

Summer 2026 Back-to-School Issue



Visual Impairment and Deafblind Education Quarterly

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The Voice and Vision of Special Education



Cover photo description: The cover photo is a group photo of three students in a summer program hugging each other and smiling as they finish out the last day of their program.

Photo submitted by: Melanie Zehnder

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Hard of Hearing*



In Memoriam

Dr. Martha Cay Holbrook

1955-2026



Message from the Editor

Kathleen M. Farrand

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Happy end of summer. A new school year has begun and many of us look for inspiration to support and engage with those that we teach and the communities that we serve. This issue provides a variety of articles aimed to inspire you and provide you with strategies for supporting individuals with low vision, blindness, and deafblindness.

The issue begins with a research article by Drs. Jennifer L. Cmar, Stephanie Welch-Grenier, and Matthew J. Smith about supporting interview preparation for

students who are blind or have low vision. The authors share key findings and detailed information about their interview instruction framework. The second article by Melanie Zehnder, provides insight about how a summer residential transition program was developed and continues to support high school students with vision impairments in Arizona.

The third article continues the conversation that was featured in the Fall 2025 special issue on physical activity for individuals with visual impairment or deafblindness by Drs. Laruen J. Lieberman and Pam Beach. In this article, Dr. Elizabeth A Foster examines evidence-based practices for physical activities and sport for students with deafblindness. Next, authors Ellie Bell, Mary Finnerty, and Katie Stuepfert provide suggestions for administration about establishing interdisciplinary collaboration from their experiences in the LIMITLESS graduate program at Illinois State University.

Dr. Adam Graves shares the history and sustained impact of the San Francisco State University Program in Visual Impairment. The final article is a doctoral candidate feature article by Bradley J. Czaplewski. This touching article shares the legacy of his son, Bradley, and the author's lived experience and research in parental self-efficacy.

I encourage you to set aside some time in your week to read this amazing collection of articles to jumpstart your school year and remind you of the great

work and individuals in the field of visual impairment and deafblindness. I also highly recommend the current issue of [*TEACHING Exceptional Children*](#), volume 58, issue 6, August 2026, co-guest edited by Dr. Nicole Johnson and I that provides an amazing collection of articles on visual impairments and deafblindness by leaders in our field.

It is never too early to register to attend the CEC 2027 Convention & EXPO. In Columbus, Ohio. Please check out the following website for information about registration, hotel information, and the schedule at a glance.

<https://ceconvention.org>





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President's Message

Beth A. Jones,

Professor, East Texas A&M University

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As everyone is gearing up for another school year, I want to take this opportunity to thank you for what you do daily to impact the lives of students with visual impairments or deafblindness. Please know that the direct instruction, consultation, and advocacy you engage in is appreciated and makes a difference.

Also, thank you for a very successful webinar this past June with Dr. Lacey Long taking a deeper dive into Usher Syndrome. Please plan to attend our upcoming fall webinars. Remember, these webinars do count for ACVREP credit.

Please check our DVIDB FB page for updates as we have them available, but the information we do have is listed below:

1. ASD and VI: September: date and time TBD, Presenter: Dr. Saurym Quezada
2. AI: Tuesday, November 17, 4:30 ET, Presenter: Kristin Grender

For future planning, please mark your calendars for the Council for Exceptional Children Conference in Ohio March 10-13, 2027. As usual, we will host a virtual Preconference in partnership with American Printing House for the Blind (APH) prior to the in-person conference. Stay tuned for more details on our Precon!

WADDLING INTO GETTING IN TOUCH WITH LITERACY & ART



SAVE THE DATE
December 5 to 10, 2027
Long Beach, CA

Interview Preparation for Students who are Blind or Have Low Vision: Takeaways from Virtual Interview Training Research

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Effective interviewing requires a complex set of skills that are not always explicitly taught. For example, interviewing involves verbal and nonverbal communication, self-presentation, and professional etiquette, as well as additional considerations for people with disabilities (e.g., disclosure). Students who are blind or have low vision (B/LV) may not learn many of these skills through casual visual observation (i.e., incidental learning), making direct instruction and experience essential (Hatlen, 1996). Opportunities for students to practice interviewing

through traditional approaches (e.g., mock interviews) may be limited in schools and transition programs due to personnel or time constraints. Technology-based tools, such as virtual interview training, can complement traditional instruction by offering self-paced learning, repeated practice, objective feedback, and space to make mistakes without real-world consequences. In this article, we share key findings and insights from a research project and explore how virtual interview training fits into interview preparation for students who are B/LV.

Project Overview and Key Findings

Despite the importance of interview instruction for students who are B/LV, we did not identify any evidence-based interview interventions for this population. Prior studies supported the effectiveness of virtual interview training for other populations, including students with disabilities (Smith et al., 2021, 2024); however, it had not been tested with students who are B/LV. To address this gap, the National Research and Training Center on Blindness and Low Vision conducted a 5-year research project, funded by the National Institute on Disability, Independent Living, and Rehabilitation Research. The project had three phases: adapting a virtual interview training program (i.e., Virtual Interview Training for Transition-Age Youth [VIT-TAY]) for students who are B/LV, assessing its usability, and examining its effectiveness in a randomized controlled trial (RCT). This article synthesizes key project findings, presents new data on student

perspectives, and provides an evidence-informed framework for incorporating virtual interview training into practice.

