Inclusion

Photovoice as a Career Exploration Tool for Youth with IDD

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Abstract:	For more than 20 years, photovoice methods have been used to help traditionally marginalized groups control their narratives and plan for individual and collective change. Because photovoice participants collect data, reflect on their circumstances, and plan action steps, this method can be used as a tool for career exploration and discovery. We highlight two photovoice studies, one virtual and one in-person, conducted with 13 transition-age youth with intellectual and developmental disabilities (IDD). After analyzing data from youths' photos, session materials, and group discussion responses in both studies, we found themes of 1) the discovery and diversity of employment goals, 2) youth identifying employment preferences, and 3) preparing for employment. Results highlight photovoice's promise – especially when coupled with work-based learning – for supporting the identification and communication of employment strengths, interests, preferences, and support needs. Finally, we describe the ways in which a photovoice discovery process supports youth, teachers, and community partners as they work toward integrated employment outcomes for youth with IDD.

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Abstract

For more than 20 years, photovoice methods have been used to help traditionally marginalized groups control their narratives and plan for individual and collective change. Because photovoice participants collect data, reflect on their circumstances, and plan action steps, this method can be used as a tool for career exploration and discovery. We highlight two photovoice studies, one virtual and one in-person, conducted with 13 transition-age youth with intellectual and developmental disabilities (IDD). After analyzing data from youths' photos, session materials, and group discussion responses in both studies, we found themes of 1) the discovery and diversity of employment goals, 2) youth identifying employment preferences, and 3) preparing for employment. Results highlight photovoice's promise – especially when coupled with work-based learning – for supporting the identification and communication of employment strengths, interests, preferences, and support needs. Finally, we describe the ways in which a photovoice discovery process supports youth, teachers, and community partners as they work toward integrated employment outcomes for youth with IDD.

Keywords: transition, employment, career exploration, discovery, photovoice, intellectual disability

Photovoice as a Career Exploration Tool for Youth with IDD

Introduction

"What do you want to be when you grow up?" Most children are asked this question multiple times throughout their life. However, youth with intellectual and developmental disabilities (IDD) are asked this question less frequently than their peers who do not have an IDD; often, they are left out of decision-making concerning their own lives, specifically around employment (Powers et al., 2005). When youth with IDD are excluded from conversations about employment, biased beliefs around their capabilities can lead to unemployment or the oversaturation of youth with IDD in entry-level, low-paying jobs that do not necessarily reflect the interests and strengths of youth (e.g., Sosnowy et al., 2018). In contrast, involvement in informed decision-making and person-centered transition planning empowers youth to work in positions that are meaningful, integrated, and sustainable (Mello & Sanderson, 2021; Uyanik et al., 2017).

Identifying strengths, interests, preferences, and support needs is a prerequisite for employment and a strong starting point for a person-centered transition planning process (Lusk & Cook, 2009).Practicing communication and decision-making supports youth autonomy, a research-based predictor of postsecondary success (Wehman et al., 2020). As youth develop self-awareness, they can better identify potential careers to explore. Opportunities to clarify their preferences lead to stronger job matches, greater satisfaction, and improved retention (Migliore et al., 2018). Even the required activities outlined in Section 113 of the Rehabilitation Act, Pre-employment Transition Services (Pre-ETS), emphasize the importance of youth with disabilities independently exploring career interests and participating in work-based learning experiences (Workforce Innovation and Opportunity Act, 2014). Pre-Employment Transition Services (Pre-

ETS) is a program that helps students with disabilities explore careers, gain workplace experience, learn about post-secondary education options, and build self-advocacy skills to successfully transition from high school to further education or the workforce.

Employment discovery is often described as the first step of customized employment, a strengths-based form of employment for people with greater support needs, that meets employer needs through tailored job duties (e.g., Inge et al., 2023). In customized employment, qualitative, often narrative-based methods are used to help youth communicate strengths, preferences, and interests (Callahan, 2007), and may include interviews or focus-groups with youth, families, teachers, and others. A number of resources, ranging from training to implementation guides have been developed to facilitate these person-centered processes. While it is important to support youth with IDD in identifying their strengths and interests for future employment (Reisen et al., 2015), teachers and practitioners may be hard-pressed to find clearly delineated, research-based approaches to facilitate these processes.

Inclusive Participatory Research

Participatory research is one viable pathway for elevating individual experiences and perspectives. Participatory research is an overarching category that includes various research methods and has been well-described in the literature (Shogren & Dean, 2024); it can provide useful procedures for eliciting insights and reflections from youth with IDD (Ahlers et al., 2021; Kramer et al., 2019). At community levels, participatory research has engaged diverse stakeholders to contribute to planning and problem-solving to improve transition for youth with IDD (e.g., Carter et al., 2021).

Despite the advantages of participatory research, people with disabilities may face significant barriers to meaningful involvement in participatory research processes. People with

IDD are excluded from participatory research when attitudinal, social, and physical environments barriers are not addressed (Vaughan et al., 2020). Making participatory research inclusive is the responsibility of research teams and may require deliberate preparation and methodological flexibility. *Inclusive, participatory research* ensures greater accessibility, providing necessary support for invited participants to fully engage in the research process. This approach avoids "fixed formulas" for conducting research and maximizes investments in tools and strategies that make research participation accessible for those with IDD (Ollerton & Kelshaw, 2011).

Photovoice

The photovoice method is flexible enough to allow for procedural alterations to accommodate various topics and participant characteristics. Wang and Burris (1997) developed the method in the late 1990s with the explicit aim of bringing to the fore experiences of traditionally marginalized individuals. The photovoice method intentionally entrusts participants to portray their living conditions and daily existences through photographs and personal narrative. Amplifying lived experiences is used as a pathway to advocacy and improved outcomes.

Photovoice has the potential to become an inclusive and participatory method for people with IDD because photography can concretize thoughts, emotions, and concerns that may otherwise require abstract or descriptive vocabulary to accurately convey. Still, it is up to the researcher to adapt their photovoice methods to specific communities and participants to ensure photovoice is inclusive and participatory. For example, Krisson and colleagues (2022) adapted photovoice methods to better capture experiences of participants with limited or no verbal communication.

People with IDD began participating in photovoice research not long after its development when Booth and Booth used it with mothers with IDD in 2003. Since then, photovoice has been used with people with IDD to explore a host of topics and settings (e.g., health promotion, social inclusion, colleges, recreational environments, etc), including employment (Chinn & Balota, 2023).

Photovoice processes are as diverse as the topics and settings explored through this method. Increasing accessibility is an often-listed rationale for the broad variation in approaches to participant training, data collection tools, elicitation techniques, group configurations, and the uses of photographs after data collection (Chinn & Balota, 2023). The result, however, is that research teams have at their disposal a diverse record of photovoice adaptations and the conditions under which they were used. The challenge and responsibility for research teams is to draw upon this collective – albeit sometimes contradictory knowledge – to design photovoice projects that are both inclusive *and* participatory (Sitter, 2017).

