### **Intellectual and Developmental Disabilities**

# Connecting Youth with Significant Disabilities to Paid Work: An Innovative School-Based Intervention --Manuscript Draft--

Manuscript Number:	IDD-D-23-00096R2			
Article Type:	Research			
Keywords:	secondary transition; employment preparation; Special Education; case study			
Corresponding Author:	Michele Ann Schutz, Ph.D. University of Illinois Urbana-Champaign Champaign, Illinois UNITED STATES			
First Author:	Michele Ann Schutz, Ph.D.			
Order of Authors:	Michele Ann Schutz, Ph.D.			
	Jessica M Awsumb, Ph.D.			
	Erik W Carter			
	Leah Burgess			
	Ben Schwartzman, Ph.D.			
Manuscript Region of Origin:	UNITED STATES			
Abstract:	Early work experiences are associated with subsequent employment for students with significant disabilities, but they rarely receive such opportunities. This paper presents two case studies illustrating a school-based intervention that connected students with significant disabilities to paid work during high school and included training for special educators, a team approach to employment planning, job connections, and postsecondary planning. We collected and analyzed data on employment outcomes over 18 months from the perspectives of students, their parents, and teachers during and after the intervention. One student was successfully connected to a paid job while the other student was not. We describe the proposed intervention, in-depth student experiences, and lessons learned for informing a randomized control trial evaluating the intervention.			

Connecting Youth with Significant Disabilities to Paid Work: An Innovative School-Based Intervention

1

PAID WORK CASE STUDIES

**Abstract** 

Early work experiences are associated with subsequent employment for students with significant disabilities, but they rarely receive such opportunities. This paper presents two case studies illustrating a school-based intervention that connected students with significant disabilities to paid work during high school and included training for special educators, a team approach to employment planning, job connections, and postsecondary planning. We collected and analyzed data on employment outcomes over 18 months from the perspectives of students, their parents, and teachers during and after the intervention. One student was successfully connected to a paid job while the other student was not. We describe the proposed intervention, in-depth student experiences, and lessons learned for informing a randomized control trial evaluating the intervention.

Keywords: employment, secondary transition, significant disabilities, school-based intervention

## Connecting Youth with Significant Disabilities to Paid Work: An Innovative School-Based Intervention

Early work experiences are a recommended practice for all youth, particularly those with significant disabilities (i.e., intellectual and developmental disabilities with extensive support needs). Correlational studies have associated a paid job during high school with post-school employment for youth with significant disabilities (e.g., Carter et al., 2012; Wehman et al., 2015). These early jobs introduce youth to employers, inform resume development, and facilitate skills and knowledge that equip them for adult work. Further, these opportunities demonstrate the capacities of these youth to work, can raise expectations among their families and teachers, and serve as rich experiences within their lifecourse (Mazzotti et al., 2021; Schutz et al., 2023).

Despite the importance of early work opportunities, several barriers have long prevented paid work from becoming a normative high school experience for most youth with significant disabilities. According to the National Longitudinal Transition Study-2, less than one third of students with an intellectual disability or autism had a paid work experience (Lipscomb et al., 2017). Among youth with extensive support needs, access to paid work was even more limited (Roux et al., 2020). School staff, agency providers, families, and employers have identified barriers that can diminish the job prospects of youth with significant disabilities during high school to relate to a host of student and family factors, school services, workplace issues, community capacities, and service system challenges (see Awsumb et al., 2022). These findings, alongside others (e.g., Butterworth et al., 2017; Povenmire-Kirk et al., 2018), also affirm the need to engage a variety of interagency stakeholders to collaboratively connect youth to work.

Nonetheless, transition stakeholders have also suggested an array of factors to obviate these challenges and expand access to paid jobs among youth with significant disabilities. Schutz

and colleagues (2023) highlighted the importance of providing work-based learning experiences in the community, delivering knowledge and skill instruction, employing individualized supports, and addressing transportation challenges. Moreover, they emphasized building the collective capacity of an interdisciplinary team of professionals and parents to help youth pursue paid employment by promoting attitudes that encourage work, adequately staffing schools and agencies, providing training and information for staff and families, and leveraging interagency collaborations. In other words, effective interventions must extend beyond merely providing instruction by also addressing the supports, opportunities, and connections available to youth with significant disabilities (Carter et al., 2009; Wehman et al., 2019). To change more than four decades of stagnant and disappointing employment outcomes (i.e., roughly 18% of adults with IDD working in any capacity; Winsor et al., 2022), new innovative approaches are critical.

A comprehensive, coordinated, and individualized approach to paid jobs in the community that harnesses the collective capacity of an interagency team is needed to connect youth with significant disabilities to early work experiences. An intervention that encompasses essential supports for youth, their families, and professionals while simultaneously anticipating barriers that have long stood in the way could address the complex and multi-faceted nature of this task (Carter et al., 2009). Further, although a clear link between initial paid jobs and postsecondary employment has been established through correlational research, more in-depth evidence is needed to understand these experiences and their impact. In this paper, we present the case studies of two youth that participated in a newly developed school-based intervention that employed interagency collaborations to connect students to paid jobs in the community during high school. The findings of these case studies were used to inform a randomized control trial to demonstrate that students with significant disabilities can gain employment during high

school and that such causes subsequent employment after graduation. Thus, these case studies aimed to provide an in-depth examination addressing the following research questions:

- 1. What were the experiences of two youth with significant disabilities, their families, and their teachers participating in a school-based intervention for connecting to paid employment during their final year of high school?
- 2. What challenges and successes did youth and families experience with respect to youth employment outcomes during the year following high school graduation?

#### Method

To achieve our study aims, we illustrate the nuanced experiences of the two participating youth and their parents and teachers. We describe the school-based intervention, each participating student, and data collection and analysis procedures used to characterize their experiences. Our team was comprised of university faculty, staff, and a doctoral student in special education, all of whom had experiences in connecting students with disabilities to work.