Virtual Interview Training for Transition-Age Youth

Originally developed in partnership with and for transition-age youth with autism (Smith et al., 2020), VIT-TAY is an internet-based job interview simulator that provides a safe space to repeatedly practice job interview skills with a virtual hiring manager. Our team leveraged community-engaged methods to adapt VIT-TAY for youth who are B/LV; we integrated stakeholder input to improve VIT-TAY's content relevance, usability, and accessibility. The program includes brief e-learning modules on interview basics, a job application, and repeated virtual interviews with scaffolded difficulty levels, along with automated feedback, transcripts, and performance scores to support learning and reflection. Although VIT-TAY is one example of a virtual simulation-based intervention, the broader takeaways and implementation implications may apply to other technology-based employment preparation tools.

Usability and Effectiveness

Results from our usability study suggested that the VIT-TAY experience was positive, with above-average usability (Steverson et al., 2025). Participants also reported it was useful, realistic, accessible, and easy to use, with all participants recommending VIT-TAY to their peers and 90% stating that they

would use or consider using it in the future. Meanwhile, our RCT comparing services as usual (SAU) plus VIT-TAY to SAU-only found that VIT-TAY significantly improved participants' job interview skills, as measured via role-play assessment (Cmar et al., in press). However, the SAU+VIT-TAY group did not differ from the SAU-only group in self-reported interview self-efficacy or anxiety and did not obtain competitive jobs more frequently (15% vs. 11%). Notably, SAU+VIT-TAY group members who used a screen reader to access the computer demonstrated larger improvements in their interview skills as compared to those who used visual methods.

Student Perspectives

Twenty-six students, ages 15–26 years ($M = 19.23$, $SD = 3.10$), shared their perspectives on VIT-TAY through acceptability surveys during the RCT. Most were female ($n = 14$, 54%) and Hispanic ($n = 14$, 54%); 50% ($n = 13$) were white, 69% ($n = 18$) had low vision or some functional vision, 31% ($n = 8$) were blind or had minimal functional vision, and 35% ($n = 9$) had other disabilities or chronic health conditions. The surveys were administered at posttest (i.e., after the VIT-TAY intervention) and 6-month follow-up via Qualtrics and included multiple items rated on a 5-point scale (1 = *not at all true*, 5 = *very true*). Table 1 contains the items and corresponding descriptive statistics, with average ratings ranging from 3.28 to 3.96. The results support the acceptability of VIT-TAY, suggesting

that students found it easy to use, helpful, and accessible, and would recommend it to their peers.

Table 1

Virtual Interview Training Acceptability Ratings

Item	<i>M</i>	<i>SD</i>	Range
Posttest (<i>n</i> = 26)			
Virtual interviewing was easy to do.	3.96	1.08	1–5
Virtual interviewing helped me prepare to interview for a job.	3.88	1.07	1–5
Virtual interviewing was accessible.	3.81	1.13	2–5
I feel very prepared to interview for a job.	3.77	1.24	1–5
Virtual interviewing improved my confidence to interview for a job.	3.69	1.23	1–5
Virtual interviewing was enjoyable.	3.46	1.17	1–5
6-month follow-up (<i>n</i> = 25)			
I would recommend virtual interview training to other teens or young adults who are blind or have low vision.	3.92	1.35	1–5
Virtual interviewing prepared me for real interviews.	3.76	1.20	1–5
Virtual interviewing improved my confidence for real interviews.	3.60	1.04	1–5
The virtual interview training program helped me prepare to search for a job.	3.44	0.92	1–5
I would use the virtual interview training program to prepare for future interviews.	3.32	1.41	1–5
The virtual interview training program improved my confidence to search for a job.	3.28	1.06	1–5

Note. 1 = *not at all true*, 5 = *very true*.

The surveys also included open-ended questions about VIT-TAY, where students shared their overall thoughts, what they liked best, and what they would change. Their responses revealed aspects of VIT-TAY that they valued and areas

for improvement. Coinciding with the acceptability ratings, students reported that VIT-TAY prepared them for real interviews and helped them learn what to say, with several describing it as “very helpful.” One student shared, “it helped me prepare for a real life job interview as well as how to word a sentence formally and professionally when responding to the interviewer.” Students appreciated the program’s interactive format (e.g., “how interactive it was”) and the variety of questions, responses, and positions (e.g., “plenty of options to choose from”). Several commented on the value of receiving feedback on their responses; for example, “I liked how there was feedback after every answer. It makes it more informative for me and I will keep it in mind when I go into a real job interview.” Areas for improvement included more realistic and flexible response options (e.g., “provide more realistic responses”) and shorter sessions with clear progress indicators (e.g., “a way to show your progress”). Some students recommended smoother screen reader navigation and a less cluttered layout, with one suggesting “a more seamless interaction with screen readers” and “making the whole interface less cluttered.” Overall, their responses highlighted the strengths of VIT-TAY, including its varied questions, structured response options, feedback, and interactivity. However, some students found the responses unrealistic and felt that the interface could be more user-friendly, indicating room for improvement.

Interview Instruction Framework

Taken together, these findings suggest that while virtual interview training can be a valuable part of interview preparation for students who are B/LV, it should not stand alone. Students appeared to benefit from structured practice, immediate feedback, and opportunities to develop professional responses. At the same time, interview preparation requires attention to elements that may be less fully addressed through virtual training alone, such as delivery, nonverbal communication, and the experience of completing a full interview from start to finish. A practical implication is that interview instruction may be most effective when it includes multiple components. One helpful way to think about this process is learning it first, rehearsing it next, and then doing it for real. Table 2 presents a proposed framework for structuring interview instruction around these three stages, and highlights the purpose, example topics, and activities for each stage.