Using Photovoice to Support Transition and Employment

Although numerous studies have included photovoice (e.g., Ollerton & Horsfall, 2013; Pallisera et al., 2016; van Heuman & Schippers, 2016; Williamson et al., 2020) and a range of studies have been conducted on employment preparation, training, and intervention (e.g., Lusk & Cook, 2009; Mamun et al., 2019), very few studies have spanned these topics. Akkerman and colleagues (2014) used photovoice to help people with IDD describe job satisfaction in sheltered and community employment. Employment is also described in other contexts during photovoice studies. For example, Indigenous youth with IDD, described the importance of community employment when using photovoice to capture elements of their health and well-being (Williamson et al., 2020). Given its relative successes across employment and other

environments, there are promising opportunities to apply photovoice methods for the purposes of career exploration, reflecting on work-based learning experiences, and communicating employment interests, preferences, and support needs.

Purpose of the Study

Early in career planning processes, youth with IDD need to communicate their strengths, preferences, interests, and support needs of which they are aware and can readily identify (Lusk & Cook, 2009). Using inclusive and participatory research methods like photovoice can be a helpful way for youth to identify and communicate who they are and how that relates to employment.

In this paper we present two photovoice studies, one conducted virtually with transition-age youth and another conducted in-person with youth with IDD in an Intensive Supports (IS) high school classroom. These studies were developed in tandem to address two primary research questions, one procedural and another outcomes-based.

1. Can employment-focused photovoice procedures be made inclusive across varying contexts and if so, are there necessary procedural adaptations for inclusion?
2. Is photovoice an effective tool for supporting youth with IDD to identify and communicate strengths, preferences, interests, and support needs for employment planning?

We intentionally designed this project to support the transition and employment outcomes of youth with IDD who identified as racially and/or ethnically minoritized, because racially and ethnically diverse youth often experience poorer transition outcomes than other groups (Acharya et al, 2017; Eilenberg et al, 2019). Additionally, the community in which this research is conducted serves many youth of color through its public school system and disability

support services. We chose photovoice as a method for career exploration because of the several reasons stated earlier in the introduction: 1) its flexibility to address various topics, 2) its use in samples of people with little or no verbal communication, and 3) its participatory nature in that youth can amplify their lived experiences and have control over the data they produce and share.

Methods

Study Context: Community Collaboration for Employment

The two studies presented were part of a larger Administration for Community Living Project of National Significance that was developed to collaborate with communities to improve employment outcomes. Community stakeholders – including persons with disabilities, family members, agencies, providers, schools, businesses and organizations – vetted and informed all aspects of the project. They shared ongoing feedback and insights through community conversations and an ongoing community collaborative for employment transition that provides guidance for the overall project. Although photovoice was recommended as a process for youth to contribute their perspectives to a larger community landscape analysis, it was adopted by a local school division for its potential to contribute to employment discovery and development among youth with IDD. All methods used to conduct the photovoice studies were approved by the Institutional Review Board at the authors' university.

Positionality

Our research team approached this work with the understanding that all youth with disabilities can and should participate in research that directly affects them. In choosing who to collaborate on these studies, we were intentional to include individuals with diverse perspectives, expertise, and lived experience with disability. Thus, our research team consists of scholars who identify as having a disability, as a parent of a child with IDD, and as Intensive Supports mentor

teachers with extensive experience working with youth with disabilities. Together, we engaged in we created a research experience designed with and for the communities we served. As a result, the studies presented differ based on the needs and strengths of each study population.

Settings and Participants

We outline the methodologies of Study 1 and Study 2 to demonstrate similarities and differences in our approaches to implementing an inclusive photovoice project in different contexts. Table 1 provides an overview of each study's methods.

Table 1

Study 1 and Study 2 Methodologies

Methodology	Study 1	Study 2
Context		
Setting	• Virtual via Zoom • Partnered with a Center for Independent Living	• In-person • Intensive Supports (IS) High School classroom
Participants	• 5 youth • 14-22 years old • 4 identified as Black/African-American, 1 as Hispanic/Latina • 2 females, 3 males	• 8 youth • 14-20 years old • 6 identified as Black/African-American, 2 as Hispanic/Latino • 2 females, 6 males
Facilitators	• 2 researchers • 1 community partner representative	• 2 researchers • 2 IS mentor teachers
Procedure		
Sessions	• 6 sessions • 1 hour each • 1 session per week	• 5 sessions • 1 hour each • 1 session per week
Materials	• PowerPoint slides to guide sessions • Transition-related self-reflection questions • SHOWeD model guided photovoice group discussions	• Self-awareness activities included: ○ Work environment preferences ○ Learning tool preferences ○ Career tools scavenger hunt ○ Work skills rubric

		○ WBL communication board ○ Job training site matches ● SHOWeD model guided photovoice group discussions
Inclusive Elements	● Live ASL Interpreter ● Live captioning via Zoom ● Session presentations included words and illustrations ● Community facilitator present for all sessions ● Research team included a cultural broker ● Youth collected all photo data	● Classroom teacher and student aids present at all sessions ● Research team included a cultural broker ● Used Unique™ Learning System to create assessments and communication boards with visual illustrations paired with written words ● Provided camera straps and alternative photography methods ● Scripts for community interactions (consent for photo taking) ● Youth collected all photo data ● Youth disseminated research at community gallery
Analysis	● Thematic analysis of photos and group discussions	● Content analysis of session materials, photos, and group discussions

Study 1

In Study 1, youth with IDD participated virtually through Zoom and were recruited through a partner at a local Center for Independent Living (CIL). This CIL offered services and training for people with IDD and they specifically offer a transition services program for youth. Participants' demographic information is included in Table 1. All youth were compensated at more than three times the state's minimum hourly wage for their participation in these studies.

We recruited youth through the CIL, as they were community partners of the larger aforementioned community-engaged project. Specifically, we collaborated with one staff member at the CIL (the same staff member that served as a facilitator for all virtual photovoice sessions) to share information with youth and their families about the research study. The staff member then scheduled an information session with interested youth and at least one family member, which served as the first photovoice session and consent discussion for parents/guardians.

Study 2

In Study 2, we partnered with a local, public school division to conduct this study in-person in an "intensive supports" (IS) high school classroom. Intensive Support (IS) encompasses programs designed for students served under a category that has a lower incidence rate of identification. Due to the nature of the disability, these students require significant support to access their social and learning environment. All 15 students in the classroom received instruction on photovoice and took part in photovoice activities, and eight students aged 14 to 20 consented to participate in the research study (See Table 1 for all demographic information). Youth were compensated above minimum wage for their participation in the research study.