#### **Intervention Package**

Through a series of iterative steps, we developed a comprehensive yet flexible, multi-component intervention that could be adapted across diverse school systems. See Figure 1 for a visual representation of our process. First, we reviewed the empirical literature on interventions with transition-age youth with disabilities that addressed postschool employment and developed our intervention based on components identified to be promising (see Figure 1 for referenced literature). Next, we conducted interviews with 74 transition stakeholders (i.e., special educators, district leaders, agency providers, parents, employers) to solicit feedback on our intervention (MASKED; MASKED). Participants suggested ensuring teams were working toward a common, realistic goal and that students had supports in-school and post-school. We revised our approach

based on this input and feedback from our project advisory board of individuals with disabilities, families, and professionals (e.g., adding more explicit information about defining employment goals and planning for postsecondary supports as part of planning meetings). The resulting school-based intervention included four main components: (1) an orientation to the project and training for teachers, (2) employment planning meeting, (3) job search in the community, and (4) graduation exit meeting. Research staff provided support and resources to teachers as needed.

First, each teacher attended a 90-minute orientation in which research staff described the intervention and overviewed participant roles. One week later, we provided a 90-minute follow-up training focused on recommendations and resources for job development, on-the-job supports, and communicating with families and employers. Second, the teacher, student, and parent participated in an employment planning meeting focused on the student's employment goals and considerations pertinent to finding a job (e.g., transportation and on-the job supports). The meeting consisted of interagency participants, including pre-employment transition services (Pre-ETS) providers, Vocational Rehabilitation (VR) counselors, and other school staff and administrators. We adapted the employment planning meeting tool from the *Summer Activities Planning Tool* (Carter et al., 2009) to guide attendees in discussing the following for pursuing paid employment: (a) student's strengths and interests, (b) employment goals, (c) transportation and scheduling, (d) needs and supports for finding and maintaining the job, (e) potential job opportunities, (f) plans for after high school, and (g) team member responsibilities and next steps. See MASKED for information on the employment planning meeting tool development.

Third, the employment planning team supported the student in conducting a job search in their community for existing paid positions aligned with their preferences, interests, needs, and strengths – rather than relying solely on school-based enterprises, internships, or short-term job

placements already utilized by the schools for no pay or sub-minimum wages. Interagency team members leveraged their individual expertise and local connections to search for jobs and identify relevant formal and informal supports while the research team provided support as necessary (e.g., resources on benefits counseling and transportation services). Fourth, we held an end-of-year exit meeting to ensure students had support to maintain or expand upon their employment trajectory upon exiting high school. To intentionally promote a seamless transition from school-based to adult services, attendees included the employment planning team members along with adult service providers who would continue to support the student following graduation (e.g., VR counselor). The guide addressed: (a) student's strengths and interests, (b) plans for after high school, (c) employment goals for the next year, (d) transportation and scheduling, (e) student needs and supports on the job, and (f) supports after graduation.

#### **Participants and Recruitment**

To recruit participants, we collaborated with transition coordinators in two school districts in a Southeastern state to identify special educators who served students with significant disabilities. To be eligible for participation, students had to (a) be in their final year of high school; (b) have a significant cognitive impairment as reflected in school records, and (c) have a postsecondary goal of becoming employed in their Individualized Education Program (IEP). Participating family members had to be parents or guardians of eligible students, while teachers had to provide transition services to them. Each participating student was joined by one parent and one teacher. We held meetings via Zoom with teachers to explain project goals, eligibility, and the project timeline. We secured teacher and parent consent as well as student assent.

Teachers received \$275 for participation in the study and \$25 for each measure completed (up to \$75). Parents received \$25 for each measure completed (up to \$125).

Shawn was a 21-year-old White male with multiple disabilities who resided in a rural community. He spent approximately 75% of his school day focused on vocational training and 25% in general education. Shawn was working toward an occupational diploma and had provided some input in prior transition planning meetings. His mother and teacher both indicated Shawn was *somewhat ready* for a paid job in the community. He had previously learned about different careers, completed interest inventories, identified preferred jobs, and met with VR.

George was a 21-year-old White male with an intellectual disability who resided in a suburban community. He spent approximately 70% of his school day on vocational training and 30% in community settings. He had completed a vocational assessment, created a resume, and participated in vocational skills training at school prior to the intervention but had not yet researched jobs, filled out applications, or applied for VR services. The teacher deemed George as *somewhat ready* for paid employment while the parent rated him to be *a little ready*.

#### **Data Collection and Analysis**

We collected multiple measures prior to, during, and after the implementation of the intervention, spanning up to 18 months. We developed parent and teacher surveys addressing their perceptions of (a) students' preparation for employment, (b) students' current employment skills, (c) expectations and concerns, and (d) students' work experiences and community experiences. We adapted measures from prior youth employment studies (e.g., AAIDD, 2018; Bluestein et al., 2016; Carter et al., 2009). Teachers completed measures at the beginning of the spring semester (Time 1) and at the end of the school year (Time 2). Parents were provided with measures at Time 1, Time 2, six-months after graduation (Time 3), and one year after graduation (Time 4). All surveys were completed as hard copies, due to participant preferences, and shared with the researchers through in-person pickup from schools or by mail.

We asked teachers and parents to describe the student's employment status and rate their own expectations for the student to engage in post-school experiences using a 4-point, Likert-type scale ranging from *very unlikely* to *very likely* (e.g., part-time work, vocational/technical school, living independently with support; Blustein et al., 2016). Parents and teachers also reported the extent to which they anticipated various barriers would keep the student from working using a 4-point, Likert-type scale ranging from *not an issue* to *major issue* (e.g., motivation to work, employers' willingness to hire, finding needed services; cf., Blustein et al., 2016). See Table 1 for all items and participant responses across the described timepoints.

The student who obtained employment completed an interview one year after graduation (Time 4). They reported their satisfaction with various aspects of their work using a 4-point, Likert-type scale ranging from *I am very unhappy* to *I am very happy* and shared if they wanted to keep the job, the best and worst aspect of the job, and supports they still may need. If a student did not gain employment, they were not interviewed. We also interviewed teachers at the end of the school year (Time 2) and parents one year later (Time 4). Interviews were conducted via Zoom (ranging 23-49 minutes) by a research staff member using a semi-structured interview protocol. Questions prompted teachers to describe their experiences connecting students to work, perceived benefits of work for their student, partnerships to support their student, overall perceptions of the intervention, and advice for replication. Parents discussed student experiences since leaving high school, connecting to employment, and sustaining or changing employment.

To analyze data, we summarized quantitative data from survey measures within and across case studies (see Table 1). We then triangulated quantitative and qualitative data from students, parents, and teachers within and across each case study. This consisted of comparing findings across parents, across teachers, and between teacher and parent within each case study.