Learn It

The *Learn It* stage builds foundational knowledge by introducing key interview concepts. Although students may recognize the importance of interviews, they often lack a clear understanding of typical interview structure, employer expectations, or how to navigate disability-related decisions such as disclosure and accommodations. For students who are B/LV, this stage can help make interview expectations more explicit and accessible, particularly when instruction addresses aspects of interviewing that are often learned visually or incidentally. Findings

from the RCT suggest that accessible e-learning may effectively introduce core interview concepts and prepare students for later practice, with greater time spent in the VIT-TAY e-learning associated with stronger interview performance (Cmar et al., in press). This stage is also consistent with general teaching principles that emphasize explicit instruction, modeling, and supported opportunities to build understanding before students are expected to perform independently (Rosenshine, 2012), as well as Council for Exceptional Children standards emphasizing explicit, systematic, and individualized instruction for learners with exceptionalities (Council for Exceptional Children, 2020).

Rehearse It

The *Rehearse It* stage focuses on repeated, low-stakes practice with timely, supportive feedback, helping students begin to turn what they know into how they perform. During rehearsal, students can try out responses, make mistakes, receive coaching, and try again in a setting that feels safe and constructive. For students who are B/LV, this stage may also include practice with disclosure decisions, use of remote interview technology, and delivery skills such as pacing, tone, and professional presence. Findings from the RCT, along with student ratings and comments, highlight the value of this stage, showing that structured practice and feedback are associated with stronger interview skills. In practice, rehearsal helps

students build fluency, confidence, and self-awareness before moving into more realistic interview experiences.

Table 2

Proposed Interview Instruction Framework for Students who are Blind or Have Low Vision

Stage	Purpose	Example topics	Activities
Learn it	Build foundational understanding of interview expectations and key decisions before practice begins.	Interview structure and etiquette; employer expectations; disclosure and accommodation decision-making; self-presentation basics; concepts related to nonverbal communication and body language; professional communication	Accessible e-learning; teacher-led lessons; guided discussions; instructor modeling; review of examples of effective and ineffective interview behaviors
Rehearse it	Practice interview skills with support, repetition, and immediate feedback to build confidence and fluency.	Common interview questions; professional responses; disclosure scenarios; greetings and closings; arrival and departure routines; camera and audio setup; delivery skills; asking questions	Interview simulations; scripted or semi-scripted role-plays; repeated guided practice; immediate feedback and coaching; structured re-tries and skill-specific practice
Do it	Apply interview skills in realistic conditions and reflect on performance afterward.	Full interview process from start to finish; unscripted questions; delivery and self-presentation in context; real-time logistics; adapting to unexpected questions or challenges	Full mock interviews (virtual or in person); interviews with unfamiliar adults; summative feedback; guided reflection activities; real interviews when available

Do It

The *Do It* stage focuses on putting interview skills into practice in real-world conditions. While virtual interview training and guided practice are helpful, they cannot fully capture the unpredictability of a real interview. Students benefit most from participating in full mock interviews or, when possible, real interviews, where they must interact with unfamiliar people, respond to unscripted questions, and manage real-time logistics. This stage is especially important because it allows students to bring together what they know, how they communicate, and how they present themselves in an authentic setting. Student feedback also indicates that these experiences feel meaningfully different from practice alone. For this reason, interview instruction is strongest when mock or real interview experiences are included and paired with guided reflection to support learning and growth.

Conclusion

Students who are B/LV often need explicit instruction to develop and refine the skills required for successful interviewing. Virtual interview training can support skill development by providing structured, repeated practice and objective feedback, but it may not fully address all aspects of interview preparation for students who are B/LV. For these students, virtual interview training may be most beneficial when incorporated into a broader framework that includes foundational

instruction, supported practice, and opportunities to apply skills in real-world settings.

Author Note

The University of Michigan receives royalties from SIMmersion, LLC on the sales of Virtual Interview Training for Transition-Age Youth, which are shared with Dr. Matthew Smith and the University of Michigan School of Social Work. Dr. Smith consulted on this project but did not recruit participants or collect or analyze any research data.

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Join us Wednesday September 23rd at 4 pm EST for a new webinar!

Understanding Co-Occurring Autism and Visual Impairment: Supporting Families & Children with Complex Diagnoses

CEC Members – Free Non-Members - \$20 + Eventbrite Fee
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[Register here](#)

The co-occurrence of autism and visual impairment (ASD+VI) in children across the United States is a complex disability diagnosis requiring carefully thought-out practices across transdisciplinary stakeholders to provide effective family-informed services. In this presentation, lived experiences of parents of children with ASD+VI will be shared. Dr. Saurym Quezada, an autism and VI researcher, will present outcomes from a national study on parents of children with autism spectrum disorder (ASD) and visual impairment (VI) recounting their experiences navigating multiple systems to secure a diagnosis and services for co-occurring ASD and VI.

This session emphasizes parental experiences with the goal of describing the complications of identifying supports for children and their families navigating a complex and understudied diagnosis. We share recommendations for practice as provided by these stakeholders to inform the field of potentially more effective transdisciplinary models of family coordinated care systems.

Learning Objectives:

1. Participants will identify current processes for ASD and VI services across assessment, diagnosis, and education practices.
2. Participants will understand the impact of current practices on families of children with ASD and VI and the role they play in providing holistic family services.
3. Participants will evaluate parent-reported recommendations for family-informed services.

Featured Speaker
Saurym Quezada, Ph.D.
Florida State University, Adjunct
Lighthouse of Broward for the Blind, Instructor



Building Summer Residential Transition Programs for Students with Visual Impairments

Melanie Zehnder, Foundation for Blind Children,

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Teachers The Foundation for Blind Children (FBC) is a nonprofit organization located in Phoenix, Arizona, that has been serving the community for more than 75 years. FBC provides services to over 2,000 individuals throughout

Arizona through 19 programs that span from early intervention through adulthood. For more than 15 years, FBC has operated summer residential transition programs for high school students with vision loss. The purpose of this article is for administrators to read our lessons learned, ideas, and practical examples that may be helpful so that more summer residential experiences can be made available for students with visual impairments.