Recruitment processes for Study 2 differed from Study 1 due to the needs of the school division. Our research team collaborated with the high school's principal, Intensive Supports administrators, Intensive Supports mentor teachers, and the classroom teacher to coordinate recruitment. The classroom teacher discussed the photovoice study with students in the classroom and sent an email and physical mail containing a flyer about the study home to students' families. Interested students and families then returned a fillable electronic form to the

research team stating their interest. Finally, we sent consent documents to families who returned the electronic form.

Both studies targeted the needs of racially and ethnically minoritized youth with disabilities. In Study 1, the CIL serves youth within several regions in the state; however, we recruited specifically from one urban region to ensure our research met the needs of the community (the same region participants resided within in Study 2). In Study 2, the public high school attended by participants serves roughly 54% Black students and 37% Hispanic students (VDOE, 2024). The youth samples in both studies thus reflect the demographic profiles of our community partners, as all participants identified as Black/African-American or Hispanic/Latinx. Participants in both studies also represented similar age ranges (early high school to young adulthood).

Procedure

Study 1

In Study 1, youth participated in six one-hour sessions, once a week over several weeks. The first session included time for researchers to inform the CIL, youth, and their families about the project, undergo consent discussions, and attain consent and assent for youth to participate in photovoice. A community partner representative was present at each session which promoted comfort among participating youth and built trust between youth and researchers. Each session began with asking youth for their consent and/or assent to participate. This was followed by an exploratory question for participants surrounding transition and employment for the purpose of self-reflection and to practice communicating with others. These exploratory employment questions included:

1) If you could have any job in the world, what would it be and why?

2) What is your biggest strength or what are you really good at?

3) Who is your biggest supporter or who is always there to help you?

4) What do you want your job environment to look like? With people or by yourself? Online or in-person? Loud or quiet? Clean or dirty?

Questions were developed to be asset-based, meaning youth were prompted to reflect on their goals, strengths, and who might help them reach their goals.

After the first session, the following three sessions centered around training youth on how research is conducted, how to take good photos, how to tell their stories through photos, how to take photos respectfully, and how to describe their photos to others. For example, to instruct youth on how to be respectful when taking photos of others, we presented youth with multiple photos of people and things and asked them "Would you need to ask anyone permission to take this picture?".

During the final two sessions, the youth selected photos to present to the group and took turns discussing their photos. We used the SHOWeD model to guide youth's discussions about their photos (Wang, 1999). The SHOWeD method guides participants' conversations to discuss not only what they photographed, but how that photo made them feel and how their perspective may relate to broader employment preferences, goals, and needs. More specifically, the SHOWeD method uses these questions to stimulate discussions around photographs: What do you See here? What is really Happening here? How does this relate to Our lives? Why does this concern, situation, or strength exist? And what can we Do about it? In these group discussion sessions, youth were instructed to share photographs that answered the question, "What are your employment goals?" at the first discussion session and that answered the question, "What are your employment barriers?" at the second session.

To ensure we met the needs of youth participants, we embedded several inclusive elements into study procedures and materials (see Table 1 for a list of elements). For example, an ASL interpreter attended all sessions for youth who were Deaf or Hard of Hearing. Session presentations also included both words and illustrations for better understanding of photovoice lessons and improved communication tools for youth. To account for the sociocultural backgrounds of youth, our session facilitator from the CIL contributed helpful information regarding the youths' employment experiences, employment opportunities in their community, connections to their educational backgrounds, and more. Thus, we were able to shape some of the photovoice training sessions and group discussions to youths' interests and experiences. Finally, our project team employed a cultural broker who was fluent in Spanish to communicate with and connect to youth and their families when needed. Our cultural broker primarily aided in translating research materials and helping families understand consent procedures.

Study 2

Youth participated in five photovoice sessions in their high school IS classroom. Sessions were facilitated by two researchers, the classroom teacher, and two IS mentor teachers who were trained in the photovoice methodology. Researchers and teachers worked together to adapt Study 1's photovoice materials to meet the needs of youth in Study 2. The Study 2 session sequence was similar to that of Study 1; the first three sessions involved training youth on photovoice and the last two sessions involved group discussions of youths' photos. However, unlike Study 1, youth in Study 2 had opportunities to participate in work-based learning experiences at various job sites; students took pictures to document aspects of these experiences that informed their career goals.

Participants' role in choosing how to present the study's results represents a critical aspect of photovoice and of participatory research more generally (Williamson et al., 2020). Therefore, youth elected to hold an in-school installation/gallery of their work. Invitees included family members, school administrators, community members, as well as division- and state-level transition leaders. During the event, students interacted with those who attended and shared their photos as well as their employment goals, preferences, and needs.

Activities and Self-Assessments. Before youth participated in work-based learning activities and took photos at each site, part of their photovoice training included self-assessments and exploration activities designed to help them communicate their thoughts, identify preferences, and make meaning of the photos they took. The IS mentor teachers designed learning materials, communication boards, and activities using visuals and modifications that met the support needs of all participating youth. First, the researchers and mentor teachers guided youth through a photography activity where they chose photos of careers that did or did not interest them. From there, each student identified the career clusters they were most interested in exploring. Additional activities included a career tools scavenger hunt with illustrated and written cues, work environment and learning tool preferences assessments, and a work skills rubric. Often, the contents of the activities served as communication boards that students could go back to when describing their photos and work-based learning experiences. Figure 1 depicts the learning tool preferences assessment as an example of such activities.

As in Study 1, our research team, including the Intensive Supports Mentor Teachers, developed several inclusive tools for students (See Table 1 for a list of all inclusive elements). One of the most helpful tools was Unique™ Learning System (ULS; (https://www.n2y.com/unique-learning-system/) developed to modify and individualized

materials for students with disabilities. The mentor teachers created employment assessments and career exploration activities using ULS's resources (see Figure 1 for an example of an assessment made with ULS). Importantly, these materials also functioned as communication boards for students to use during photovoice sessions and while communicating in group discussions about their photos.

These employment assessments and activities helped us integrate students' sociocultural backgrounds into not only our photovoice sessions, but also into planning work-based learning experiences that aligned with the interests and experiences of students. For example, our team was able to customize a photovoice training activity by assessing youths' career cluster interests and incorporating photos of those careers into an activity where students had to describe the qualities of specific workplace environments. Lastly, we employed the same cultural broker as in Study 1 to meet the needs of our youth and families.

Analysis

Study 1

Data sources included group discussion dialogue from the final two photovoice sessions and the photographs that youth shared in these discussions. The first step of analysis began during group discussions with youth about their photographs; during these discussions, youth served as the first analysts of their own photos by ascribing meaning to their photos and connecting them to their career interests and experiences. During this process, both researchers who implemented the photovoice study took detailed notes of youth responses. One researcher then inductively coded group discussion transcripts (Saldaña, 2011). Following this initial coding, the researcher clustered these codes based on interrelationships between code patterns. For example, codes such as "lack of transportation" were clustered into a code group labeled

"employment barriers." Finally, the two researchers that implemented photovoice with youth used thematic analysis to identify meaningful patterns or themes across codes and code groups (Braun & Clarke, 2012).

