



Effects of Paid Work Experiences on Post-School Employment Outcomes of Students with Severe Disabilities

Background and Purpose

Equipping students with severe disabilities for the world of work has been the longstanding emphasis of transition education. A good job enables young people to connect to their community, to assume a valued role, to contribute to local needs, to develop friendships, to find purpose, to experience personal satisfaction, and, of course, to earn a paycheck (Carter, Trainor et al., 2010). Not surprisingly, the Individuals with Disabilities Education Improvement Act (2004) describes the overarching purpose of special education as preparing students “for further education, *employment*, and independent living” (emphasis added). Moreover, the extent to which students with disabilities obtain jobs in the first year after graduation has become a primary metric for gauging the effectiveness of special education and transition services (i.e., Indicator 14). Although paid employment during high school is a predictor of post-school education and employment (Mazzotti et al., 2021), most students with severe disabilities (i.e., individuals with intellectual disability, autism, or multiple disabilities) are not afforded these hands-on opportunities (Carter, Trainor et al., 2010).

Paid work experience during high school is strongly advocated as a recommended practice. In large part, this is because correlational research associates early work with later work (e.g., Benz et al., 1997; Carter, Austin et al., 2012; Wehman et al., 2015). Although the value of such early work experiences is clear, it is important to emphasize that research addressing the link between early work experiences and post-school outcomes is entirely *correlational* rather than *causal* (cf., Southward & Kyzar, 2017). The nature of correlational evidence leaves wide open the possibility that other factors are influencing the association between work experiences across time, such as expectations, motivation, disability-related needs, work-related skills, and other factors. In an era of evidence-based practices, more rigorous evaluations are needed to establish causal evidence for the impact of early work experiences. Stronger claims about the impact of early work experiences would bolster prevailing policy and practice recommendations related to paid work during adolescence.

Therefore, we developed a randomized control trial to demonstrate that students with severe disabilities: (1) can gain employment during their final year of high school, and (2) that being connected to employment during high school causes employment one-year following high school. In this fourth-year update, we describe (1) the five phases of the intervention, (2) the employment status of our 2021-2022 students as of six-months following their May 2022 school exit, and (3) the employment status of students enrolled for the 2022-2023 school year.

Methods

Study Design

The randomized control trial was designed in five phases. First, a review of the employment literature was conducted alongside focus groups and individual interviews with transition stakeholders to develop and solidify intervention components. Second, intervention materials were developed based on the review of the literature and interviews. Third, the intervention was piloted with two students, their parents, and a special educator during the spring of 2021 (Schutz et al., 2023). Fourth, we began implementing the intervention with the first of three cohorts in the fall of 2021. The second cohort began in the fall of 2022. The third and final cohort will begin in the fall of 2023. Fifth, once complete, we will package the study materials, stories, and findings to share statewide and nationally. This study update focuses on the fourth year and the fourth phase of the study.

Participants and Recruitment

To be eligible, students were required to (1) be enrolled in one of the school districts that agreed to participate; (2) be in their final year of high school; (3) have an intellectual disability, autism with a cognitive impairment, multiple disabilities, or are taking the alternate assessment; and (4) have a goal for employment. Eligible students were recruited through school district professional development days and by reaching out to individual special educators. Meetings were held via Zoom and in-person with special educators to explain the goals and basic steps of the project and the requirements for each person involved. To be enrolled in the project, a whole triad had to be consented including the special education teacher, a parent/guardian, and the student. After agreeing to participate, special educators were randomly assigned to either the intervention group or the comparison group. The comparison group special educators delivered students with their typical transition services. Special educators were then consented and shared the consent form with a parent/guardian of the student. Once the completed parent/guardian consent form was returned, students were assented or consented based on their eligibility and conservatorship status. For participation, special educators in the intervention group were compensated \$275 and an additional \$25 for each measure/interview completed (up to \$75). Special educators in the comparison group received \$25 for completion of two measures and one interview (up to \$75). Parents in both the intervention and comparison groups were compensated \$25 for each measure completed (up to \$125). Students were not financially compensated for participation but those in the intervention group received additional supports to connect to employment.