#### **Results**

In this section, we describe the employment pursuits and experiences of Shawn and George, as well as the insights of their parents and special education teachers. Results highlight ways in which services, supports, and collaborations intersect to produce differing outcomes.

#### **Shawn's Employment Pursuits**

#### **Baseline Information**

Shawn's teacher and mother both reported that he was *very likely* to work in a part-time job and live at home with his family. Yet, they each agreed that he was *somewhat unlikely* to work full-time and was *very unlikely* to attend postsecondary education. Shawn's mother did not anticipate Shawn would live outside of his family's home. When asked about potential barriers to Shawn working, his teacher and mother rated concern about losing social security benefits as *not an issue* and Shawn's motivation to work as a *minor issue*. The teacher rated the family's concerns about safety to be a *minor issue*, while his mother characterized this as a *medium issue*. Both considered the availability of transportation to be a *major issue*. His mother also deemed difficulties finding services, the family's ability to provide needed support, and finding high-quality services as *major issues*, while his teacher deemed the latter to be a *medium issue*.

Shawn had previously worked in a paid job assembling items at a community rehabilitation center funded through VR. His mother reported that she was *unsure* if Shawn wanted a job and that he had unrealistic job expectations. Shawn's teacher reported that Shawn wanted to find a job but had not yet started to search and indicated that she only had *a little experience* and *moderate confidence* with connecting students with disabilities to paid work.

#### **Employment Planning Meeting**

After participating in the orientation and training, Shawn's teacher helped him create a

presentation to share during his employment planning meeting. Shawn, his teacher, and parent invited the district transition coordinator, local VR counselor, a community rehabilitation provider (CRP) job coach, and Shawn's speech-language therapist. The meeting was held in Shawn's classroom and lasted 90 minutes. The teacher used the employment planning tool to overview the purpose of the meeting and guide conversation as the research team provided prompting as necessary. Shawn presented his strengths, needs, preferences, and employment goals. He described his interests in fire stations and fishing; strengths of being respectful, punctual, and transitioning tasks efficiently; and supports to include the text-to-talk feature on his phone to communicate. Shawn identified his favorite work-based learning experience to be at a gym because he enjoyed scanning ID cards and greeting people as they arrived.

Attendees reiterated Shawn's strengths and began brainstorming job options to include completing tasks at local gyms, the fire department, or a sports store. Shawn shared that he would not mind cleaning if at a firehouse, but that cleaning was not his favorite task. The team agreed that it would be ideal for Shawn to work two to three days per week to accommodate his family's schedule and brainstormed transportation options (e.g., his mother or grandmother driving him) given the lack of public transportation. Since Shawn already had an open VR case, the CRP was authorized to provide supported employment services (e.g., support in identifying job leads, completing applications, and participating in interviews). The CRP emphasized that if Shawn worked at least 15 hours per week, he would receive job coaching at the workplace that would fade as his independence increased. Further, the teacher noted that Shawn would benefit from a pictorial task analysis and having job tasks modeled. The team used a Google doc to share contact information for local businesses and agreed to share weekly updates.

#### Pursuing Employment

Following the employment planning meeting, the CRP representative began contacting local fire departments using contacts from the team and inquiring about potential positions that could be developed, but they were not hiring at that time. Thus, they contacted local gyms. The student was interested in front desk and greeter positions at the gym and completing limited custodial work if necessary. The CRP reached out to the owner of a new gym to set up an interview and prepared Shawn. Shawn interviewed and was extended a job offer.

#### Graduation Meeting and End of High School

Shawn became employed in May but did not start until June due to a medical procedure. Therefore, the exit meeting was held prior to Shawn's first day on the job and in conjunction with his final IEP meeting. Attendees included Shawn, his mother, the special education teacher, the CRP representative, and the VR counselor. Shawn and his teacher reviewed his original employment goals, and the teacher used the meeting tool to guide discussions. Shawn reiterated that his favorite work-based learning site was the gym and discussed how he preferred working with people. The CRP provided updates on contacts that had been made regarding the job hire. The research staff provided information on a state agency that provided benefits counseling to assist Shawn and his mother in reporting income to Supplemental Social Security.

According to survey results, most teacher and parent perspectives remained the same at the end of the school year. Yet, the teacher now reported that Shawn was only *somewhat likely* to hold a part-time job and less likely to live outside the family home. They transitioned from *not an issue* to *minor issue* regarding Shawn's ability to do the work and the employer's ability to support him. Shawn' mother shared that his job coach was not appropriately supporting him on the job. This could be one reason why both the teacher and parent reports changed from baseline to end of high school. Conversely, Shawn's mother no longer considered his motivation to work

and social/communication skills to be barriers. Both had previously indicated that transportation was a *major issue* but later rated it as *not an issue*. His teacher and mother agreed that the family's schedule and ability to provide support and find needed services were now *minor issues* or *not an issue*. In her interview, Shawn's teacher described her participation in the intervention:

I loved it when everybody came together in the meeting, all the different agencies came together and was just pitching ideas and like, "Hey, I can do this, I can do that." I've invited agencies before, but they've never really showed up, or they're like, "Oh, if the parent needs anything, let me know..." We got a plan together. I think that the slideshow that [the student] and I put together, how proud he was of being able to present that, have pictures, he had his note cards to read I mean those things really stick out. And, of course, him getting a job is awesome.

Shawn's teacher went on to affirm that the goals of the project aligned well with her own focus on employment preparation in the classroom. She described the only challenge to be "making the extra time" to "get in all the meetings" required in the process. She praised her connections with the CRP representative, sharing that such "took the pressure off of me when going to job places" to ask about paid work on behalf of her student. Lastly, she explained that she would continue to use the connections developed from this project, now knowing "what avenues to take" to connect with outside agencies to pursue jobs for other students in the future. She explained:

[This project] gives me hope for a lot of my students to know if we do have a good team and they have the right resources, a lot of them could get a job. Even if they have to have support, that's fine, but it's good to know there are people there to back them up that want to help support them so they can be successful in the community after they leave.

