response.

Before instruction: Observe student working on job site for 20-30 minutes

Review the steps for UPGRADE instruction (5 minutes)

____ **Teacher:** *"Here is your worksheet for today (provide them with the worksheet for day 2) What is the first step of UPGRADE instruction? [Point to the U if students are not sure]"*

____ **Student:** *"You evaluate yourself"*

____ **Teacher:** *"Good job! At the top of your sheet is a the grading scale for your performance on the job, go ahead rate yourself on how you think you did today while you were working today. Here is a key for you to look at to help you decide how to rate yourself."* [Give the student time fill in the rating sheet]

____ **Student:** [writes]

____ **Teacher:** [Check to be sure student is following directions. Prompt, assist, redirect as needed. Praise when complete.]

____ **Teacher:** *“Why did you grade yourself the way you did?”*

____ **Student:** [student gives reasons for why they graded themselves the way they did]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“What is the next step in UPGRADE?”*

____ **Student:** [“Professional evaluates you.”]

____ **Teacher:** *“That is correct, here is how I graded you. Go ahead and fill in the scores I gave you on your sheet.”* [Show the student how you graded them and let them look at both grades next to each other]

____ **Student:** [writes]

____ **Teacher:** [Check to be sure student is following directions. Prompt, assist, redirect as needed. Praise when complete.]

____ **Teacher:** *“I graded you this way because...”* [Explain to the student why you graded them the way you did, use the scoring guide to explain to them their score, this may help them see how they can get better tomorrow]

____ **Teacher:** *“What is the next step in UPGRADE?”*

____ **Student:** [“Graph.”]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“Fill in the scores from your worksheet onto the chart on the graphing worksheet. Before graphing, we need to add up the scores of each area to get your total score for today.* [If needed model for the student how to add up the scores to get their total score] *Next, we need to make sure you go to “3” for today on the x-axis and you will graph both of the total points on the graph.* [If needed model for the student how to graph two points on a graph on your sheet]. *Go ahead and graph the points on the graph.”*

____ **Student:** [graphs the scores]

____ **Teacher:** [Prompt and assist until this is complete, if student’s don’t connect the points say “Remember to connect the points with a line”.]

____ **Teacher:** *“How did you graph yourself differently from me? Or are they the same?”*

____ **Student:** [“responds based on the graph”]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“Why do you think we got different scores or the same scores?”*

____ **Student:** [responds based on the graph]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“We will work on hopefully getting our scores to be the same. This is important because you want to be able to self-evaluate yourself in the same way your employer will so you can make improvements to yourself without having to be told. Looking at the graph, did you do better than you did last time or the same?”*

____ **Student:** [Answers based on their scores on the graph]

____ **Teacher:** *“What is the next step in UPGRADE?”*

____ **Student:** [“Restate your goal and determine if you met it.”]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“Let’s look at the goal on your graphing worksheet.”* [Show them their goal listed on the graphing worksheet]

____ **Student:** [Student reads their goal]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“Based on your scores, did you meet your goal?”* [Remind students to look at their goal on the graphing worksheet]

____ **Student:** [Student answers based on if they met their goal or not]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“Circle yes or no on your worksheet to indicate if you met your goal or not.”*

____ **Student:** [writes]

____ **Teacher:** *“What is the next step in UPGRADE?”*

____ **Student:** ["Acknowledge what you did well."]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *"What did you do well today? List two things you did well under the plus sign on the chart."*

____ **Student:** [writes]

____ **Teacher:** [Check to be sure student is following directions. Prompt, assist, redirect as needed. Praise when complete.]

____ **Teacher:** *"What is the next step in UPGRADE?"*

____ **Student:** ["Decide what you can do better to meet your goal."]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *"What do you think you need to do better on in order to reach your goal? List two things under the triangle part of the chart on your worksheet."*

____ **Student:** [writes]

____ **Teacher:** [Check to be sure student is following directions. Prompt, assist, redirect as needed. Praise when complete.]

____ **Teacher:** *"What is the last step in UPGRADE?"*

____ **Student:** ["Execute improvements tomorrow to meet your goal."]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *"What is one thing you can do tomorrow to get closer to meeting your goal?"*

____ **Student:** [Gives an example of something they can do better]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *"List that one thing on your worksheet."*

____ **Student:** [writes]

Closing (5 minutes)

____ *Teacher: “Today we reviewed how you did while you were working on the job. We followed the UPGRADE instruction steps and you evaluated your performance. Tomorrow we will do the same thing and see how you improve. Thank you for working so hard today.* [Transition student back to classroom]

Lesson Plan #5-Intervention Day 3

Teacher Preparation

- ❑ Make sure you have all materials (listed below).