Research suggests that students with visual impairments benefit from inclusive educational settings that provide opportunities to learn and build relationships with nondisabled peers while also maintaining access to disability-specific supports and communities that foster belonging, identity development, and shared learning experiences (Miyauchi, 2020). Because most students with visual impairments are educated in neighborhood schools rather than residential schools, supplemental programs can provide meaningful opportunities for students to connect with peers who share similar experiences while continuing to benefit from inclusive education. Residential summer programs can help bridge this gap by offering concentrated opportunities for community building, mentorship, expanded core curriculum instruction, and independent living practice (“School Experience,” n.d.).

At FBC, these principles have guided the development of summer residential transition programs for high school students with vision impairments across

Arizona. Each summer, FBC operates a five-week residential program at Arizona State University (ASU), totaling approximately 39 nights for 18 high school students with vision loss. Students have the opportunity to experience independence through living in an apartment style dorm with other student peers as roommates. Each student receives their own bedroom, and has a shared bathroom with 1 other roommate, and a shared living room and kitchen with up to three other roommates. Through classroom instruction, community-based learning, recreation, residential living, and peer engagement, students practice the skills needed for future success in college, employment, and independent living.

One reason these programs have remained accessible to students across Arizona is the support of grants, community partnerships, and state vocational rehabilitation (VR) services. This funding allows students to participate in a five-week residential program at no cost to families, including instruction, housing, meals, transportation, and community experiences. Throughout the summer, staff collaborate with students and VR counselors to support individualized goals related to employment, college, independent living, assistive technology, and transition planning. These partnerships help ensure that students leave the program with new skills, meaningful experiences, and a team of professionals who can continue supporting their goals after the summer ends.

Planning a residential program takes year-round dedication. One of the most significant changes FBC made was dedicating a year-round position in 2023 to focus on planning and coordinating the summer programs. As the programs have grown, an additional position of Youth & Transition Specialist was added to support 50% of the summer planning alongside the Transition Programs Manager. Although the programs conclude in mid-July, planning for the following summer begins again every August.

From August through October, the team evaluates the previous summer by identifying what to begin, stop, and continue. During this time, staff also does inventory of supplies, organizes materials, repacks equipment, and does outreach to schools, families, VR counselors, and community partners. FBC also seeks to support teachers of students with visual impairments (TSVIs) and orientation and mobility (O&M) specialists throughout the state by providing resources that help make the transition process smoother for students and school teams.

Starting early with the planning of the programs allows the team to be intentional rather than reactive and helps ensure that staffing, curriculum, housing, transportation, and community partnerships are in place before students arrive. In 2025, the programs introduced a new schedule that proved to be a success. The program focused on three weekdays for seven hours of instruction per day, with two days built in for community outings/field trips to get real world experiences,

one weekend evening and one full weekend day for recreational outings, and one day of rest to prepare for the week ahead.

Summer job applications are typically launched in October, with interviews completed before the holiday season. To support the program, FBC hires approximately 28 staff members each summer, including instructors, residential mentors, residential leads, program coordinators, an office lead, a manager, and O&M interns. One strength of the staffing model is that more than 75% of residential staff are individuals with visual impairments who previously participated in similar residential transition programs. Their lived experience provides valuable mentorship for younger students beginning their own transition journeys.

Instructional staff primarily include O&M specialists, TSVIS, and special education teachers with experience supporting students with vision loss. Some summer staff work for FBC year-round, serve students in public school districts, or travel from other states. To recruit and retain qualified staff, the hiring process begins approximately nine months before the program starts. FBC also reduces barriers for out-of-state staff by providing travel reimbursement and complimentary housing.

A unique aspect of the program is the partnership with O&M interns working toward ACVREP certification. Interns are able to accumulate hours

toward the 350-hour certification requirement while gaining hands-on experience in a residential transition setting. They arrive five days before student move-in to learn the Phoenix area, explore public transportation systems, build relationships with supervisors, and become familiar with student needs and program procedures. During the first week, interns observe and co-teach before gradually moving into direct instruction during Weeks two through five. They receive ongoing guidance and feedback from certified O&M supervisors and are provided housing, a weekly stipend for breakfast and lunch expenses, and dinner each evening.

Student applications open in early December. Students must be in grades 9 through 12 when applying. To be eligible, students must be actively participating in VR services, complete the FBC Summer Program application, and participate in an interview. Students must also be able to independently manage personal medications, maintain personal hygiene, dress themselves, wake up using an alarm clock, and self-regulate their behavior in a residential setting. Students apply for one of two tracks: Teen to Work or College Prep. While each program has different goals, both emphasize the expanded core curriculum and provide opportunities for students to apply skills across instructional, residential, and community environments.

The Teen to Work program focuses on employment preparation, assistive technology, independent living, and travel skills. Students develop resumes, cover

letters, interview skills, and professional communication while learning to use accessibility tools, email systems, Microsoft Office applications, and digital organization systems that support success in both employment and daily life. Community-based instruction reinforces classroom learning through grocery shopping, banking, online shopping, public transportation, rideshare instruction, and employment-focused outings. For example, students participated in mock interviews with talent acquisition staff from the City of Phoenix and engaged in professional conversations with City Council members. By embedding communication, self-advocacy, organization, technology use, and problem-solving across the curriculum, students repeatedly practice and generalize these skills in authentic settings.