Study 2

Due to the varying support needs of youth in Study 2, we adapted our approach to analyzing student photos and narratives. Many students communicated nonverbally, and as such, several participants had limited transcript segments from group discussions to code. We conducted a comparative descriptive analysis (Saldaña, 2011) of student photos, group discussions, and other materials that students used to communicate their thoughts (e.g. worksheets developed by IS mentor teachers, described above). Descriptive analysis is particularly useful when analyzing several types of qualitative data, which is the case in this study (Saldaña, 2011). The same researchers that analyzed data in Study 1 also analyzed Study 2 data. As in Study 1, analysis of student photos began during group discussion sessions as youth gave meaning to the photos they chose to share with researchers, teachers, and peers. The two researchers then gathered youth photos, group discussion quotes, and Unique™ career exploration materials students completed during photovoice sessions (see Figure 1 for an example of a ULS career assessment activity). Similar to the analysis approach used by Krisson and colleagues (2022), we conducted a within-case analysis of each participant to inductively code for their career interests, barriers, preferences, experiences, and skills across data sources. Finally, we engaged in a similar process of thematic analysis as in Study 1 (Braun & Clarke, 2012) to develop meaningful themes across participants.

Results across studies do not simply restate themes found within each study independently, but rather describe common youth outcomes we found in both groups. To

integrate study findings, the project team, including researchers, photovoice facilitators, mentor teachers, and other project team members reviewed themes generated from both studies and discussed connections between study outcomes.

Results

Our analysis of this data resulted in three broader themes: 1) Discovery and diversity of employment interests; 2) Identifying employment preferences; and 3) Preparing for employment. Binding the themes is student self-reflection and self-awareness. Formulating employment goals, preferences and plans each required youth to consult with more crystallized identities while actively responding to work-based learning experiences–they were challenged to sync what they knew about themselves with what they learned about themselves during their process of career discovery and exploration. Aliases are used to conceal the identities of all participants.

Theme 1: Discovery and Diversity of Employment Interests

In both photovoice studies, youth exhibited various interests across diverse career clusters or fields, career goals, and general workplace environments. In Study 1, youth discussed their intentions of entering careers in science, entrepreneurship, beauty and esthetics, and manufacturing. Similarly in Study 2, career interests spanned the fields of landscaping, manufacturing and materials handling, visual arts, culinary arts, clerical work, and transportation. Through their pictures, students captured various tools, settings and roles that represented their interests and preferences in and for work environments. During an agricultural work-based learning experience, youth in Study 2 generally took pictures of tractors, gardens, animals, office supplies and more capturing their distinct interests. For example, Aaron previously communicated his interest in art; when he went to see the farm, Aaron took a special interest in photographing the flowers “Cause the flowers are colors.” Meanwhile, Isaiah was interested in

pursuing culinary arts; at the agricultural site depicted in Figure 2, he chose to take photos of the food grown on the farm. Thus, each youth took something different away from each work-based learning experience as we saw through the lens of their cameras.

Importantly, the photovoice process aided in youths' discovery and expansion of their own interests. Especially when photovoice was paired with work-based learning experiences outside of the classroom (as in Study 2), youth could explore various tools, settings, and skill sets that they may not have considered beforehand. For example, Christian (whose photograph is depicted in Figure 2), knew he liked working outside, but after visiting a farm during a work-based learning experience, he communicated that he enjoyed farming because "I'm growing, I'm growing plenty, plenty of food."

Theme 2: Identifying Employment Preferences

Beyond the identification of employment goals, photovoice also helped youth to communicate with greater specificity their preferences within work environments in terms of location (indoor vs. outdoor), coworkers, cleanliness, and noise level. The alignment between these preferences and workplace environments can be crucial for youth to maintain a position in the job of their choice and find meaning in their work. For example, in Study 2, 3 out of 8 youth preferred to work in a clean environment, 6 out of 8 preferred working with others, and 2 out of 8 preferred working with their hands. During initial Study 2 sessions, Aaron communicated that he wanted a career in art (Aaron's photo is presented in Figure 3). His preferred workplace environment aligned with his career goal. He wished to work in a colorful, clean space and to work with friends. He also stated that one accommodation he needed in his job was to work with a coworker, which corresponded with his desire to work with friends.

Mateo (Study 2) expressed an interest in manufacturing, specifically in a packaging position. His workplace preferences included a loud work environment, standing while working, and working directly with a few other people. Such alignment between goals and specific preferences helped youth to envision what working would look like in different environments and ensure that their employment goals were a reflection of their personalities and preferences.

Lastly, youth communicated motivations and feelings derived from specific work environments that, while intangible, were elements they considered crucial aspects of their work decisions. For example, Rachel, who participated in Study 1, shared that she had a work opportunity in a daycare and that she had a goal of opening her own childcare business one day (Rachel's related photo is depicted in Figure 4). When asked why her job has been so enjoyable, Rachel replied, "It's really not… work. This really is, you know, I love these, these kids, they like know my name. It's like every morning they be like, [Rachel's] here, [Rachel's] here. And they give me all hugs and kisses. I just like, oh, that just touched my heart." Not only did Rachel's explanation help us to understand her career goals, but it also helped Rachel to realize that the primary reason she enjoyed her job was because of the affection, sense of importance, and bonds that she formed with young children.

As another example, Aleah (Study 2) stated that she wanted to work independently because, "I really wanna learn how to be comfortable and not like, depend on somebody." For Aleah, preferences were driven by a strong motivation to fade support and complete tasks on her own. Understanding the "why" behind her employment preferences helped develop another transition goal: becoming a more independent student and employee.

Theme 3: Preparing for Employment

In order for career exploration to be effective, it must include elements of preparation for actual employment. Through photovoice, youth in these studies leveraged their self-awareness to consider pathways for attaining their employment goals. A key feature of planning was communicating their awareness of what types and intensity of supports would be required to fully participate and succeed in work environments. Through their photovoice experiences, youth showed an understanding of their support needs and learning strategies that were most effective for them individually. This information helped students formulate action steps for obtaining a job in their desired field.

In Study 1, when discussing their photos, youth identified work skills necessary to reach their career goals and then discussed personal barriers to gaining those skills. Stefon, for example, aimed for a career in meteorology. When asked what skills he needed to be successful in that career, he elaborated, “Math skills would be good… Eye contact skills is good… communication skills are good too.” The discussion facilitator then asked what makes it difficult for Stefon to gain those work skills and he responded, “Math is hardest, hardest subject to do.” Stefon decided that he needed more education in math and science to reach his goal of working in meteorology.