Materials

- ❑ Students’ 3-Ring 1 inch Notebooks
- ❑ Copy of the student rating sheet for the area they are focusing on
- ❑ Copy of the UPGRADE worksheet for Intervention
- ❑ Graphing Worksheet (this sheet will go in their notebook for them to continue to graph on daily)
- ❑ Colored pencils (at least two different colors)
- ❑ Calculator depending on student’s math level

General Feedback Procedures

- When student makes correct response, provide enthusiastic affirmation/praise (e.g., “Correct,” “Excellent,” “Yes, you got it.”)
- When student makes a correct response that is not quite complete, provide enthusiastic affirmation/praise (e.g., “Correct,” “Excellent,” “Yes, you got it.”) followed by a statement of the FULL correct answer.
- When student makes an incorrect response or does not respond, prompt using a model-test format (e.g., “To get a level 4 on the rubric for attitude and cooperating an employee should do the right things every day. What does an employee need to do in order to get a level 4 on the rubric for attitude and cooperation? And then follow the feedback procedures based on student’s prompted response.

Before instruction: Observe student working on job site for 20-30 minutes

Review the steps for UPGRADE instruction (5 minutes)

____ *Teacher: “Here is your worksheet for today (provide them with the worksheet for day 2) What is the first step of UPGRADE instruction?* [Point to the U if students are not sure]

____ *Student: “You evaluate yourself”*

____ *Teacher: “Good job!. Go ahead rate yourself on how you think you did today while you were working, remember to use the keys you have to help you rate yourself.”*[Give the student time fill in the rating sheet]

____ **Student:** [writes]

____ **Teacher:** [Check to be sure student is following directions. Prompt, assist, redirect as needed. Praise when complete.]

____ **Teacher:** *“Why did you grade yourself the way you did?”*

____ **Student:** [student gives reasons for why they graded themselves the way they did]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“What is the next step in UPGRADE?”* [Point to the P]

____ **Student:** [“Professional evaluates you.”]

____ **Teacher:** *“That is correct, here is how I graded you. Fill in these scores on your sheet.”* [Show the student how you graded them and let them look at both grades next to each other]

____ **Student:** [writes]

____ **Teacher:** [Check to be sure student is following directions. Prompt, assist, redirect as needed. Praise when complete.]

____ **Teacher:** *“I graded you this way because...”* [Explain to the student why you graded them the way you did, use the scoring guide to explain to them their score, this may help them see how they can get better tomorrow]

____ **Teacher:** *“What is the next step in UPGRADE?”* [Point to the G]

____ **Student:** [“Graph.”]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“Get out your graphing sheet we have been using each day. Go ahead and fill in the scores from your worksheet onto the chart on the graphing worksheet. Before graphing, add up the scores of each area to get your total score for today.* [Point to the area where they need to total up their scores] *Next, make sure you go to “3” for today on the x-axis and you will graph both of the total points on the graph. Remember to use the different colors so we know who’s scores are whose.* [Point to the graph to remind the student if they are unsure]. *Go ahead and graph the points on the graph.”*

____ **Student:** [graphs the scores]

____ **Teacher:** [Prompt and assist until this is complete, if student has not connected the dots with a line say ***“Remember to draw lines to connect the dots”***.]

____ **Teacher:** ***“How did you graph yourself differently from me? Or are they the same?”***

____ **Student:** [responds based on the graph]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** ***“Why do you think we got different scores or the same scores?”***

____ **Student:** [responds based on the graph]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** ***“We will work on hopefully getting our scores to be the same. This is important because you want to be able to self-evaluate yourself in the same way your employer will so you can make improvements without having to be told. Looking at the graph, did you do better than you did last time or the same?”***

____ **Student:** [Answers based on their scores on the graph]

____ **Teacher:** ***“What is the next step in UPGRADE?”*** [Point to the R]

____ **Student:** [“Restate your goal and determine if you met it.”]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** ***“Let’s look at your goal listed at the bottom of the graphing worksheet.*** [Show them their goal listed on the graphing worksheet] ***Read your goal out loud”***

____ **Student:** [Student reads their goal]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** ***“Based on your scores, did you meet your goal?”*** [Remind students to look at their goal on the graphing worksheet]

____ **Student:** [Student answers based on if they met their goal or not]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** ***“Circle yes or no on your worksheet to indicate if you met your goal or not.”***

____ **Student:** [writes]

____ **Teacher:** *“What is the next step in UPGRADE?”* [Point to the A]

____ **Student:** [“Acknowledge what you did well.”]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“What did you do well today? List two things you did well under the plus sign on the chart.”*

____ **Student:** [writes]

____ **Teacher:** [If student is struggling to come up with things they did well help them think of things they did well by pointing them back to their scores and the scoring guide. Check to be sure student is following directions. Prompt, assist, redirect as needed. Praise when complete.]

____ **Teacher:** *“What is the next step in UPGRADE?”* [Point to the D]

____ **Student:** [“Decide what you can do better to meet your goal.”]

____ **Teacher:** [If the student is struggling to come up things they need to work on, help think of things they did well by pointing them back to their scores and the scoring guide. Prompt, assist, redirect as needed. Praise when complete.]