#### Six Months After High School Graduation

A number of challenges emerged after Shawn graduated and continued working at the gym. His mother reported that the CRP representative had negotiated with the owner for Shawn to start at a lower wage needed to prevent him from losing his Supplemental Social Security benefits, but his mother received conflicting information from another agency. Further, Shawn's mother reported inconsistency in Shawn's work schedule despite communicating that a weekly

schedule was needed in advance to ensure transportation. Additionally, she shared that Shawn's work tasks did not seem to align with those discussed at the employment planning meeting (i.e., janitorial tasks versus front desk/greeter tasks) and that he did not receive formal training on tasks delegated to him. Finally, Shawn's mother reported asking the CRP representative to create a visual schedule of his tasks but ultimately having to develop this herself. As a result of these challenges, Shawn's parent requested that the CRP no longer provide his employment services. On the six-month follow-up survey, Shawn's mother reported that he was still working at the gym for two 3-hour shifts per week and performing the same duties for \$10 per hour. She reported that it was *very likely* that he would continue working a part-time job in the community and living at home with his family. Nonetheless, she indicated that Shawn was not fully satisfied with the janitorial aspects of the job and would prefer more responsibilities at the front desk.

#### One Year After High School Graduation

One year after Shawn's graduation, his mother reported that Shawn was still working at the same gym and had increased to nine hours per week. She had created a visual schedule of his tasks, added phone alarms to help with his transition of tasks, provided a map of the gym, and supported him in using an augmentative and alternative communication device at work. She shared that Shawn was still receiving appropriate pay, being treated well by co-workers and supervisors, was proud of his job, and received support needed. She also reported that Shawn had enrolled in state-funded community integration services and was given opportunities to visit fire stations. When asked about his job, Shawn shared that he wanted to continue to work. He reported he was *very happy* with his job tasks, his work schedule, his interactions with coworkers, and the level of difficulty of his job and that "making new friends" was the best part.

Shawn's mother described the 12 months that passed as a "year of transition, learning new skills, and new schedules" as he began to "understand that he's not going back to school."

She highlighted several changes in Shawn's employment-related support. After asking the CRP agency to discontinue services, she advocated for a new job coach through a different agency and funding source, which "rejuvenated him in the job". Further, Shawn's mother discussed how a newly hired manager expected Shawn to be a more "active employee" than the previous manager. She continued that the "place of employment is a good fit" for him, but the "job is not a good fit," explaining that he would "really prefer working behind a desk and greeting people" but "either the person behind the desk won't allow him to do it or there are way too many questions that he can't answer." She shared her hopes that, with new management, Shawn would receive more formal training on front desk duties and increase his responsibilities. She noted that she wished Shawn had been connected to employment earlier in his schooling:

We needed to start earlier...doing a job search and all of that should have happened somewhere between [age] 18 and 22...for [my child] to have that time to build up seniority, comfortability...and their hours...knowing that when they leave school, this is going to be your job. This is where you're going to be. So that while they are still part of the school system, the job coach can be taking notes, parents can be involved. You've got teachers, you've got lots of supports out there that can help facilitate those [supports].

#### **George's Employment Pursuits**

#### **Baseline Information**

George's teacher reported that he was *very likely* to obtain a part-time paid job in the community, while his mother responded that he was *somewhat unlikely* to do so. Both anticipated he would attend an inclusive higher education program and live at home with his family. Although his mother considered it *very unlikely*, his teacher considered it *somewhat likely* that George may eventually live in a group home in the community. His teacher did not report any major barriers to George connecting to paid work, but his mother deemed *major* 

issues to include safety on the job, employers' willingness to hire her son, having the support needed on-the-job, the availability of jobs, and the availability and quality of services and supports from adult providers. George had two prior unpaid work experiences (i.e., cleaning at a restaurant, data entry for a trolley service) coordinated by his teacher. Yet, the teacher reported no confidence and no prior experience in connecting students with disabilities to paid work.

#### **Employment Planning Meeting**

With the support of his teacher, George created a PowerPoint presentation for his employment planning meeting and invited the high school's in-house Pre-ETS provider, the director of George's community photography club, and the director of an adult disability services organization where George participated in social activities. The 1-hour meeting was held in a conference room at the high school with one attendee participating via Zoom. George shared that he enjoyed grocery shopping, taking pictures, playing video games, drawing, following a schedule, and using a task list. He identified his strengths as being organized, typing, and using computers, and he preferred to work indoors in a quiet area by himself in a job that would not involve customer interaction. His preferred workplace was a grocery store. Attendees identified George's strengths to include following directions and answering questions when given choices between two options. The Pre-ETS provider shared George's vocational assessment data suggesting aptitudes in caring for others and retail. Attendees suggested potential positions at grocery stores, hotels or event venues, gyms, and book or art supply stores. Based on George's schedule, they established a goal of working eight to ten hours over two to three days per week.

Next, the team discussed supports George would need for employment. His mother said George was not connected to any state services (e.g., VR, Social Security), and the Pre-ETS provider and teacher offered to help George connect to VR services. The teacher anticipated

George would need some job coaching to learn tasks and communicate with employees. The Pre-ETS provider offered to pursue a potential job at a grocery store and identify a job coach.

#### Pursuing Employment and End of High School

The Pre-ETS provider later resigned from their position, leaving the teacher to follow up on job pursuits. The teacher helped George's mother set up an appointment with a VR counselor, but she reported that several months passed before she heard back on when VR services could begin. In the meantime, the grocery store manager expressed an interest in hiring George, but supports were not yet available from VR, and the job ultimately fell through. The team did not hold an exit employment meeting for George because he was not connected to a job.

The responses of George's teacher and mother remained largely unchanged at the end of the school year. Although George did not connect to paid work, his mother indicated increased optimism, anticipating that he was *very likely* to connect to part-time paid work after high school. Yet, his teacher said that such was only *somewhat likely*. According to George's mother, many of the same barriers remained *major issues* to his employment, including employers' willingness to hire her son and provide needed supports, the availability of adult disability services, transportation gaps, and George's social and communication skills. Meanwhile, his teacher described challenges around "outside resources—things I can't control outside of the school," stated that she wished "we had [the student] in connection with outside resources sooner," and said connecting the student to paid work during the pandemic was "overwhelming." Nonetheless, George's teacher shared value for the intervention:

Seeing the team come together for my student and everybody wanting to support him and having his best interests in mind, and everybody working together to help him be successful in the community, especially after leaving high school. Just to think all these people are on [the student's] side. It gives me hope for a lot of my students to know if we do have a good team and they have the right resources, a lot of them could get a job.

The teacher also shared that these experiences helped her recognize how important it was for her to "hound parents even more" to "have a relationship" with the adult service system *prior* to their students graduating so that "they can get what they need afterwards." Finally, George's teacher expressed value for guidance she received with respect to "how to talk to the businesses and running the [employment planning] meeting" and having someone to have "kept me on my toes when I needed to get things done, which is good…sometimes [educators] need that."