Also in Study 1, Rachel described that the biggest barrier to opening her own daycare business was her struggles in math. She explained, “But sometimes if my, um, my boss asks me, can you count this for me please? And can you count that for me? And it's kind of get really hard.” She then discussed strategies and tools for improving her math skills and overcoming her frustration around learning these skills, “Um, just take a deep breath, take a deep breath, you know, and try to do it. And if I did it right and if I did it wrong, but you know, my dad be helping it, helping me too also with, you know, count money and whatever.” Here, Rachel identified

emotion regulation strategies and she identified a person she could turn to for help, both of which are clear pathways to obtaining her employment goal.

In our descriptive analysis of students' communication materials in Study 2, we found evidence of self-awareness in participants' work skills rubrics and self-assessments of learning preferences. Specifically, students communicated – verbally, in writing, or in written marks – that they needed someone to model tasks for them, a checklist or chart for tasks with pictures and words, a visual schedule, and a mentor to work alongside them in order to be successful in their job (see Figure 1 for an example of the learning tool preferences self-assessment). At the end of the photovoice project, youth connected their employment goals to their required accommodations and preferred learning supports, which illustrated a clear pathway to self-advocacy in future employment. Devon, for example, identified an interest in materials handling and manufacturing and he stated that to be successful in that job, he learned best by watching someone model a task before trying it himself. Self-awareness promotes self-advocacy, which is a key component in obtaining and maintaining employment (Sinclair et al., 2023).

Discussion

Participatory research invites community members to use their insights and experiences to address issues affecting their lives, but barriers to engagement exclude many people with IDD from the process. Accommodations for communication, processing, memory, or other common barriers to research participation can create research that is participatory and inclusive. Inclusive, participatory research, in this study, was shown to be a viable process for supporting youth with IDD to engage in critical steps of employment planning: exploring, reflecting on, and communicating employment-based interests, preferences and support needs. The study

highlighted how to make participatory research inclusive for people with IDD and how an inclusive, photovoice process can facilitate career exploration and planning.

Making Photovoice Procedures Inclusive

Community partnerships strengthen research procedures and improve the experiences of participants. Typically partners, beyond the participants with IDD in photovoice studies, provide direct support. Chinn and Balota (2023) describe support staff and family members assisting participants with photography or triangulating accounts of lived experiences (e.g. Rinaldi, 2021; St. John et al., 2021). However, partners' indirect support also contributed to inclusive youth participation in photovoice. For example, community and school partners supported with logistics, communicating when youth were available to attend sessions, how often sessions should be held, and the suggested duration of each session. They also knew how to contact youth and their families if they forgot about a session or had technology issues. As a result, the majority of participants attended every photovoice session and we retained all youth participants throughout data collection and analysis. We also asked our community partners what tools would make youth most successful. Partners notified us of necessary and recommended accommodations needed for youth participation, including ASL interpreter services for our online sessions and live captioning through Zoom.

In Study 2, school professionals supported study facilitation by supplying students with clipboards and camera bags to help them carry and use supplies at work-based learning sites. They also offered extensive expertise in teaching youth with disabilities, particularly students with the most significant support needs. IS mentor teachers created vocabulary cards, communication boards, and adapted reflection documents using ULS. These tools were particularly useful for students requiring visual prompts for processing and communicating.

In our studies, youth with IDD enjoyed using cameras to collect data. The novelty of photovoice processes was motivating and offered them a new way to demonstrate what they know about themselves as employees. Youth always chose what to take photos of and which photos to share with others which was important because inclusive photovoice research requires participant leadership and choice (Wang, 2006; Wang & Burris, 1997).

In Study 2, students curated photos for a gallery installation that communicated their employment interests and support needs to families and community stakeholders. Engagement in dissemination is an important step in participatory research (Williamson et al., 2020) and serves as another way to build self-advocacy, communication, and networking skills. Youths' autonomy in photovoice processes supports the development of self-advocacy skills, especially as they relate to transition and employment (Doren & Kang, 2016).

The photovoice method can be successfully implemented under various conditions and with diverse populations. However, the research teams must take care to adapt methods to meet participants' needs, but in our studies, building and maintaining community partnerships and emphasizing participant leadership further contributed to inclusive processes for career exploration and discovery

Youth Discovery and Exploration Outcomes

Participants' interests and goals were not limited by their disabilities but were, alternatively, informed by their desires. Although it may be common for student transition and employment goals to reflect stereotypical career options based on one's gender or disability (Powers et al., 2005), the photovoice process supported students in capturing and communicating their distinct interests, without influence from proxies or other parties. Distinguishing these preferences allowed students to develop an emerging profile of career interests unique to them,

further distinguishing them from others. More exact career goals can improve the extent to which students are matched to appropriate rather than stereotypical employment opportunities.

Secondly, photovoice specifically led to better recall of transition and work-based learning experiences, which led to easier communication connecting those experiences to goals, preferences, and needs. Recall of these positive learning experiences also bolsters self-efficacy around employment (Usher & Pajares, 2008), meaning youth build confidence around their employment skills when they have evidence of successful employment experiences. Overall, it is important that the photovoice activities themselves provide training not just for photography, but for auto-biographical storytelling. A critical antecedent of communicating about oneself is self-exploration, and in this case, the participatory nature of photovoice provided an opportunity for career exploration coupled with youth-led storytelling.

Limitations

Due to the virtual setting of Study 1, it was difficult to train youth in the technical aspects of taking effective photographs. Researchers could not physically help youth adjust their grip on the camera, for example, which led to some confusion among youth. Specifically, some participants misunderstood that they needed to take the photos themselves and instead of sharing their own photographs, youth shared photos from the internet. In Study 2, which was conducted face-to-face in the classroom, researchers and educators could physically model how to hold a camera with two hands, which buttons to press to take a photo, and how to ensure that photos were well-lit. Researchers should prioritize practicing taking photos during photovoice sessions, even if conducting the study virtually, and be very explicit in their directions to participants that they should be the photographer behind the images they share.

In Study 2, one important limitation was that due to the regulations set by our school division, students were only allowed to take photos for the project during the school day or school-sponsored trips in the community. These rules prevented youth from capturing employment experiences, skills, and preferences outside of school sanctioned activities, such as volunteer experiences. Youth in Study 1 shared photos of where they worked outside of school and youth in Study 2 mostly sharing photos taken at their high school and/or local businesses they visited for work-based learning. Nonetheless, the flexibility of photovoice processes allowed youth to fully participate in both research studies while continuing to meet the needs of youth, their families, our community partners, and our own research team.

Implications for Inclusion

Photovoice offers the flexibility that is necessary to develop fully inclusive ways to support people from marginalized communities in sharing their opinions and perspectives to produce a desired change. Used in employment contexts in the home, school or community, photovoice can better connect youth with their own strengths, interests, preferences and support needs. Uncovering each person's interests, skills and passions is the cornerstone of the discovery process (Timmons et al., 2019). It is a step seen as crucial for connecting youth with employment, but widespread knowledge of discovery's importance has not equated to its widespread implementation (Inge et al., 2022). Implementation of discovery processes may be less frequent with those with greater support needs (Lyons et al., 2022). Photovoice offers a way to promote exploration and discovery for people with IDD who have a wide range of support needs.