____ **Teacher:** *“What do you think you need to do better on in order to reach your goal? List two things under the triangle part of the chart on your worksheet.”*

____ **Student:** [writes]

____ **Teacher:** [Check to be sure student is following directions. Prompt, assist, redirect as needed. Praise when complete.]

____ **Teacher:** *“What is the last step in UPGRADE?”* [Point to the E]

____ **Student:** [“Execute improvements tomorrow to meet your goal.”]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“What is one thing you can do tomorrow to get closer to meeting your goal?”*

____ **Student:** [Gives an example of something they can do better]

____ **Teacher:** [If the student is struggling to think of what they can do to get better, help them by pointing them to the Triangle part of the chart where they listed things they need to improve on. Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“List that one thing on your worksheet.”*

____ **Student:** [writes]

Closing (5 minutes)

____ **Teacher:** *“Today we reviewed how you did while you were working on the job. We followed the UPGRADE instruction steps and you evaluated your performance. Tomorrow we will do the same thing and see how you improve. Thank you for working so hard today.”* [Transition student back to classroom]

Lesson Plan #6-Intervention Day 4

Teacher Preparation

- ❑ Make sure you have all materials (listed below).

Materials

- ❑ Students’ 3-Ring 1 inch Notebooks
- ❑ Copy of the student rating sheet for the area they are focusing on
- ❑ Copy of the UPGRADE worksheet for Intervention
- ❑ Graphing Worksheet (this sheet will go in their notebook for them to continue to graph on daily)
- ❑ Colored pencils (at least two different colors)
- ❑ Calculator depending on student’s math level

General Feedback Procedures

- When student makes correct response, provide enthusiastic affirmation/praise (e.g., “Correct,” “Excellent,” “Yes, you got it.”)
- When student makes a correct response that is not quite complete, provide enthusiastic affirmation/praise (e.g., “Correct,” “Excellent,” “Yes, you got it.”) followed by a statement of the FULL correct answer.
- When student makes an incorrect response or does not respond, prompt using a model-test format (e.g., “To get a level 4 on the rubric for attitude and cooperating an employee should do the right things every day. What does an employee need to do in order to get a level 4 on the rubric for attitude and cooperation? And then follow the feedback procedures based on student’s prompted response.”)

Before instruction: Observe student working on job site for 20-30 minutes

Review the steps for UPGRADE instruction (5 minutes)

____ **Teacher:** *“Here is your worksheet for today (provide them with the worksheet for day 2) What is the first step of UPGRADE instruction?”* [Point to the U if students are not sure]

____ **Student:** *“You evaluate yourself”*

____ **Teacher:** *“Good job! Go ahead rate yourself on how you think you did today while you were working.”* Give the student time fill in the rating sheet]

____ **Student:** [writes]

____ **Teacher:** [Check to be sure student is following directions. Prompt, assist, redirect as needed. Praise when complete.]

____ **Teacher:** *“Why did you grade yourself the way you did?”*

____ **Student:** [student gives reasons for why they graded themselves the way they did]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“What is the next step in UPGRADE?”* [Point to the P]

____ **Student:** [“Professional evaluates you.”]

____ **Teacher:** *“That is correct, here is how I graded you. Fill in these scores on your sheet.”* [Show the student how you graded them and let them look at both grades next to each other]

____ **Student:** [writes]

____ **Teacher:** [Check to be sure student is following directions. Prompt, assist, redirect as needed. Praise when complete.]

____ **Teacher:** *“I graded you this way because...”*[Explain to the student why you graded them the way you did, use the scoring guide to explain to them their score, this may help them see how they can get better tomorrow]

____ **Teacher:** *“What is the next step in UPGRADE?”* [Point to the G]

____ **Student:** [“Graph.”]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“Go ahead and fill in the scores from your worksheet onto the chart on the graphing worksheet. Before graphing, add up the scores of each area to get your*

total score for today. [Point to the area where they need to total up their scores] ***Next, make sure you go to “4” for today on the x-axis and you will graph both of the total points on the graph.*** [Point to the graph to remind the student if they are unsure, if student needs to be prompted say ***“Go ahead and graph the points for today on the graph”***]

____ ***Student:*** [graphs the scores]

____ ***Teacher:*** [Prompt and assist until this is complete, if student has not connected the dots with a line say ***“Remember to draw lines to connect the dots”***]

____ ***Teacher:*** ***“How did you graph yourself differently from me? Or are they the same?”***

____ ***Student:*** [responds based on the graph]

____ ***Teacher:*** [Deliver feedback according to general feedback procedures.]

____ ***Teacher:*** ***“Why do you think we got different scores or the same scores?”***

____ ***Student:*** [responds based on the graph]

____ ***Teacher:*** [Deliver feedback according to general feedback procedures.]

____ ***Teacher:*** ***“We will work on hopefully getting our scores to be the same. This is important because you want to be able to self-evaluate yourself in the same way your employer will so you can make improvements without having to be told. Looking at the graph, did you do better than you did last time or the same?”***