#### Six Months After High School Graduation

Six months later, George's mother indicated that he had still not connected to a paid job despite having filled out a job application, met with a VR counselor, and connected to a CRP. She reported that he had support for finding a job and was still interested in working, but it would need to be "the right situation" due to "masking and COVID requirements." She identified concerns about George's safety on the job and employers' ability to provide support to still be *major issues*, while other barriers were less of an issue. Overall, George's mother still believed it was *very likely* that George would find a part-time paid job in the next six months.

#### One Year After High School Graduation

One year after graduation, George had still not obtained paid employment. His mother explained that they met with a VR counselor and researched internships, but George had not applied or interviewed for a paid job. She shared that George had sufficient help and was interested in finding a paid job. In fact, she now believed it was *very likely* George would connect to part-time employment and *somewhat likely* he would find full-time employment. However, she considered the following barriers to remain persistent: George's social and communication skills, the family's concerns about job safety, and employers' willingness to hire and ability to support George. More specifically, she had "tried pursuing voc rehab, but the

[counselor] we got hooked up with was flaky...and then they passed us on to the next guy, and he was good for a little bit, but he had his own ideas and then he got bogged down in other cases, and so [George] got pushed to the back burner again." She concluded, "I don't think we're getting much support." When asked what advice she would give to other parents, she shared:

I wish [there was someone to evaluate our students] and say, "okay, these are the state programs that need to be in place to make everything work together as a team." I think maybe I put too much faith in just one way of going, and then voc rehab didn't turn out. So now I kind of feel like we're starting over again."

She went on to describe her desire for VR counselors to be more "realistic in what they're promising they can do and just be honest with the parents." She shared that she "thought [George's teacher] did a great job [and] she cared a lot," but "COVID happened, so the job training aspect really suffered." George's mother wanted "schools to start [focusing on employment] even earlier so that it's in place for a longer period of time [because] the sooner they could get that type of mindset, the better it's going to be for the kid I think outcome-wise."

George's mother shared she was "most surprised about how quiet and lonely life is after you leave high school. If you don't make efforts to go and do activities and things, how quickly you just get forgotten and how hard you have to pursue things in order to make them happen."

Nonetheless, she mentioned that her son began attending a day program at his church because he was bored at home and was really enjoying participating in a photography club for adults with disabilities. When asked if she was still interested in continuing to pursue work, she shared:

I'm still fairly interested...if it's a good situation [and] if there was someone that was going to be nurturing to him, I think that would be awesome. But I'm really scared about [an employer] that's not going to really support him when he gets there and it's going to end up into a fiasco. So, I'm hoping it will end up in a good situation and something that lets him grow as an individual and challenges him and that he enjoys doing."

#### **Discussion**

We examined the journeys of two youth with significant disabilities through their final

semester of schooling and first year post-graduation. Our intervention incorporated prior literature and practice regarding transition assessment, interagency collaboration, employment planning, and supported employment. Our findings extend upon existing literature by illustrating the in-depth possibilities and complexities associated with pursuits of paid work facilitated by teachers for their students alongside their families and interagency collaborators. We highlight potential implications for the transition education of students with extensive support needs.

Each of these examples illustrated the need for employment to be pursued actively and earlier for youth with significant disabilities. Shawn and George both received special education and transition services for more than seven years of high school—including vocational courses and community-based experiences—and had postschool goals for employment. Yet, their actual services were not aimed toward this outcome, their parents cited a lack of authentic experiences to hinder their subsequent outcomes, and neither student's employment prospects appeared promising. Concerns regarding the rarity of hands-on work experience for students with significant disabilities have been raised repeatedly in the literature (Carter, et al., 2010; Rooney-Kron & Dymond, 2022). Best practices for seamless transition emphasize ensuring the final days of school closely resemble those desired after graduation (e.g., Luecking & Luecking, 2015).

Thus, focused and comprehensive employment planning can be a critical catalyst for tangible movement toward this goal prior to graduation. Transition planning is legally mandated, but the scope and depth of this planning still varies widely (Schutz et al., 2024; Snell-Rood et al., 2020). Both students participated in transition planning meetings since age 14. Yet, these annual meetings—and the written IEP plans that result—do not typically address exactly how paid work experiences will be pursued, by whom, or with what formal or informal supports. Rather, each student's employment-focused planning meeting centered paid work as an immediate and

pressing pursuit, engaged key stakeholders, delineated specific steps to be taken, and established accountability for collective action. It was only after this meeting that teachers and providers actively inquired about community jobs for the students, and teachers explained that doing so helped them believe they could pursue paid work for other students we well. Incorporating more focused employment planning meetings beyond just traditional IEP meetings may comprise an important supplement to annual transition planning (Carter et al., 2009; Schutz & Carter, 2022).

Nonetheless, some providers may not be equipped for this pursuit. Prior studies highlight the uneven extent to which pre-service and in-service special educators are trained to implement transition best practices (Mazzotti et al., 2018; Morningstar & Benitez, 2013) yet suggest that they often self-decide career development services (Schutz et al., 2024). Shawn and George's teachers reported having minimal experience and confidence in connecting students to paid work despite having over a decade of experience. Each affirmed the value of the orientation, initial training, occasional guidance, and coordination provided. Tasks related to employment planning, job development, job supports, and interagency collaboration can be challenging in the absence of guidance. Increasing access to paid work experiences for students with significant disabilities during high school requires that school staff be fluent in best practices and develop strong interagency teams that can collectively draw upon their own assets and linkages to develop paid job experiences (Flowers et al., 2018; Mazzotti & Plotner, 2016; Mazzotti et al., 2021).

Similarly, cultivating employment pursuits as rich experiences within a person's lifecourse necessitates the support and empowerment of families in expecting, pursuing, and sustaining work for their youth. Parent expectations for work serve as a powerful predictor of postschool employment for youth with significant disabilities (Carter et al., 2012). Notably, the parents in this study—albeit their goals for their youth to work—maintained more heightened

concerns regarding the safety and failure of their young adults than teachers did, aligning with prior literature (Blustein et al., 2016; Carter et al., 2023). Thus, school and agency personnel should actively foster (a) family expectations for employment for their children during and after high school and (b) family access to the knowledge and resources necessary to facilitate their youths' employment goals with informal supports (e.g., community support, natural supports) alongside formal supports like VR services (Gotto et al., 2019, Schutz & Carter, 2023).