Research Implications

Qualitative approaches have always been recommended for discovery (Callahan, 2007). What may be most common is an interview with youth, families, and other voices important to the referenced person. We have shown that photovoice offers an opportunity for youth with IDD to gain more control over their narrative and group conversation when presenting data that they produced and reflected upon. The importance of people with disabilities leading their own individualized education program (IEP) meetings, individualized support plan (ISP) meetings, and person-centered planning meetings (including transition planning) has been well documented (e.g., Author(s), 2021; Dean et al., 2021; Morningstar et al., 2010) and applies to the discovery process as well. After all, supporting students to know themselves better and to be strong self-advocates for what they need also predicts postsecondary success (Mazzoti et al., 2021)

Practitioner Implications

When implemented in combination with other predictors of post-secondary success, like work opportunities prior to graduation, photovoice also offers opportunities for teachers and students to track important employment-related data. As a positive outcome of this arts-based discovery process, youth capture employment experiences, including work-based learning, volunteerism, and chores at home, with their pictures. They can document the diversity of employment experiences and detail the opportunities and challenges that these experiences presented. By exploring a range of activities, students further understand their preferences (e.g., climate-controlled employment; independent vs collaborative tasks, etc.) as well as their own support needs (e.g., support with on-the-job tasks, communication, or transportation). Documenting these experiences through detailed visual records creates useful tools for youth as they prepare to talk with employers about their interests and prior experiences, but they are also

helpful for vocational rehabilitation counselors (VRC) and employment support specialists who look to connect youth with employment opportunities.

For teachers looking to help students with greater support needs transition into employment, Choiseul-Praslin and McConnel (2020) proposed a six-step model. The photovoice discovery process supports a minimum of three of those steps. First, the process supports students in sharing information that is valuable and necessary for VRC, employment service organizations, job coaches, and others who will assist with job placement and job support. This is important because community partners, such as employment support professionals, sometimes place greater emphasis on job seeking than getting to know the job seeker (Butterworth et al., 2023). Given other time constraints faced by community partners, (e.g., large caseloads), results from a photovoice discovery process can provide helpful information for job placement without the traditional investment of time or resources. Finally, VRCs will find that the photovoice discovery process – when coupled with work-based learning – supports some of the required primary activities of those enrolled in Pre-ETS such as job exploration, reflection on work-based learning experiences, and supporting students in communicating their interests and needs. Although photovoice would not supplant designated Pre-ETS services, the information it yields would further support information that would be gathered and used during the process.

Schutz and Carter's (2022) review of 42 employment intervention studies, which included over 22,000 youth with IDD, found that nearly 86% of the studies included individualized planning. This rate reiterates the importance of discovery processes when preparing for youth with IDD for employment. It also seems that there is great variability in the activities that can be classified as individualized planning or discovery. Photovoice is a youth-led process and a flexible methodology that supports career exploration by providing a thorough

pathway to gathering employment-related information about its participants. This information is useful to youth, teachers, VR counselors, and job support specialists and may include person-centered planning or one-on-one discussions between youth and case managers.

Policy Implications

Communities are eager for stronger collaboration between students, families, agencies, schools and other partners (Carter et al., 2021). Although collaboration is encouraged through WIOA and IDEA through required interagency agreements and coordinated planning, many collaboration principles are not implemented, including sharing resources such as data (Magee et al., 2022; Poirier et al., 2022). Information exchange is an important feature of collaboration. VR needs updated student data to support the development of meaningful and substantive individualized plans for employment (IPE). The role of the teacher in communicating with VR and exchanging data has been emphasized. With family and student permission, they may share information on academic performance, work readiness, assistive technology use in the classroom and even student interests. However, photovoice processes give students opportunities to collect and subsequently communicate their assessments of vocational experiences, including strengths, interests and support needs. Photovoice data can be used by students to lead their IEP meetings which, ideally, VR counselors should proactively seek to attend. Communication between teachers and VR counselors is still important for transition collaboration, but when students share experiences directly they directly inform employment assessments and plans while helping VR counselors get to know more about them as job seekers–an important step in attaining employment that is often overlooked (Butterworth et al, 2023; McKnight et al., 2022). Using photovoice for career discovery can assist in meeting research supported and policy endorsed collaboration during the transition from school to employment.

Conclusion

Inclusive and participatory photovoice processes can give youth opportunities for self-exploration and to frame narratives presenting them as individuals making decisions and offering skills. These studies give examples of how youth with IDD can generate the data to drive employment discussions with families, educators, and VR and to develop transition and employment plans framed by desired job and supports they require to obtain it. We encourage future researchers to implement photovoice to enhance career exploration and planning, but to document and subsequently describe practices used to make research processes accessible and inclusive for youth with IDD.

References

Acharya, K., Meza, R., & Msall, M. E. (2017). Disparities in life course outcomes for transition-aged youth with disabilities. *Pediatric Annals, 46*(10), e371–e376. https://doi.org/10.3928/19382359-20170918-01

Ahlers, K. P., Ayers, K. B., Iadarola, S., Hughes, R. B., Lee, H. S., & Williamson, H. J. (2021). Adapting participatory action research to include individuals with intellectual and developmental disabilities during the Covid-19 global pandemic. *Developmental Disabilities Netthiswork Journal, 1*(2), 22-31. https://doi.org/10.26077/ec55-409c

Akkerman, A., Janssen, C. G., Kef, S., & Meininger, H. P. (2014). Perspectives of employees with intellectual disabilities on themes relevant to their job satisfaction. An explorative study using photovoice. *Journal of Applied Research in Intellectual Disabilities, 27*(6), 542-554. https://doi.org/10.1111/jar.12092

Author(s). (2021).

Braun, V., & Clarke, V. (2012). Thematic analysis. In H. Cooper, P. M. Camic, D. L. Long, A. T. Panter, D. Rindskopf, & K. J. Sher (Eds.), *APA handbook of research methods in*

psychology, Vol. 2. Research designs: Quantitative, qualitative, neuropsychological, and biological (p. 57-71). American Psychological Association.