____ ***Student:*** [Answers based on their scores on the graph]

____ ***Teacher:*** ***“What is the next step in UPGRADE?”*** [Point to the R]

____ ***Student:*** [“Restate your goal and determine if you met it.”]

____ ***Teacher:*** [Deliver feedback according to general feedback procedures.]

____ ***Teacher:*** ***“Let’s look at your goal listed at the bottom of the graphing worksheet.*** [Show them their goal listed on the graphing worksheet] ***Read your goal out loud”***

____ ***Student:*** [Student reads their goal]

____ ***Teacher:*** [Deliver feedback according to general feedback procedures.]

____ ***Teacher:*** ***“Based on your scores, did you meet your goal?”*** [Remind students to look at their goal on the graphing worksheet]

____ **Student:** [Student answers based on if they met their goal or not and circles the answer on their worksheet]

____ **Teacher:** [Deliver feedback according to general feedback procedures, if they do not circle yes or no say ***“Circle yes or no on your worksheet to indicate if you met your goal or not.”***.]

____ **Teacher:** ***“What is the next step in UPGRADE?”*** [Point to the A]

____ **Student:** [“Acknowledge what you did well.”]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** ***“What did you do well today? List two things you did well under the plus sign on the chart.”***

____ **Student:** [writes]

____ **Teacher:** [If student is struggling to come up with things they did well help them think of things they did well by pointing them back to their scores and the scoring guide. Check to be sure student is following directions. Prompt, assist, redirect as needed. Praise when complete.]

____ **Teacher:** ***“What is the next step in UPGRADE?”*** [Point to the D]

____ **Student:** [“Decide what you can do better to meet your goal.”]

____ **Teacher:** [If the student is struggling to come up things they need to work on, help think of things they did well by pointing them back to their scores and the scoring guide. Prompt, assist, redirect as needed. Praise when complete.]

____ **Teacher:** ***“What do you think you need to do better on in order to reach your goal? List two things under the triangle part of the chart on your worksheet.”***

____ **Student:** [writes]

____ **Teacher:** [Check to be sure student is following directions. Prompt, assist, redirect as needed. Praise when complete.]

____ **Teacher:** ***“What is the last step in UPGRADE?”*** [Point to the E]

____ **Student:** [“Execute improvements tomorrow to meet your goal.”]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“What is one thing you can do tomorrow to get closer to meeting your goal?”*

____ **Student:** [Gives an example of something they can do better]

____ **Teacher:** [If the student is struggling to think of what they can do to get better, help them by pointing them to the Triangle part of the chart where they listed things they need to improve on. Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“List that one thing on your worksheet.”*

____ **Student:** [writes]

Closing (5 minutes)

____ **Teacher:** *“Today we reviewed how you did while you were working on the job. We followed the UPGRADE instruction steps and you evaluated your performance. Tomorrow we will do the same thing and see how you improve. Thank you for working so hard today.* [Transition student back to classroom]

Lesson Plan #7-Intervention Day 5

Teacher Preparation

- ❑ Make sure you have all materials (listed below).

Materials

- ❑ Students’ 3-Ring 1 inch Notebooks
- ❑ Copy of the student rating sheet for the area they are focusing on
- ❑ Copy of the UPGRADE worksheet for Intervention
- ❑ Graphing Worksheet (this sheet will go in their notebook for them to continue to graph on daily)
- ❑ Colored pencils (at least two different colors)
- ❑ Calculator depending on student’s math level

General Feedback Procedures

- When student makes correct response, provide enthusiastic affirmation/praise (e.g., “Correct,” “Excellent,” “Yes, you got it.”)
- When student makes a correct response that is not quite complete, provide enthusiastic affirmation/praise (e.g., “Correct,” “Excellent,” “Yes, you got it.”) followed by a statement of the FULL correct answer.

- When student makes an incorrect response or does not respond, prompt using a model-test format (e.g., “To get a level 4 on the rubric for attitude and cooperating an employee should do the right things every day. What does an employee need to do in order to get a level 4 on the rubric for attitude and cooperation? And then follow the feedback procedures based on student’s prompted response.

Before instruction: Observe student working on job site for 20-30 minutes

Review the steps for UPGRADE instruction (5 minutes)

____ **Teacher:** “Here is your worksheet for today (provide them with the worksheet for day 2) What is the first step of UPGRADE instruction? [Point to the U if students are not sure]

____ **Student:** “You evaluate yourself”

____ **Teacher:** “Good job! Go ahead rate yourself on how you think you did today while you were working.” Give the student time fill in the rating sheet]

____ **Student:** [writes]

____ **Teacher:** [Check to be sure student is following directions. Prompt, assist, redirect as needed. Praise when complete.]