In conclusion, job connections for youth with significant disabilities necessitate a combination of services, supports, and coordination to sustain. Several steps were taken to identify and secure a job for George, but unanticipated changes in Pre-ETS staffing, latency in accessing VR services, and poor experiences with providers resulted in him missing this window of early work. Meanwhile, Shawn remained employed, but his interests and preferences were hardly honored at his workplace. Connecting students to paid work and ensuring that subsequent employment extends beyond a paycheck can take considerable time and necessitates the partnership of multiple entities (e.g., school systems, Pre-ETS providers, VR, employers) toward seamless transition from school to adult services (Schutz & Carter, 2022). The long-term impact of employment may be more pronounced when students have extended work experiences that allow them to refine their goals and develop natural supports that can sustain upon graduation.

#### **Limitations and Implications for Future Research**

These two case studies raise key issues that should be addressed in future research. First, further qualitative, follow-along studies are needed to better understand how students, their families, and teachers navigate the transition to work. We followed the journeys of Shawn and George across 18 months to learn whether and how their pathways led to paid work. Although a number of quantitative studies have examined employment outcomes over time (see review by

Schutz & Carter, 2022), they typically lack the depth needed to elucidate the twists and turns in between time points. In particular, future research should capture the first-hand views of students with significant disabilities who do *and* who do not successfully obtain employment.

Second, future inquiry is needed to explore ways of engaging youth with significant disabilities more fully in their job pursuits. Although Shawn and George had prominent voices at their employment planning meetings, educators and providers approached prospective employers independently. Increasing the self-determination of youth in all aspects of the job search expands the skills they can develop and may increase their investment in the work they obtain (Mazzotti et al., 2021). Third, we recommend adjustments to our intervention that can best support students gaining employment while in high school. The most apparent need was more time (Schutz et al., 2023). These students were enrolled in the study for their final semester of school due to the pandemic, which created challenges completing each component of the study, connecting to work, and ensuring adult service connections. Connecting students to work earlier could allow for on-the-job observations that add rich context to the student's employment experience.

#### **Implications for Practice**

Additionally, these case studies shed light on salient implications for transition practices to address gaps in work opportunities for youth with significant disabilities. First, practitioners responsible for providing services that support the transition from school to work should actively support youth and their families in their pursuit of paid work opportunities early within transition planning. Special educators and pre-ETS providers can colaboratively implement practices from this study, such as gathering information about the work-related preferences and needs of students and their families, conducting job searches in the community, and coordinating the shift from school services to adult services and natural supports (Schutz et al., 2024). Indeed, these

practices align with the very charges of these individuals' roles as defined in special education and rehabilitation legislation (Individuals with Disabilities Education Act [IDEA], 2004; Workforce Innovation and Opportunity Act [WIOA], 2014), such as conducting transition assessments, setting postsecondary goals in employment, and coordinating work-based learning experiences as a part of IEP transition services or pre-ETS.

Second, the partnerships of these key players are critical for such efforts to result in the obtainment and sustainment of paid work experiences for students with extensive support needs (Schutz et al., 2023). The intricacies that were cited to make or break successful linkages to paid work for the two youth in this study call for ongoing communication and coordination across school and adult service systems that may be too extensive to address solely within an annual IEP meeting or during a youth's final months of high school (Flowers et al., 2018). Practitioners from schools and adult agencies should seek to move beyond mere compliance with legal mandates and plan for careful and extensive collaborations. Finally, these partners should work together to equip and empower families to help connect youth to jobs that they themselves can also support and sustain outside of the school day and after graduation (Carter et al., 2023).

#### Conclusion

Accessing paid work during high school can have a substantial impact on the postschool outcomes of students with significant disabilities (Carter et al., 2012). In partnership with families, providers, and employers, educators can be instrumental in connecting students to these experiences. The two case studies featured in this paper illustrated divergent paths: one that ended in employment and one that stopped short of this goal. We encourage future research and practice aimed toward understanding how practices, partnerships, and policies coalesce toward elevating more students with significant disabilities upon a pathway to meaningful work.

#### References

- American Association on Intellectual and Developmental Disabilities (2004). *Support Intensity Scale*. AAIDD.
- Awsumb, J. M., Schutz, M. A., Carter, E. W., Schwartzman, B., Burgess, L., & Taylor, J. L. (2022). Pursuing paid employment for youth with severe disabilities: Multiple perspectives on persistent challenges. *Research and Practice for Persons with Severe Disabilities*, 47(1), 22-39. https://doi.org/10.1177/15407969221075629
- Blustein, C. L., Carter, E. W., & McMillan, E. (2016). The voices of parents: Post–high school expectations, priorities, and concerns for children with intellectual and developmental disabilities. *The Journal of Special Education*, *50*, 164-177.

  <a href="https://doi.org/10.1177/0022466916641381">https://doi.org/10.1177/0022466916641381</a></a>
- Carter, E. W., Austin, D., & Trainor, A. A. (2012). Predictors of postschool employment outcomes for young adults with severe disabilities. *Journal of Disability Policy Studies*, 23(1), 50-63. <a href="https://doi.org/10.1177/1044207311414680">https://doi.org/10.1177/1044207311414680</a>
- Carter, E. W., Lanchak, E. R., Berry, L. E., McMillan, E. D., Taylor, J. L., Fleming, L. P., & Rowley, H. (2023). "More than a paycheck": Parent perspectives on meaningful work for individuals with intellectual and developmental disabilities. *Intellectual and Developmental Disabilities*, 61(2), 145-157. <a href="https://doi.org/10.1352/1934-9556-61.2.145">https://doi.org/10.1352/1934-9556-61.2.145</a>
- Carter, E. W., Trainor, A. A., Cakiroglu, O., Swedeen, B., & Owens, L. A. (2010). Availability of and access to career development activities for transition-age youth with disabilities. *Career Development for Exceptional Individuals*, 33(1), 13–24. <a href="https://doi.org/10.1177/0885728809344332">https://doi.org/10.1177/0885728809344332</a>