Butterworth, J., Migliore, A., Lyons, O., Mahoehney, D. C., Eastman, J., Miles, B., Foos, P., & Zalewska, A. (2023). Supporting employment consultants to implement supported and customized employment. *Intellectual and Developmental Disabilities, 61*(6), 468-480. https://doi.org/10.1352/1934-9556-61.6.468

Callahan, M. (2007). *Discovery is…. The job developer's handbook: Practical tactics for customized employment* [White paper]. Marc Gold & Associates. https://www.marcgold.com/s/Discovery-is-5-2019.pdf

Carter, E. W., Schutz, M. A., Gajjar, S. A., Maves, E. A., Bumble, J. L., & McMillan, E. D. (2021). Using community conversations to inform transition education in rural communities. *The Journal of Special Education, 55*(3), 131-142. https://doi.org/10.1177/0022466920950331

Chen, J. (2022). Digitally dispersed, remotely engaged: Interrogating participation in virtual photovoice. *Qualitative Research, 0*(0), 1-21. https://doi.org/10.1177/14687941221110175

Chinn, D., & Balota, B. (2023). A systematic review of photovoice research methods with people with intellectual disabilities. *Journal of Applied Research in Intellectual Disabilities, 36*, 725–738. https://doi.org/10.1111/jar.13106

Choiseul-Praslin, B., & McConnell, A. (2020). Increasing work skills for students with significant disabilities: A six-step model for transition worksite programs. *Career Development and Transition for Exceptional Individuals, 43*(3), 180-186. https://doi.org/10.1177/2165143419893363

Dean, E. E., Kirby, A. V., Hagiwara, M., Shogren, K. A., Ersan, D. T., & Brown, S. (2021). Family role in the development of self-determination for youth with intellectual and developmental disabilities: A scoping review. *Intellectual and developmental disabilities, 59*(4), 315-334. https://doi.org/10.1352/1934-9556-59.4.315

Doren, B., & Kang, H. J. (2016). Autonomy, self-realization, and self-advocacy and the school- and career-related adjustment of adolescent girls with disabilities. *Career Development and Transition for Exceptional Individuals, 39*(3), 132-143. https://doi.org/10.1177/2165143415574875

Eilenberg, J. S., Paff, M., Harrison, A. J., & Long, K. A. (2019). Disparities based on race, ethnicity, and socioeconomic status over the transition to adulthood among adolescents and young adults on the autism spectrum: A Systematic Review. *Current Psychiatry Reports, 21*(5). https://doi.org/10.1007/s11920-019-1016-1

Inge, K. J., Avellone, L., Wehman, P., Broda, M., & Joy, J. (2023). Effects of customized employment on the independence of youth with intellectual and developmental disabilities. *Intellectual and Developmental Disabilities, 61*(6), 481-491. https://doi.org/10.1352/1934-9556-61.6.481

Inge, K. J., Sima, A. P., Riesen, T., Wehman, P., & Brooks-Lane, N. (2022). The essential elements of customized employment: Results from a national survey of employment providers. *Rehabilitation Counseling Bulletin, 66*(3), 170-185. https://doi.org/10.1177/00343552221088256

Jurkowski, J. M. (2008). Photovoice as participatory action research tool for engaging people with intellectual disabilities in research and program development. *Intellectual and*

Developmental Disabilities, 46(1), 1-11. https://doi.org/10.1352/0047-6765(2008)46[1:PAPART]2.0.CO;2

Kramer, J. M., Schwartz, A. E., Watkins, D., Peace, M., Luterman, S., Barnhart, B., Bouma-Sims, J., Riley, J., Shouse, J., Maharaj, R., Robinson Rosenberg, C., Harvey, K., Huereña, J., Schmid, K., & Sladen Alexander, J. (2019). Improving research and practice: priorities for young adults with intellectual/developmental disabilities and mental health needs. *Journal Of Mental Health Research In Intellectual Disabilities, 12*(3-4), 97-125. https://doi.org/10.1080/19315864.2019.1636910

Krisson, E., Qureshi, M., & Head, A. (2022). Adapting photovoice to explore identity expression amongst people with intellectual disabilities who have limited or no verbal communication. *British Journal of Learning Disabilities, 50*(1), 41-51.

Lusk S. L., & Cook, D. (2009). Enhancing career exploration, decision making, and problem solving of adolescent girls with disabilities. *Journal of Vocatational Rehabilitation, 31*(3), 145–153. https://doi.org/10.3233/JVR-2009-0484

Lyons, O., Timmons, J., Hall, A., Enein-Donovan, L., & Kamau, E. (2022). The benefits of active, person-centered job placement: results from service providers undergoing organizational transformation away from sheltered employment. *Intellectual and Developmental Disabilities, 60*(3), 234-245. https://doi.org/10.1352/1934-9556-60.3.234

Magee, E. & Plotner, A. (2022) Examining barriers and strategies for effective professional or interagency collaboration in secondary transition. *Journal of Vocational Rehabilitation, 56*(1), 29 – 42. https://doi.org/10.3233/JVR-211170

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. https://www.mathematica.org/-/media/publications/pdfs/disability/2019/promise-interim-impact-report.pdf

McKnight, M., Scheef, A. R., Levine, A., Thomas, F., & Phillips, B. N. (2022). Secondary special educators' perceptions of transition collaboration with vocational rehabilitation. *Rehabilitation Counselors and Educators Journal, 11*(3). https://doi.org/10.52017/001c.38444

Mello, M. P., & Sanderson, K. (2021). Decision making during transition to adulthood. In I. Khemka, & L. Hickson (Eds.), *Decision making by individuals with intellectual and developmental disabilities: Integrating research into practice* (pp. 377-403). Springer International Publishing. https://doi.org/10.1007/978-3-030-74675-9_16

Migliore, A., Butterworth, J., Lyons, O., Nye-Lengerman, K., & Foos, P. (2018). Supporting employment consultants in their work with job seekers: A longitudinal study. *Journal of Vocational Rehabilitation, 49*(3), 273-286. http://doi.org/10.3233/JVR-180973

Morningstar, M. E., Frey, B. B., Noonan, P. M., Ng, J., Clavenna-Deane, B., Graves, P., Kellems, R., McCall, Z., Pearson, M., Bjorkman Wade, D., & Williams-Diehm, K. (2010). A preliminary investigation of the relationship of transition preparation and self-determination for students with disabilities in postsecondary educational settings. *Career Development for Exceptional Individuals, 33*(2), 80-94. https://doi.org/10.1177/0885728809356568

Ollerton, J., & Kelshaw, C. (2011). Inclusive participatory action research: Rights, camera, action! In J. Higgs, A. Titchen, D. Horsfall, & D. Bridges (Eds.), Creative *spaces for qualitative researching: living research* (pp. 267-278). Brill.