____ **Teacher:** “Why did you grade yourself the way you did?”

____ **Student:** [student gives reasons for why they graded themselves the way they did]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** “What is the next step in UPGRADE?” [Point to the P]

____ **Student:** [“Professional evaluates you.”]

____ **Teacher:** “That is correct, here is how I graded you. Fill in these scores on your sheet.” [Show the student how you graded them and let them look at both grades next to each other]

____ **Student:** [writes]

____ **Teacher:** [Check to be sure student is following directions. Prompt, assist, redirect as needed. Praise when complete.]

____ **Teacher:** “I graded you this way because...”[Explain to the student why you graded them the way you did, use the scoring guide to explain to them their score, this may help them see how they can get better tomorrow]

____ **Teacher:** “What is the next step in UPGRADE?” [Point to the G]

____ **Student:** ["Graph."]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *"Go ahead and fill in the scores from your worksheet onto the chart on the graphing worksheet. Before graphing, add up the scores of each area to get your total score for today. [Point to the area where they need to total up their scores] Next, make sure you go to "5" for today on the x-axis and you will graph both of the total points on the graph. [Point to the graph to remind the student if they are unsure, if student needs to be prompted say "Go ahead and graph the points for today on the graph"]*

____ **Student:** [graphs the scores]

____ **Teacher:** [Prompt and assist until this is complete, if student has not connected the dots with a line say *"Remember to draw lines to connect the dots"*]

____ **Teacher:** *"How did you graph yourself differently from me? Or are they the same?"*

____ **Student:** [responds based on the graph]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *"Why do you think we got different scores or the same scores?"*

____ **Student:** [responds based on the graph]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *"We will work on hopefully getting our scores to be the same. This is important because you want to be able to self-evaluate yourself in the same way your employer will so you can make improvements without having to be told. Looking at the graph, did you do better than you did last time or the same?"*

____ **Student:** [Answers based on their scores on the graph]

____ **Teacher:** *"What is the next step in UPGRADE?"* [Point to the R]

____ **Student:** ["Restate your goal and determine if you met it."]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *"Let's look at your goal listed at the bottom of the graphing worksheet. [Show them their goal listed on the graphing worksheet] Read your goal out loud"*

____ **Student:** [Student reads their goal]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“Based on your scores, did you meet your goal?”* [Remind students to look at their goal on the graphing worksheet]

____ **Student:** [Student answers based on if they met their goal or not]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“Circle yes or no on your worksheet to indicate if you met your goal or not.”*

____ **Student:** [writes]

____ **Teacher:** *“What is the next step in UPGRADE?”* [Point to the A]

____ **Student:** [“Acknowledge what you did well.”]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“What did you do well today? List two things you did well under the plus sign on the chart.”*

____ **Student:** [writes]

____ **Teacher:** [If student is struggling to come up with things they did well help them think of things they did well by pointing them back to their scores and the scoring guide. Check to be sure student is following directions. Prompt, assist, redirect as needed. Praise when complete.]

____ **Teacher:** *“What is the next step in UPGRADE?”* [Point to the D]

____ **Student:** [“Decide what you can do better to meet your goal.”]

____ **Teacher:** [If the student is struggling to come up things they need to work on, help think of things they did well by pointing them back to their scores and the scoring guide. Prompt, assist, redirect as needed. Praise when complete.]

____ **Teacher:** *“What do you think you need to do better on in order to reach your goal? List two things under the triangle part of the chart on your worksheet.”*

____ **Student:** [writes]

____ **Teacher:** [Check to be sure student is following directions. Prompt, assist, redirect as needed. Praise when complete.]

____ **Teacher:** *“What is the last step in UPGRADE?”* [Point to the E]

____ **Student:** [“Execute improvements tomorrow to meet your goal.”]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“What is one thing you can do tomorrow to get closer to meeting your goal?”*

____ **Student:** [Gives an example of something they can do better]

____ **Teacher:** [If the student is struggling to think of what they can do to get better, help them by pointing them to the Triangle part of the chart where they listed things they need to improve on. Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“List that one thing on your worksheet.”*

____ **Student:** [writes]

Closing (5 minutes)

____ **Teacher:** *“Today we reviewed how you did while you were working on the job. We followed the UPGRADE instruction steps and you evaluated your performance. Tomorrow we will do the same thing and see how you improve. Thank you for working so hard today.* [Transition student back to classroom]

APPENDIX Q

Final *UPGRADE Your Performance* Lesson with instructions for U-GRADE

Final Lesson Plan for *UPGRADE Your Performance* Instruction
Final step includes instructions for U-GRADE

Teacher Preparation

- ❑ Make sure you have all materials (listed below).