Figure 2

Teen To Work and Technology



The College Prep program uses a multidisciplinary approach to prepare students for the academic, social, and independent living demands of

postsecondary education. Lessons in executive functioning, assistive technology, orientation and mobility, activities of daily living, and self-advocacy are intentionally connected across settings. Students build organization and time management skills through schedules, calendars, and college planning activities while using technology tools such as Microsoft Office, accessibility features, and online collaboration platforms. Self-advocacy is reinforced through accommodation planning, speech development, disability services presentations, and college campus visits. Independent living instruction includes budgeting, meal planning, grocery shopping, health and wellness, transportation, and apartment exploration.

Research suggests that participation in recreation, leisure, and community activities supports self-determination, social inclusion, independence, and overall well-being for youth with visual impairments (Alcaraz-Rodríguez et al., 2022; Lieberman et al., 2022). Community experiences are essential to both programs. By participating in employment tours, college visits, volunteer opportunities, recreational outings, and community travel experiences, students apply classroom learning in real-world environments. Over the summer, students had the opportunity to pick different recreation events that they wanted to experience and explore such as iFly indoor skydiving, an outdoor high ropes course, kayaking at the lake, accessible escape room, ice skating, pottery, audio description movies,

field day games, rock-climbing, bowling, themed mystery character party, and the water park.

Figure 3 and 4

Skydiving and Mystery Party



Teen to Work students participated in employment-focused outings to organizations including Stantec, the City of Phoenix, Arizona Industries for the Blind, Peckham, Ability360, and Feed My Starving Children. These experiences exposed students to career pathways while providing opportunities to interact with employers, practice interview skills, and participate in volunteer service. Students also strengthened orientation and mobility skills through airport training, Valley Metro assessments, Walmart shopping trips, and navigation activities at Arizona

Mills Mall. Alongside the recreation events, these experiences helped students build confidence, teamwork, social skills, and problem-solving abilities.

Figure 5

Mock Interview



Figure 6

Travel



College Prep students participated in university visits and ASU Bootcamps at the West, Tempe, and Downtown campuses, where they learned about disability services, accommodations, campus resources, and college expectations. Additional outings included airport travel training learning about TSA Cares for accessible travel, public transportation instruction, apartment tours, IKEA budgeting and furnishing activities, shopping experiences at Arrowhead Mall, and visits to Northern Arizona University and the University of Arizona.

Figures 7 and 8

Networking Mock Interviews and Speech



A culminating experience of Teen to Work is the Summer Promotion Day Mock Interview Event, which serves as the final project students work toward throughout the summer. Students spend several weeks developing resumes,

practicing professional communication, learning interview strategies, building self-advocacy skills, and preparing for interactions with employers. During the event, each student hosts a networking table and participates in ten “mini mock interviews” with community professionals that ask different questions. Students discuss their strengths, accomplishments, leadership experiences, career goals, teamwork skills, and professional growth while receiving individualized feedback. The mock interviews serve as both a celebration of student growth and a meaningful assessment of employment readiness.

For College Prep students, the culminating project is the Leadership Speech Project. Throughout the summer, students engage in self-reflection activities focused on values, goals, strengths, leadership styles, communication preferences, and personal growth. Students select a meaningful topic and spend several weeks researching, locating sources, creating outlines, writing drafts, incorporating feedback, and developing public speaking skills. The project culminates on Summer Promotion Day, where students present their speeches to peers, families, staff, and community members. For many students, this becomes a powerful opportunity to recognize their growth and share their future goals.

As the program ended, many students and families shared feedback that reflected the impact of both the instructional and residential experience. Student reflections demonstrated growth in confidence, independence, and self-

determination. Participants reported increased confidence, stronger socialization and self-advocacy skills, and greater readiness for college, employment, and adult life. Students identified accomplishments such as navigating public transportation, improving O&M skills, mastering cooking and laundry tasks, developing leadership skills, writing resumes, preparing for interviews, and becoming more comfortable advocating for themselves. Several students shared that they stepped outside their comfort zones by living away from home, building friendships, and participating in community activities.

Residential transition programs provide a unique opportunity to bring together classroom instruction, community-based learning, independent living experiences, and peer connection in a way that prepares students with visual impairments for life beyond high school. While employment skills, college readiness, orientation and mobility, and assistive technology are important components of transition programming, some of the most meaningful growth occurs through the everyday experiences of living, learning, and problem-solving alongside peers. The outcomes observed through FBC's summer programs demonstrate that when students are provided with structured opportunities to practice skills in authentic environments, they develop greater confidence, self-advocacy, independence, and a stronger vision for their futures. As organizations continue to explore ways to support successful transitions to adulthood, residential

summer programs can serve as a powerful model for helping students build the skills, confidence, and relationships needed to thrive in college, employment, and independent living.

For additional information, please visit the links to our program websites below:

[Teen To Work Website](#)

[College Prep Website](#)

[Foundation for Blind Children's Summer Programs YouTube Video](#)

[Summer O&M Internship Program with Foundation for Blind Children](#)

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Physical Activities and Sport for Students with Deafblindness

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Abstract

Physical education is a federally mandated service under the Individuals with Disabilities Education Improvement Act (IDEIA, 2004) for all students with disabilities, including those with deafblindness. Students with blindness, visual impairments, or deafblindness often experience delays in motor development, reduced fitness levels, and limited opportunities for physical activity participation. This paper examines evidence-based practices for providing quality physical education and sport opportunities for students with deafblindness, emphasizing the importance of communication and presuming competence, while utilizing best practices in instruction, and implementing appropriate adaptations for educators and service providers. Key strategies include pre-teaching, environmental orientation, physical guidance,

confirmation, the use of adapted equipment, and modification for educators and service providers. The four components of high-quality physical education; opportunity to learn, meaningful content, appropriate instruction, and assessment; serve as the foundation for developing comprehensive programs that promote physical competence, health-related fitness, and positive attitudes toward lifelong physical activity involvement for students with deafblindness.