- Carter, E. W., Trainor, A. A., Ditchman, N., Swedeen, B., & Owens, L. (2009). Evaluation of a multi-component intervention package to increase summer work experiences for transition-age youth with severe disabilities. *Research and Practice for Persons with Severe Disabilities*, 34, 1-12. https://doi.org/10.2511/rpsd.34.2.1
- Fabian, E., Dong, S., Simonsen, M., Luecking, D., & Deschamps, A. (2016). Service system collaboration in transition: An empirical exploration of its effects on rehabilitation outcomes for students with disabilities. *Journal of Rehabilitation*, 82(3), 3–10. https://diginole.lib.fsu.edu/islandora/object/fsu:829995
- Flowers, C., Test, D. W., Povenmire-Kirk, T. C., Diegelmann, K. M., Bunch-Crump, K., Kemp-Inman, A., & Goodnight, C. I. (2018). A demonstration model of interagency collaboration for students with disabilities: A multilevel approach. *The Journal of Special Education*, *51*(4), 211-221. https://doi.org/10.1177/0022466917720764
- Fraker, T. M., Crane, K. T., Honeycutt, T. C., Luecking, R. G., Mamun, A. A., & O'Day, B. L. (2018). The youth transition demonstration project in Miami, Florida: Design, implementation, and three-year impacts. *Journal of Vocational Rehabilitation*, 48(1), 79-91. <a href="https://doi.org/10.3233/JVR-170917">https://doi.org/10.3233/JVR-170917</a>
- Gotto, G. S., Reynolds, M. C., Palmer, S. B., & Chiang, D. F. (2019). Supporting families through the Charting the LifeCourse framework. *Intellectual and developmental disabilities*, *57*(1), 56–65. <a href="https://doi.org/10.1352/1934-9556-57.1.56">https://doi.org/10.1352/1934-9556-57.1.56</a>
- Individuals with Disabilities Education Improvement Act of 2004, 20 U.S.C. § 1400 et seq. <a href="https://www.congress.gov/bill/108th-congress/house-bill/1350">https://www.congress.gov/bill/108th-congress/house-bill/1350</a>
- Lipscomb, S., Haimson, J., Liu, A. Y., Burghardt, J., Johnson, D. R., & Thurlow, M. L. (2017).

  Preparing for life after high school: The characteristics and experiences of youth in

- special education (Vol. 2). U. S. Department of Education. https://ies.ed.gov/ncee/pubs/20184011/
- Luecking, D. M., & Luecking, R. G. (2015). Translating research into a seamless transition model. *Career Development and Transition for Exceptional Individuals*, 38(1), 4-13. https://doi.org/10.117/2165143413508978
- Mamun, A., Patnaik, A., Levere, M., Livermore, G., Honeycutt, T., Kauff, J., Katz, K.,
  McCutcheon, A., Mastrianni, J., & Gionfriddo, B. (2019) Promoting readiness of minors
  in SSI (PROMISE) evaluation: Interim services and impact report. Mathematica.
  <a href="https://www.ssa.gov/disabilityresearch/documents/PROMISE\_Interim\_Impact\_Report.pd">https://www.ssa.gov/disabilityresearch/documents/PROMISE\_Interim\_Impact\_Report.pd</a>
  f
- Mazzotti, V. L. (2018). State of personnel preparation in secondary transition: Introduction to the special series. *Career Development and Transition for Exceptional Individuals*, 41(1), 3–3. https://doi.org/10.1177/2165143417742630
- Mazzotti, V. L., & Plotner, A. J. (2016). Implementing secondary transition evidence-based practices: A multi-state survey of transition service providers. *Career Development and Transition for Exceptional Individuals*, 39(1), 12-22.

  <a href="https://doi.org/10.1177/2165143414544360">https://doi.org/10.1177/2165143414544360</a></a>
- Mazzotti, V. L., Rowe, D. A., Kwiatek, S., Voggt, A., Chang, W. H., Fowler, C. H., Poppen, M.,
  Sinclair, J., & Test, D. W. (2021). Secondary transition predictors of postschool success:
  An update to the research base. *Career Development and Transition for Exceptional Individuals*, 44(1), 47–64. https://doi.org/10.1177/2165143420959793
- Modini, M., Tan, L., Brinchmann, B., Wang, M. J., Killackey, E., Glozier, N., Mykletun, A., & Harvey, S. B. (2016). Supported employment for people with severe mental illness:

systematic review and meta-analysis of the international evidence. *The British Journal of Psychiatry: The Journal of Mental Science*, 209(1), 14–22. https://doi.org/10.1192/bjp.bp.115.165092

- Morningstar, M. E., & Benitez, D. T. (2013). Teachers training matters: The results of a multistate survey secondary special educators regarding transition from school to adulthood. *Teacher Education and Special Education*, 36(1), 51-64.
- Rooney-Kron, M., & Dymond, S. K. (2022). Participation of students with intellectual disability in community-based work experiences: A scoping review. *Research and Practice for Persons with Severe Disabilities*, 47(2), 90-100.

  https://doi.org/10.1177/15407969221093378
- Roux, A. M., Rast, J. E., Garfield, T., Anderson, A. A., & Shattuck, P. T. (2020). Prevalence and correlates of work experiences among high school students on the autism spectrum.

  Intellectual and Developmental Disabilities, 58(4), 273-287.

  https://doi.org/10.1352/1934-9556-58.4.273
- Schutz, M. A., Awsumb, J. M., Carter, E. W., Schwartzman, B., Burgess, L., & Taylor, J. L. (2023). Facilitators of paid employment for transition-age youth with severe disabilities.

  \*\*Journal of Vocational Rehabilitation, 58(1), 11-26. <a href="https://doi.org/10.3233/JVR-221221">https://doi.org/10.3233/JVR-221221</a>
- Schutz, M. A., & Carter, E. W. (2022). Employment interventions for youth with disabilities: A review of transition practices and partners. *Career Development and Transition for Exceptional Individuals*, 45(3), 154-169. https://doi.org/10.1177/21651434221075810
- Schutz, M. A., Carter, E. W., & Travers, H. E. (2024). Rural school staff roles in career development for students with disabilities: A mixed methods study. *Career Development*

*and Transition for Exceptional Individuals, 47*(1), 46-61. https://doi.org/10.1177/21651434231152822