Materials

- ❑ Students' 3-Ring 1 inch Notebooks
- ❑ Copy of the student rating sheet for the area they are focusing on
- ❑ Copy of the UPGRADE worksheet for Intervention
- ❑ Graphing Worksheet (this sheet will go in their notebook for them to continue to graph on daily)
- ❑ Colored pencils (at least two different colors)
- ❑ Calculator depending on student's math level

General Feedback Procedures

- When student makes correct response, provide enthusiastic affirmation/praise (e.g., "Correct," "Excellent," "Yes, you got it.")
- When student makes a correct response that is not quite complete, provide enthusiastic affirmation/praise (e.g., "Correct," "Excellent," "Yes, you got it.") followed by a statement of the FULL correct answer.
- When student makes an incorrect response or does not respond, prompt using a model-test format (e.g., "To get a level 4 on the rubric for attitude and cooperating an employee should do the right things every day. What does an employee need to do in order to get a level 4 on the rubric for attitude and cooperation? And then follow the feedback procedures based on student's prompted response.

Before instruction: Observe student working on job site for 20-30 minutes

Review the steps for UPGRADE instruction (5 minutes)

____ **Teacher:** *"Here is your worksheet for today (provide them with the worksheet for day 2) Go ahead and follow the first step of UPGRADE and rate yourself on how you think you did today while working."* [Point to the U if students are not sure]

____ **Student:** [writes]

____ **Teacher:** [Check to be sure student is following directions. Prompt, assist, redirect as needed. Praise when complete.]

____ **Teacher:** *"Why did you grade yourself the way you did?"*

____ **Student:** [student gives reasons for why they graded themselves the way they did]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“What is the next step in UPGRADE?”* [Point to the P]

____ **Student:** [“Professional evaluates you.”]

____ **Teacher:** *“That is correct, here is how I graded you. Fill in these scores on your sheet.”* [Show the student how you graded them and let them look at both grades next to each other]

____ **Student:** [writes]

____ **Teacher:** [Check to be sure student is following directions. Prompt, assist, redirect as needed. Praise when complete.]

____ **Teacher:** *“I graded you this way because...”* [Explain to the student why you graded them the way you did, use the scoring guide to explain to them their score, this may help them see how they can get better tomorrow]

____ **Teacher:** *“What is the next step?”* [Point to the G if students are unsure]

____ **Student:** [“Graph.”]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“Go ahead and fill in the scores, add them up, and graph them.”* [Make sure student is following directions and graphing the scores, if not say *“Fill in the scores from your worksheet onto the chart on the graphing worksheet. Before graphing, add up the scores of each area to get your total score for today.* [Point to the area where they need to total up their scores] *Next, make sure you go to “8” for today on the x-axis and you will graph both of the total points on the graph.* [Point to the graph to remind the student if they are unsure, if student needs to be prompted say *“Go ahead and graph the points for today on the graph”*]

____ **Student:** [graphs the scores]

____ **Teacher:** [Prompt and assist until this is complete, if student has not connected the dots with a line say *“Remember to draw lines to connect the dots”*]

____ **Teacher:** *“How did you graph yourself differently from me? Or are they the same?”*

____ **Student:** [responds based on the graph]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“Why do you think we got different scores or the same scores?”*

____ **Student:** [responds based on the graph]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“Looking at the graph, did you do better than you did last time or the same?”*

____ **Student:** [Answers based on their scores on the graph]

____ **Teacher:** *“What is the next step?”* [Point to the R if students are unsure]

____ **Student:** [“Restate your goal and determine if you met it.”]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“Based on your scores did you meet your goal today?”*

____ **Student:** [Student answers based on if they met their goal or not]

____ **Teacher:** [Deliver feedback according to general feedback procedures and make sure students circle yes or no on their worksheet, if not then say *“Circle yes or no on your worksheet to indicate if you met your goal or not.”*]

____ **Student:** [writes]

____ **Teacher:** *“What are the next two steps in UPGRADE?”* [Point to the A and D if student is unsure]

____ **Student:** [“Acknowledge what you did well and Decide what you need to do better”]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“Go ahead and fill in two things for each of those.”*

____ **Student:** [writes]

____ **Teacher:** [If student is struggling to come up with things they did well help them think of things they did well by pointing them back to their scores and the scoring guide. Check to be sure student is following directions. Prompt, assist, redirect as needed. Praise when complete, If the student is struggling to come up things they need to work on, help

think of things they did well by pointing them back to their scores and the scoring guide. Prompt, assist, redirect as needed. Praise when complete.]

____ **Teacher:** *“What is the last step?”* [Point to the E if student is unsure]

____ **Student:** [“Execute improvements tomorrow to meet your goal.”]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“What is one thing you can do tomorrow to get closer to meeting your goal?”*

____ **Student:** [Gives an example of something they can do better]

____ **Teacher:** [If the student is struggling to think of what they can do to get better, help them by pointing them to the Triangle part of the chart where they listed things they need to improve on. Deliver feedback according to general feedback procedures.]