Keywords: deafblindness, physical education, adapted physical education, motor development, IDEA

The Individuals with Disabilities Education Improvement Act (IDEA) of 2004, Public Law 108-466, mandates physical education as a required service for children and youth between the ages of 3-21 who qualify for special education services due to specific disabilities or developmental delays. Under IDEA, 20 U.S.C. 1401(29), special education is defined as "specially designed instruction, at no cost to parents, to meet the unique needs of a child with a disability," explicitly including instruction in physical education. For students with deafblindness, this mandate represents a critical opportunity to address the unique motor, social, and developmental challenges they face while promoting lifelong physical activity, health and wellness. Quality education should remove barriers and provide supports that are needed for students with deafblindness to remain safe and experience success in all settings, including physical education.

The Importance of Physical Activity for Students with Deafblindness

Students with blindness, visual impairments, or deafblindness frequently experience significant challenges and barriers that impact their physical development and participation in movement activities. Research has documented that these students often display delays in developmental milestones, delayed motor skills, lower levels of fitness, balance and stability problems, reduced stamina and endurance, and fewer opportunities to

participate in movement and physical activities (Dammeyer, 2012; Foster et al., 2020; Hartshorne et al., 2021; Perkins et al., 2013; Perreault et al., 2021). The underlying factors contributing to these challenges include motor developmental delays related to vision and hearing loss, proprioception and vestibular dysfunction, muscular weakness, orthopedic impairments, and the cumulative effects of hospitalization and surgeries (Foster et al., 2020). The majority of students with deafblindness have additional disabilities, the most common being intellectual impairment, speech and language impairment, and orthopedic or physical impairments (National Center on Deaf-Blindness, 2021). In addition, approximately 53 percent of students with deafblindness involve complex needs regarding their health. These factors collectively impact balance, posture, and overall motor performance, creating a complex web of challenges that require specialized intervention such as adapted physical education or the use of specially design instruction to meet the unique needs of this heterogeneous group of students with deafblindness. Everyone with deafblindness may experience differences which impact their ability to perform physical activities, therefore analyzing and gaining knowledge of the specific student is imperative to developing appropriate movement activities.

Participation in movement, physical activities, and sport offers major benefits for students with deafblindness, extending far beyond physical fitness

and gross motor skills. Quality adapted or general physical education programs can promote social skills development, enhanced self-esteem, self-determination, and communication opportunities (Arcous et al., 2020).

Opportunities to practice and improve motor skills can also lead to a higher level of independence and orientation and mobility skills while gaining strategies to maneuver in environments with special awareness (Airi et al., 2016). Physical activity can also provide students with deafblindness a sense of belonging and improve perceptions of other educators and service providers. Blind sports can be modified to provide youth with deafblindness access to competition and increase opportunities to be physically active. When developing transition plans within the Individualized Education Program (IEP), lifelong physical activities such as running, biking, or swimming can provide recreational opportunities that are often overlooked by IEP team members (Lieberman et al., 2018). Limited opportunities being provided to students with deafblindness within physical activities as one of the largest barriers (Imel et al., 2020). Lieberman, Kirk, and Haegele (2018) reported that adults who were deafblind were dissatisfied with the lack of information in their transition plan related to physical recreation and activity, which could have encouraged future involvement in physical activity. Another study reported that 60 percent of the

adults who were deafblind were not satisfied with their current level of physical activity (Lieberman & Stuart, 2002).

Principles for Effective Programming

Programming needs to be highly individualized for each student with deafblindness. A priority for educators and service providers must be to fully understand the students' needs, preferences, strengths, and areas that need support (Correa-Torres et al., 2021). Building an effective strength-based approach to physical activity and their education can build on current abilities while increase self-confidence and willingness to participate and engage in physical movement activities. Utilizing proper instructional strategies and adaptations will increase access and success of students with deafblindness motor performance. Maintaining high expectations and continuously monitoring progress is critical for effective programming.

Presuming Competence

The principle of presuming competence serves as the foundation for all educational programming for students with deafblindness. Students with blindness, visual impairments, or deafblindness often face undue limitations due to low expectations and systemic barriers (Masuku et al., 2024). Presuming competence challenges these assumptions by recognizing that every student is

inherently capable of learning, progressing, and contributing. It also challenges assumptions of a students' inability, by first ensuring that access has been provided in terms of communication, processing time, and any environmental or skill modifications which may be needed. Despite policies (such as IDEA, 2004) that advocate for the least restrictive environment (LRE), significant gaps remain in practice, particularly in physical education and physical activity for students who are deafblind (Lane et al., 2020). Presuming competence isn't about having unrealistic expectations, but rather about starting from a place of possibility rather than limitation. It is important to evaluate and challenge low expectations that may limit opportunities for students who are deafblind while developing environments where students can demonstrate their true capabilities. Educators and service providers should be aware of the impact of previous learned helplessness and overprotection which can influence students' motivation, affect, and cognition (Abramson et al., 1978) and may impact levels of competence. Involving the student in discussions about goals and expectations can promote active participation and further develop independence and students' confidence.