- Snell-Rood, C., Ruble, L., Kleinert, H., McGrew, J. H., Adams, M., Rodgers, A., Odom, J., Wong, W. H., & Yu, Y. (2020). Stakeholder perspectives on transition planning, implementation, and outcomes for students with autism spectrum disorder. *Autism*, 24(5), 1164-1176. <a href="https://doi.org/10.1177/1362361319894827">https://doi.org/10.1177/1362361319894827</a>
- Wehman, P., Schall, C., McDonough, J., Sima, A., Brooke, A., Ham, W., Whittenburg, H., Brooke, V., Avellone, L., & Riehle, E. (2019). Competitive employment for transitionaged youth with significant impact from autism: A multi-site randomized clinical trial. *Journal of Autism & Developmental Disorders*, 50(6).
  https://doi.org/10.1007/s10803-019-03940-2
- Wehman, P., Sima, A. P., Ketchum, J., West, M. D., Chan, F., & Luecking, R. (2015). Predictors of successful transition from school to employment for youth with disabilities. *Journal of Occupational Rehabilitation*, 25, 323-334. <a href="https://doi.org/10.1007/s10926-014-9541-6">https://doi.org/10.1007/s10926-014-9541-6</a>
- Winsor, J., Butterworth, J., Migliore, A., Domin, D., Zalewska, A., Shepard, J., & Kamau, E. (2022). StateData: The national report on employment services and outcomes through 2019. University of Massachusetts Boston, Institute for Community Inclusion.

  <a href="https://www.thinkwork.org/sites/default/files/files/bluebook\_2022\_complete\_F.pdf">https://www.thinkwork.org/sites/default/files/files/bluebook\_2022\_complete\_F.pdf</a>

Workforce Innovation and Opportunity Act of 2014, Pub. L. 113-128, 128 Stat. 1425.

Figure 1

Intervention Components, Referenced Literature, and Measures Across Phases

	Αc	tivities	Referenced Literature	Me	easures
Intervention Development	•	Completed a review of empirical literature on employment interventions for transition-age youth	<ul> <li>See review [MASKED]</li> <li>See interview studies [MASKED]</li> <li>Supported employment literature (e.g., Modini et al., 2016; Wehman et al., 2015, 2019)</li> </ul>	•	Teacher survey prior to intervention Parent survey prior to intervention
	•	Conducted focus group interviews with transition stakeholders	• Employment model programs (e.g., Carter et al., 2009; Luecking & Luecking, 2015)	_	
	•	Solicited input from project advisory board	• Interagency collaboration foundation (e.g., Flowers et al., 2018; Mazzotti & Plotner, 2016)		
Intervention Implementation	•	Delivered teacher orientations and training	<ul> <li>Summer work intervention (e.g., Carter et al., 2009)</li> <li>PROMISE (e.g., Mamun et al., 2019)</li> </ul>	•	Teacher survey and interview at the end of intervention Parent survey at the
	•	Supported teacher in leading interagency employment planning meeting	- <b>•</b>	end of intervention	
	•	Supported teacher in conducting job search in the community	<ul> <li>Summer work intervention (e.g., Carter et al., 2009)</li> <li>PROMISE (e.g., Mamun et al., 2019)</li> </ul>	_	
	•	Supported teacher in coordinating interagency graduation exit meeting	<ul> <li>CIRCLES (e.g., Flowers et al., 2018)</li> <li>Guideposts for Success (Luecking &amp; Luecking, 2015)</li> <li>Service system collaboration (e.g., Fabian et al., 2016)</li> <li>YTDP (e.g., Fraker et al., 2018)</li> </ul>		
Post Intervention	•	Followed student employment status through parent surveys	• Not applicable	•	Parent survey 6 months and 12 months after intervention Parent and student interview 12 months after intervention

Note: *PROMISE* = *Promoting the Readiness of Minors in Supplemental Security Income*; YTDP = *Youth Transition Demonstration Project.* 

<u>\*</u>

Table 1 Student Experiences and Challenges Following High School Exit

	Baseline			End of year				Six-month		One year		
	Parent		Teacher		Parent		Teacher		Parent		Parent	
Items	P1	P2	T1	T2	P1	P2	T1	T2	P1	P2	P1	P2
Likeliness the student will have the following experiences: <sup>a</sup>												
Work in a <i>part-time</i> job	4	2	4	4	4	4	3	3	4	4	3	4
Work in a <i>full-time</i> job	2	1	2	1	2	1	2	2	1	1	1	3
Attend vocational/technical school	2	1	1	2	1	2	2	2	1	1	1	3
Attend 2-year community college	1	2	1	1	1	1	1	1	1	1	1	2
Attend 4-year college or university	1	1	1	1	1	1	1	1	1	1	1	1
Attend an inclusive higher education program	1	3	1	4	1	3	1	3	1	3	1	4
Live at home with family members	4	4	4	4	4	4	4	4	4	4	4	4
Live in the community in a group home (with 3+ others)	1	1	3	3	1	1	2	3	1	1	1	1
Live in the community with 1-2 others	1	1	3	2	1	1	1	3	1	1	1	2
Living independently with supports	1	1	2	1	1	1	2	1	1	1	1	1
Items that will likely keep the student from working:b												
Motivation to work	2	2	2	3	1	2	2	2		2		2
Social/communication skills	3	3	3	2	1	4	3	3		3		4
Ability to do the work	1	2	1	1	2	2	2	1		3		3
Behaviors	1	2	1	1	1	2	2	1		3		3
Health issues	1	1	1	1	1	1	2	1		2		1
Family concerns about job safety	3	4	2	1	3	3	3	2		4		4
Family concerns about losing benefits	1	1	1		1	1	1	1		1		1
Family's schedule	4	2	3	1	2	3	1	1		2		3
Family's ability to provide support	4	3	3	1	1	3	1	1		3		3
Employers' willingness to hire	1	4	1	2	1	4	2	3		3		4
Employers' ability to support student	1	4	1	3	2	4	2	3		4		4
Availability of job search help	1	4	1	3	1	3	2	2		3		3
Availability of on-the-job support	2	4	1	2	2	4	2	2		3		1
Availability of jobs in the community	2	4	1	2	1	4	2	2		3		3
Transportation	4	3	4	1	1	4	1	1		3		3
Finding needed services	4	4	3	2	2	4	2	2		3		3
Finding high-quality services	4	4	3	3	3	4	2	2		3		3

Note: Parent 1 did not complete Items that would likely keep the student from working at Time 3 or Time 4.

a1=Very unlikely, 2=somewhat likely, 3=somewhat likely, 4=very likely
b1=Not an issue, 2=minor issue, 3=medium issue, 4=major issue