____ **Student:** [writes]

Closing (5 minutes)

____ **Teacher:** *“Today we reviewed how you did while you were working on the job. We followed the UPGRADE instruction steps and you evaluated your performance. Now we are going to learn how you can use your smart phone to track your own performance. I have talked with your teachers and they are okay with you having your phone out after you finish your job so you can grade yourself on your work performance. To do this you and I are going to use a shared spreadsheet for you to grade yourself each day and follow steps like we have together. This will be called U-GRADE. The steps are the same as UPGRADE, but we are taking out the P. Do you remember what the P stand’s for?”*

____ **Student:** [“Professional evaluates you.”]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“Good, so everyday after you work in the morning you will take out your smart phone and grade yourself and follow the steps we have followed together. Go ahead and get out your smart phone.”*

____ **Student:** [Gets out smart phone]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“Do you have the Google drive app on your phone?”*

____ **Student:** [Responds yes or no]

____ **Teacher:** [if student says no] ***“Let’s go to the app store on your phone and download the Google drive app. It is free to download.”*** [Help student find the Google drive app and download it and help them log into their school account in their Google drive app]

____ **Teacher:** ***“Now, I am going to share this spreadsheet with you and we will pull it up on your phone. You and I will be the only ones that can see this spreadsheet and it will also automatically graph your scores for you when you enter them in. Lets look at the spreadsheet together on my computer. This is what it will look like when you pull click on it on your phone. The steps are listed. This is where you would enter your scores [show them the section for U] this is where your scores will be graphed [show them G], this is where your goal is and you can decide if you met it or not [show them where to select if they met their goal or not], this is where you can acknowledge what you did well and decide what you need to do better [show them the + and ^ chart], and this is where you do your last step [Show them where they can type what they can do better the next day.] Now lets practice with you using your phone.”*** [Make sure Google sheet is shared with the student only and show them what it looks like on your computer]

____ **Student:** [Clicks on their Google App and finds the Google sheet shared with them, if they have trouble finding it, prompt and assist until they are able to open it]

____ **Teacher:** ***“Let’s practice with your scores from today, what is the first step?”***

____ **Student:** [“You evaluate yourself.”]

____ **Teacher:** ***“Go ahead and enter your scores how you evaluated yourself in the chart for today.”***

____ **Student:** [enters scores]

____ **Teacher:** ***“What’s the next step?”*** [Point to the G if students are unsure]

____ **Student:** [“Graph.”]

____ **Teacher:** ***“Looking at the graph, do you see how it graphed your scores?”***

____ **Student:** [responds with yes or no]

____ **Teacher:** ***“What’s the next step?”*** [point to the R if the student is unsure]

____ **Student:** [“Restate your goal and determine if you met it.”]

____ **Teacher:** *“Good, There is your goal listed there, go ahead and click yes or no for if you met your goal or not”*

____ **Student:** [clicks yes or no]

____ **Teacher:** *“What are the next two steps?”* [Point to the chart for them if they are unsure]

____ **Student:** [“Acknowledge what you did well and Decide what you need to do better”]

____ **Teacher:** [Deliver feedback according to general feedback procedures.]

____ **Teacher:** *“Go ahead and fill in what you did on your sheet from today.”*

____ **Student:** [enters information from their worksheet]

____ **Teacher:** *“What is the last step?”* [Point to the E if student is unsure]

____ **Student:** [“Execute improvements tomorrow to meet your goal.”]

____ **Teacher:** *“Go ahead and fill in what you did on your sheet from today.”*

____ **Student:** [enters information from their worksheet]

____ **Teacher:** *“Good job, do you see how to do this on your own each day when you finish working? I will be checking it and then on the 3rd day, I will enter my scores on the sheet and we will see how our scores are comparing again. Do you have any questions?”*

____ **Student:** [responds, if they have questions, help them and make sure they are fluent in following the steps using their phone]

APPENDIX R

U-GRADE Spreadsheet Example

Productivity and On-Task													
U-You Evaluate Yourself				P-Professional Evaluates You									
	Day	Day	Day	Day	Day	Day	Day	Day	Day	Day	Day	Day	Day
Productivity and On-Task	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date
Areas	Student	Student	Student	Teacher	Student	Student	Student	Teacher	Student	Student	Student	Student	Teacher
Works without assistance, reassurance or reminders	4	4	4	3	4	4		3	3		4	4	3
Stays focused and attentive	3	4	4	4	4	3		4	4		4	3	4
Works at pace comparable to other employees	4	3	3	4	4	4		3	4		4	4	3
Total Score	11	11	11	11	12	11		10	11		12	11	10
Total Scores	Student	Teacher											
Day 1	11												
Day 2	11												
Day 3	11	10											
Day 4	12												
Day 5	11												
Day 6	10	11											
Day 7	12												
Day 8	11												
Day 9	11	10											

G-Graph Your Scores

R-Restate Your Goal and Determine if you met it

My goal is to...