High-Quality Physical Education and Adapted Physical Education Service

According to Society of Health and Physical Educators (SHAPE) America (2025), high-quality physical education programs must incorporate four essential components: opportunity to learn, meaningful content,

appropriate instruction, and student assessment. These components provide the framework for developing comprehensive programs that help all students develop health-related fitness, physical competence, cognitive understanding, and positive attitudes about physical activity, enabling them to adopt healthy and physically active lifestyles. Physical educators must assess their program based on these components and make changes as needed to increase the quality of program being offered to all students, which will assist with the successful integration of students with disabilities. In addition, it is important to note that IDEIA (2004) defines physical education as:

The development of physical and motor fitness, fundamental motor skills and patterns, and skills in aquatics, dance, and individual and group games and sports, including intramural and lifetime sports. This definition includes special physical education, adapted physical education, movement education, and motor development [section 300.39(b)(2)].

Adapted physical education represents specially designed instruction that has been modified to be appropriate for students with disabilities. Adapted physical education is a comprehensive service for students with disabilities who require additional support. Adapted physical education services encompass assessment of students to determine qualification of services which include prescription,

planning, and placement through the IEP. Once service is determined as a need, progress monitoring and evaluation of services, is important to effectively adjust teaching and use adaptations. This service ensure that students receive appropriate, individualized instruction in their least restrictive environment for physical education while maintaining safety and promoting success.

Collaboration with other educators and service providers is essential to continuously meet the needs of the student with deafblindness.

Motor development serves as the foundation for strength, balance, coordination, and endurance, requiring instruction that covers basic skills and progresses systematically. Comprehensive programming should include various gross motor skills and movements that work on balance and movements that include reaching, grabbing, striking and releasing with hands and feet. Balance activities can include various positions and postures, crossing midline and body awareness activities, range of motion exercises, push and pull activities for proprioceptive input, and static and dynamic balance challenges (Foster et al., 2021). These prerequisites then lead into fundamental movement skills, including both locomotor and manipulative skills which are important skills for students who are deafblind to acquire. Locomotor skills include creeping, walking, rolling, running, jumping, hopping, sliding, and leaping. Manipulative skills encompass grasping, releasing, catching, throwing, kicking, striking, and using implements. These

skills can be implemented in fun activities and lead to the development of sport and recreational physical activity skills. Successful attainment of fundamental movement patterns provides the building blocks for more complex skills such as goalball or soccer skills. Functional movement skills that are relevant to the individual student's interest and preferences directly contribute to an increase in confidence and independence, while also making their development of motor skills and participation in physical activity a priority in programming for students with deafblindness (Haibach-Beach et al., 2019).

The curriculum should provide various activities that can address balance, motor skills, and fitness delays that students with deafblindness may exhibit (Hartman et al., 2011). It is important to provide students with ample opportunities for practice and trials to improve understanding, expectations, and critical elements of the skill (Alshahrany, 2021). Balance and postural exercises and activities can assist students who have sensorineural hearing loss or have vestibular impact. These activities could include the use of balance boards, inflatable discs, foam squares, balance beams, wavy and sponge mattresses, exercise balls, and steppingstones to increase strength and endurance related to maintaining balance. More advance balance activities involve performing various exercises on one leg or in different poses, such as performing a single-leg deadlift or airplane pose. Another area is social emotion learning which can be provided

through various adventure-based activities. These activities promote communication and engage students in problem-solving and creative challenges that allow them to practice social-emotional skills such as self-management, communication, collaboration, goal setting, perseverance, and empathy (Project Adventure, n.d.). When students who are deafblind are provided with appropriate movement experiences that accommodate their needs, they are more likely to engage in physical activity and sports outside of school (Ponchillia et al., 2002). Participation in adapted sport or blind sports can have a positive effect on their perceived motor competence and increase their overall physical activity level and balance (Esatbeyoglu et al., 2022). Sports for individuals with blindness or vision loss, otherwise known as blind sports, can provide access to modified sports and additional skills for students who are deafblind. These sports such as goalball, beep baseball, blind tennis, blind soccer, 1Touch self-defense skills, tandem biking, swimming, running, and showdown (like air hockey and table tennis), may need additional modifications if hearing loss is significantly affected by utilizing touch cues and physical guidance can be utilized.

Safe and Successful Environment

Before expecting performance from students with deafblindness, the physical education and/or physical activity environment must be safe and appropriate. This requires careful consideration of integration opportunities

within general education classes when activities permit. Environmental safety and individual safety considerations must be comprehensively addressed to create optimal learning conditions, especially if the student with deafblindness has any health needs or contraindications. Movement performance depends on numerous student factors including previous knowledge and experience, language and communication abilities, interest levels, functional relevance and meaningfulness, energy levels, flexibility, range of motion, mobility, processing time, and residual vision or hearing level. Understanding these factors enables educators and service providers to design appropriate environments which include needed interventions and realistic expectations. A systematic review found that adaptation to the educational environment was a key intervention to increase benefit to the students with deafblindness (Sundqvist et al., 2023). Furthermore, social interaction/communication and motivation/participation were the other major goals of interventions provided for youth who are deafblind.

Students must have access to communication and language within their preferred mode to be able to provide input on their wants and needs while being provided choice throughout their physical education and activity experience. Students who are deafblind should feel safe and experience success throughout physical activities while progressing their skills.

Communication

Due to the dual sensory loss, students who are deafblind have limited access to incidental learning. Concept development needs to be addressed using a multisensory approach that uses practice, increases opportunities, and encourages exploration in a student's preferred and accessible mode of communication. Also, it is important to ensure appropriate communication during activities and experience within physical education and movement activities. Students who are deafblind may use a variety of ways to communicate from non-verbal forms such as the use of body language or objects to verbal forms such as vocalization or American sign language (ASL). They may require large font or specific distances to better access their vision. Tactile signing is where the person who is deafblind will feel the shape, location, and movement of signs made by the other person (Van Der Mark, 2023). Protactile or (PT) is tactile communication developed by the DeafBlind community that utilizes various forms of touch such as taps, scratches, and direction cues to convey visual communication, emotions, and environmental information.