Ollerton, J., & Horsfall, D. (2013). Rights to research: Utilising the convention on the rights of persons with disabilities as an inclusive participatory action research tool. *Disability & Society, 28*(5), 616–630. https://doi.org/10.1080/09687599.2012.717881

Pallisera, M., Fullana, J., Puyaltó, C., & Vilà, M. (2016). Changes and challenges in the transition to adulthood: Views and experiences of young people with learning disabilities and their families. *European Journal of Special Needs Education, 31*(3), 391-406. https://doi.org/10.1080/08856257.2016.1163014

Plotner, A. J., Mazzotti, V. L., Rose, C. A., & Teasley, K. (2020). Perception of interagency collaboration: Relationships between secondary transition roles, communication, and collaboration. *Remedial & Special Education, 41*(1), 28–39. https://doi.org/10.1177/0741932518778029

Poirier, S. È., St-Pierre, M. C., Julien-Gauthier, F., Flamand, V., Martin-Roy, S., & Desmarais, C. (2020). Inter-Agency collaboration in the transition from school to adulthood of students with disabilities: A narrative review of the literature. *International Journal of Disability, Development and Education, 69*(4), 1249–1256. https://doi.org/10.1080/1034912X.2020.1779915

Powers, K. M., Gil-Kashiwabara, E., Geenen, S. J., Powers, L. E., Balandran, J., & Palmer, C. (2005). Mandates and effective transition planning practices reflected in IEPs. *Career Development for Exceptional Individuals, 28*(1), 47-59. https://doi.org/10.1177/08857288050280010701

Rinaldi, J. (2021). What survivors see: Creative condemnations of total institutionalization. *Emotion, Space and Society, 40*. https://doi.org/10.1016/j.emospa.2021.100819

Saldaña, J. (2011). *Fundamentals of qualitative research*. Oxford University Press.

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

Shogren, K. A., & Dean, E. E. (Eds.). (2024). Centering the voices of people with intellectual and developmental disabilities in the process and outcomes of science [Special Issue]. *Inclusion, 12*(1).

Sinclair, J., Gilson, C. B., & Dulas, H. (2023). "I'm going to be a working person": Self-determination in employment settings for adults with intellectual and developmental disabilities. *Career Development and Transition for Exceptional Individuals*. https://doi.org/10.1177/21651434231186136

Sitter, K. C. (2017). Taking a closer look at photovoice as a participatory action research method. *Journal of Progressive Human Services, 28*(1), 36-48. https://doi.org/10.1080/10428232.2017.1249243

Sosnowy, C., Silverman, C., & Shattuck, P. (2018). Parents' and young adults' perspectives on transition outcomes for young adults with autism. *Autism: The International Journal Of Research And Practice, 22*(1), 29–39. https://doi.org/10.1177/1362361317699585

St. John, B., Gray, M., Malzacher, A., Hladik, L., Lurie, S., & Ausderau, K. (2021). Using photovoice with people with intellectual disability to illuminate definitions of health and factors influencing participation in health promotion. *Journal of Applied Research in Intellectual Disabilities, 34*(3), 866–876. https://doi.org/10.1111/jar.12868

Timmons, J. C., Kamau, E., Lyons, O., & Enein-Donovan, L. (2019). Provider strategies on ten elements of organizational transformation. *Journal of Vocational Rehabilitation, 50*, 307–316. https://doi.org/10.3233/JVR-191012

Usher, E. L., & Pajares, F. (2008). Sources of self-efficacy in school: Critical review of the literature and future directions. Review of Educational Research, 78(4), 751-796. https://doi.org/10.3102/0034654308321456

Uyanik, H., Shogren, K. A., & Blanck, P. (2017). Supported decision-making: Implications from positive psychology for assessment and intervention in rehabilitation and employment. *Journal of Occupational Rehabilitation, 27*, 498-506. https://doi.org/10.1007/s10926-017-9740-z

van Heumen, L., & Schippers, A. (2016). Quality of life for young adults with intellectual disability following individualised support: Individual and family responses. *Journal of Intellectual & Developmental Disability, 41*(4), 299-310. https://doi.org/10.3109/13668250.2016.1213797

Vaughan, C., Gill-Atkinson, L., Devine, A., Zayas, J., Ignacio, R., Garcia, J., Bisda, K., Salgado, J., & Marco, M. J. (2020). Enabling action: Reflections upon inclusive participatory research on health with women with disabilities in the Philippines. *American journal of community psychology, 66*(3-4), 370–380. https://doi.org/10.1002/ajcp.12468

Wang, C., & Burris, M. A. (1997). Photovoice: Concept, methodology, and use for participatory needs assessment. *Health Education & Behavior, 24*(3), 369–387. https://doi.org/10.1177/109019819702400309

Wang, C. C. (2006). Youth participation in photovoice as a strategy for community change. *Journal of Community Practice, 14*(1-2), 147-161. https://doi.org/10.1300/J125v14n01_09

Wang, C. C. (1999). Photovoice: A participatory action research strategy applied to women's health. *Journal of Women's Health, 8*(2), 185-192.

Wehman, P., Brooke, V., & Taylor, J. (2020). Introduction to transition planning. In P. Wehman (Ed.), *Essentials of transition planning* (pp. 1-22). Paul H. Brookes Publishing Co.

Williamson, H. J., van Heumen, L., & Schwartz, A. E. (2020). Photovoice with individuals with intellectual and/or developmental disabilities: Lessons learned from inclusive research efforts. *A Journal of Community-Based Research and Practice, 3*(1), 1-12. https://doi.org/10.33596/coll.45

Figure 1

Section of Self-Assessment of Learning Tool Preferences

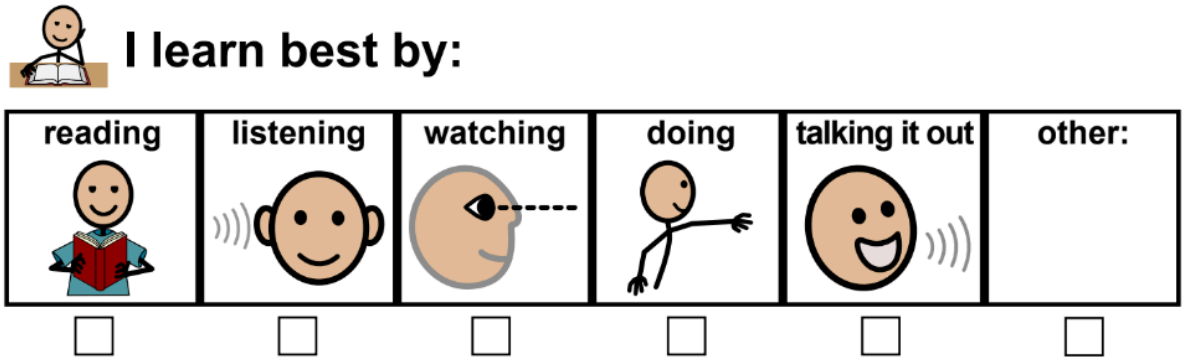

Figure 2

Christian's Photograph Depicting His Career Interest in Farming

Note. Christian participated in Study 2.

Figure 3

Aaron's Photograph Depicting His Career Interest in Art

Note. Aaron participated in Study 2.

Figure 4

Rachel's Photograph Depicting Her Employment Experience and Goals

Note. Rachel participated in Study 1.