Did you meet your goal, YES or NO?

Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

A-Acknowledge What you Did Well

A (+)	D (+)	A (+)	D (+)	A (+)	D (+)	A (+)	D (+)	A (+)	D (+)	A (+)	D (+)	A (+)	D (+)
Stayed focused and attentive	Working without help	Worked without help	Staying focused and attentive	Worked at a good pace	Working without help	Staying focused and attentive	Working without help	Working without help	Staying focused and attentive	Working at a good pace	Working without help	Working at a good pace	Staying focused and attentive

D-Decide what you need to do better

E-Execute improvements tomorrow to meet or maintain your goal

What is one thing you can do tomorrow to meet or maintain your goal?

Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9
Work by myself	be focused	work on my own	work on my own	focus more	no reminders	focus more	focus!!!	Pay attention

APPENDIX S

Procedural Fidelity Checklists

UPGRADE Your Job Performance: Student: _____Baseline # _____
Date: _____**Procedural Fidelity Checklist for Baseline**

- _____ Researcher observes each student for 25 minutes or longer
- _____ Researcher does not provide any prompts
- _____ Researcher does not provide feedback to the students
- _____ Researcher collects data on each student

UPGRADE Your Job Performance: Student: _____Baseline # _____
Date: _____**Procedural Fidelity Checklist for Baseline**

- _____ Researcher observes each student for 25 minutes or longer
- _____ Researcher does not provide any prompts
- _____ Researcher does not provide feedback to the students
- _____ Researcher collects data on each student

UPGRADE Your Job Performance: Student: _____Baseline # _____
Date: _____**Procedural Fidelity Checklist for Baseline**

- _____ Researcher observes each student for 25 minutes or longer
- _____ Researcher does not provide any prompts
- _____ Researcher does not provide feedback to the students
- _____ Researcher collects data on each student

UPGRADE Your Job Performance: Student: _____Baseline # _____
Date: _____**Procedural Fidelity Checklist for Baseline**

- _____ Researcher observes each student for 25 minutes or longer
- _____ Researcher does not provide any prompts
- _____ Researcher does not provide feedback to the students
- _____ Researcher collects data on each student

UPGRADE Your Job Performance: Student: _____

Maintenance # ____
Date: _____

Procedural Fidelity Checklist for Maintenance

- _____ Researcher observes each student for 25 minutes or longer
- _____ Researcher does not provide any prompts
- _____ Researcher does not provide feedback to the students
- _____ Researcher collects data on each student

UPGRADE Your Job Performance: Student: _____

Maintenance # ____
Date: _____

Procedural Fidelity Checklist for Maintenance

- _____ Researcher observes each student for 25 minutes or longer
- _____ Researcher does not provide any prompts
- _____ Researcher does not provide feedback to the students
- _____ Researcher collects data on each student

UPGRADE Your Job Performance: Student: _____

Maintenance # ____
Date: _____

Procedural Fidelity Checklist for Maintenance

- _____ Researcher observes each student for 25 minutes or longer
- _____ Researcher does not provide any prompts
- _____ Researcher does not provide feedback to the students
- _____ Researcher collects data on each student

UPGRADE Your Job Performance: Student: _____

Maintenance # ____
Date: _____

Procedural Fidelity Checklist for Maintenance

- _____ Researcher observes each student for 25 minutes or longer
- _____ Researcher does not provide any prompts
- _____ Researcher does not provide feedback to the students
- _____ Researcher collects data on each student

UPGRADE Your Job Performance: Student: _____

Intervention # _____ IOA Collector Initials _____ Date: _____

Procedural Fidelity Checklist for First Part of Intervention

_____ Researcher observes each student for 25 minutes or longer

_____ Researcher does not provide any prompts

_____ Researcher does not provide feedback to the students

_____ Researcher collects data on each student

UPGRADE Your Job Performance: Student: _____

Intervention # _____ IOA Collector Initials _____ Date: _____

Procedural Fidelity Checklist for First Part of Intervention

_____ Researcher observes each student for 25 minutes or longer

_____ Researcher does not provide any prompts

_____ Researcher does not provide feedback to the students

_____ Researcher collects data on each student

UPGRADE Your Job Performance: Student: _____

Intervention # _____ IOA Collector Initials _____ Date: _____

Procedural Fidelity Checklist for First Part of Intervention

_____ Researcher observes each student for 25 minutes or longer

_____ Researcher does not provide any prompts

_____ Researcher does not provide feedback to the students

_____ Researcher collects data on each student

UPGRADE Your Job Performance: Student: _____

Intervention # _____ IOA Collector Initials _____ Date: _____

Procedural Fidelity Checklist for First Part of Intervention

_____ Researcher observes each student for 25 minutes or longer

_____ Researcher does not provide any prompts

_____ Researcher does not provide feedback to the students

_____ Researcher collects data on each student