Cohort 1

The first cohort of students were recruited in the beginning of the 2021-2022 school year. For the first cohort, three school districts agreed to participate. The first school district was rural with approximately 30,000 students, 14% with disabilities. The second was considered suburban and rural serving about 40,000 students, 10% with disabilities. The third was an urban district with 85,000 students, 13% with disabilities. Through recruitment efforts, 12 triads were randomly assigned to the intervention group and 11 triads were randomly assigned to the comparison group. The intervention triad included 7 students with an intellectual disability, 4 students with autism, and 1 student with multiple disabilities. Students in the comparison group had an intellectual disability ($n=6$) and autism ($n=5$).

Cohort 2

The second cohort was recruited during the late summer going into the 2022-2023 school year. In addition to the three school districts from the first cohort, two additional rural school districts were enrolled. The first additional school district educates approximately 8,000 students, 15% with disabilities. The second school district had nearly 3,000 students. The percentage of students with disabilities was not available for this school district. Enrollment for cohort 2 included 11 intervention triads and 10 comparison triads. While participants were randomly assigned to either the intervention or comparison groups, if special educator participants were in the intervention group for cohort 1 and had eligible students to enroll for cohort 2, they remained in the intervention group because of their knowledge of each of the steps in the process. Comparison special educators from cohort 1 that wished to participate in cohort 2 were randomly assigned again to either the intervention or comparison groups.

Intervention Procedures

The intervention was designed in four parts. First, members of the research staff held an orientation for special educators lasting up to two hours. This orientation was held for individuals or for groups of enrolled special educators, dependent on teacher availability. A presentation was developed to share the project's purpose, to define the expectations of each participant and the research staff, and to explain each step of the intervention.

Second, the special educator organized an employment planning meeting with the student, their parent/guardian, and any additional supports they would need (e.g., provider of pre-employment transition services [Pre-ETS], Vocational Rehabilitation [VR] counselor, school counselor). This group became known as the employment team. During the employment planning meeting, the employment team discussed the student's strengths and interests, their employment goals for the school year, transportation options, supports for finding and keeping their desired job, job options in the community, goals for post-high school, and any other comments or questions from the members of the employment team (Awsumb, et al., 2023).

Third, once the employment planning meeting was completed, the special educator attended a training on job development conducted by the research team. This training was held separate from the orientation to ensure the content of the job development training was tailored and aligned to the goals of their student based on the discussions in the employment planning meeting. When steps one through three were complete, the team, with each of their defined roles, was expected to begin seeking employment with the student. We required employment for this study to be defined as a competitively paid job in the community.

Fourth, at the end of the school year, the special educator organized an employment exit meeting. The purpose of the meeting was to ensure students had their post-school employment goals set and the necessary supports gathered to achieve these goals. In addition to the student's high school employment team (e.g., student, parent, special educator), supports for post-high school were invited to the meeting (e.g., adult service agency representatives). Topics covered included strengths and interests, post-high school employment goals, options for transportation, on-the-job support needs, how to connect to adult supports when needed, and any remaining questions or comments.

Measures

Parent and special educator measures were developed to examine participants' perceptions of (a) students' preparation for future employment, (b) students' current employment skills, (c) their expectations and concerns

for students, and (d) students' work experiences and community experiences. The research team was comprised of transition-focused faculty and staff with expertise in connecting students with severe disabilities to employment opportunities. To develop measures, the research team reviewed literature related to supported employment for students with severe disabilities (AAIDD, 2004; Blustein et al., 2016; Carter, Ditchman et al., 2010; MAT et al., 2012). We used a consensus approach to develop questions and engaged in multiple rounds of revisions to finalize measures. Special educators completed measures at baseline (i.e., the beginning of the school year) and the end of the school year. Parents completed measures at baseline, the end of the school year, six-months after high school exit, and one-year after high school exit.

Data Analysis

Data were analyzed within and across the two cohorts of triads. Parent and special educator findings were summarized using descriptive statistics. When summarizing the findings, data are presented using frequencies and percentages.

Preliminary Findings

Cohort 1

At the time of high school exit, four intervention students and one comparison student opted to remain in school. As a result, there were eight students remaining in the intervention group and 10 in the comparison group. Of the eight intervention students, 4 (50.00%) were employed. Students were connected to jobs in restaurants ($n=2$), custodial work ($n=1$), and a grocery store ($n=1$). While eight comparison students were also employed (80.00%), all but one student were enrolled in Project SEARCH. Project SEARCH students were connected to jobs in hotels ($n=6$) and a grocery store ($n=1$). The final employed comparison student found a job working in a restaurant. The two comparison students that were unemployed were not enrolled in Project SEARCH. On average, students in the intervention group were working 12.80 hours per week for \$11.40 per hour whereas comparisons worked 17.13 hours for \$13.06 per hour.

During year four, starting in November 2022, the research team began requesting the six-month parent follow-up measure. As of March 2023, only five intervention parents (62.50%) and seven comparison parents (70.00%) returned the six-month measure. Of the four intervention students, one was reportedly still employed at the same restaurant and one student began a job doing custodial work. The student engaging in custodial work, was employed during their final school year, but not at school exit. Parents reported an average of 12.83 hours worked per week at \$11.33 per hour. The additional intervention students' parents that were employed at the time of high school exit have not responded to the measure; therefore, it is unclear if the students are still employed. The three intervention students that were not employed at high school exit were still unemployed at six-months post-high school.

In regard to the seven six-month comparison parent measures we received, six students were still employed. Five of the six students were enrolled in Project SEARCH and still employed at hotels. The sixth student did not have support from Project SEARCH but continued their employment at a restaurant. Parents reported students working an average of 13.67 hours a week for \$13.83 per hour. Of the 2 comparison students that were not employed at the end of the school year, only one parent returned the measure and reported that their student

was still not employed. The research staff are currently collecting one-year follow up measures from parents of students participating in the study.

Cohort 2

Research staff collected baseline measures from cohort 2 parents and special educators during the fall of 2022. At the time of enrollment, no students were employed. Additionally, no students in either the intervention ($n=11$) or comparison ($n=10$) group were enrolled in Project SEARCH. All students in the intervention group participated in the employment planning meeting and each member began the process of assisting students with connecting to employment supports and to paid employment opportunities. As of May 2023, five students were employed, one student was hired but had not begun their employment, two students had applied for jobs, one student was still connected to employment supports, and two students decided to remain in school. Students found employment at restaurants ($n=2$), a flower shop ($n=1$), a grocery store ($n=1$), and a veterinarian's office ($n=1$). Research team members are reaching out to parents and special educators to collect the end-of-year measures.

Implications for Practice

The preliminary findings of this study have two main implications for practitioners assisting students with severe disabilities to connect with employment while in high school. First, although the involvement of parents and special educators is crucial, students need additional supports. In this study, the students that were successful in obtaining employment in high school had support from at least one or some combination of Pre-ETS providers, VR counselors, additional family members, or other outside agencies (e.g., community rehabilitation centers, Employment and Community First Choices). In particular, the students in this study required job coaches, making those early connections to supports imperative. Second, one of the goals of the employment planning meeting and employment exit meeting is to ensure the supports students need are in place to help them achieve their goals. If students do not already have these supports available or are not already receiving services, it is proving challenging in the beginning of the year to ensure these are in place for employment immediately. It may be important to start this process prior to the final year of high school, ensuring student supports are already in place as they enter their final year of school.

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This intervention study is being conducted as a collaboration among Vanderbilt University, the Vanderbilt Kennedy Center for Excellence in Developmental Disabilities (VKC-UCEDD), and local schools and agencies.

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The contents of this publication were developed under a grant from the National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR grant number #90RTEM0002). NIDILRR is a Center within the Administration for Community Living (ACL), Department of Health and Human Services (HHS). The contents of this publication do not necessarily represent the policy of NIDILRR, ACL, HHS, and you should not assume endorsement by the Federal Government.