In 2021, around 47 percent of students with deafblindness used corrective lenses, 53 percent used an assistive listening device, and 45 percent used assistive technology (National Center on Deaf-Blindness, 2021). As an adapted

or general physical educator, it is important to be familiarized with these devices. The teacher or service provider should check to make sure the student's device is working accurately before the start of the session. If a student uses an FM system, the teacher or provider should wear the system's microphone to assist with auditory access, such as verbal instructions. Collaborating with or guardians and other educational professionals who specialize in services for students with deafblindness such as teachers of students with deafness, teachers of students with visual impairments or teachers of students with deafblindness can provide valuable information about communication strategies and accessing environmental visual and auditory cues (Perreault et al., in press). Typically, a student who is deafblind will be assisted in the educational environment by a professional known as an intervener. This professional supports the student in obtaining access to information in the environment (Parker & Nelson, 2016). Like interpreters for the deaf, interveners are there solely to serve the student with deafblindness and provide them with access to language, communication, and information pertaining to the environment.

Since all forms of behavior is communication, it is important that educators and service providers observe and interact when communication attempts are displayed by students with deafblindness. This will aid to further establish trust, rapport, and positive interactions with the student. Engagement confirms students' attempts at expressive language. This is a pivotal point since

students with deafblindness often feel isolated and excluded because of issues with accessing communication and language (Dyzel et al., 2020). Taking the opportunity to learn students' communicative intents and analyze those intentions in different interactional situations can lead to more successful communication exchanges and increase positive integration within the environment (Janssen et al., 2003; Lane et al., 2020). Development of common language systems is imperative to giving access to physical activities for students who are deafblind. Information specific on how each student communicates both expressively and receptively is needed to develop a supportive learning environment. Students with deafblindness should be able to identify people and objects within physical activity and provided choice opportunities. Building meaningful language using actual objects can assist with connecting objects or equipment to specific movement task.

Best Practices for Successful Movement Experiences

Effective physical education programming for students with deafblindness relies on four core best practices: anticipation/pre-teaching, physical guidance, confirmation, and adapted equipment and modification. These interconnected strategies create a supportive learning environment that maximizes student engagement and success.

Anticipation & Pre-teaching

Introduction of movement and physical activities should be done through well-established routines and schedules for students to be able to anticipate that movement and participation will be asked of them. Previewing skills and new environments involves students being provided with extra time for exploration to learn about the set-up of the activity or environment and also learning about what equipment will be used throughout the lesson or activity (Iannacchino et al., 2024; Lieberman et al., 2025). This strategy is known as pre-teaching which involves providing advance targeted instruction and orientation before actual classes or units begin. This approach supports students with deafblindness to become familiar with environments, equipment, rules, and movements they will encounter. Therefore, enhancing safety, confidence, and participation during lessons, as students will be better informed on what is occurring. Effective pre-teaching incorporates several key components including working in collaboration with classroom teachers. Environmental orientation is one component that provides an introduction of the layout of gymnasium or outdoor spaces, including key landmarks, boundaries, and potential hazards. Environment preloading should also include instruction on spatial development related to self and others, self and objects, objects to objects, and cognitive mapping. This can be done by drawing on the student's hand or back, depending on their preference, or by describing the environment in the student's preferred mode of communication to enable them to build a cognitive

map of the space. Establishing the setup of the environment and where equipment is located within the educational space can lead to increased participation and independence (Lieberman et al., 2025). It is also important during activity to identify any students who are around the student with deafblindness and/or on their team. Teaching their peers to say their name and identify themselves while near the student who is deafblind is a important aspect of integration.

Equipment familiarization allows students to handle and explore sports equipment beforehand to learn shape, texture, and function. Movement and skill preview involves demonstrating and practicing specific movements or techniques in controlled, quiet settings before integrating them into group activities. Multi-sensory cues incorporate auditory, tactile, and verbal elements to enhance understanding and recall of instructions. Collaborative instruction involves working with specialists such as orientation and mobility instructors and teacher of students with deafblindness, also known as teacher of the deafblind (Bruce et al., 2020) to tailor pre-teaching sessions to individual needs.

Physical Guidance Techniques

Movement tasks and skills should be provided by demonstrations within the students preferred mode to access during the group lesson. Preferred modes may be through vision (at the students' best angle, distance, lighting

etc.), through auditory cues (describing the movement with concrete verbal description) or with the use of physical guidance. The hand-under-hand technique represents a crucial instructional approach for students with deafblindness compared to the use of hand over hand. This method involves always requesting permission before physical contact, utilizing coactive movement where instructor and student move together during skill manipulation, and recognizing that movement together is preferable to no movement at all. This approach maintains the student's sense of control while providing necessary physical guidance for skill development.

Tactile modeling is when a student who is deafblind can feel certain body parts and movements of a proficient performer as the individual performs a specific motor skill (Lieberman & Haegele, 2019). Tactile modeling should only be used if it is preferred by the student and permission is obtained. It should always be paired with precise verbal cues describing the movements. Educators and service providers should always follow the prompting hierarchy, starting with less intrusive prompts first before using more intrusive prompts such as physical guidance. Prompting can also assist in scaffolding, by shifting the responsibility and performance from the teacher to the student. To further respect students' autonomy, assistance may be provided by

performing activities together through coactive movement and following the student's lead.

Figures 1 and 2

Tactile Confirmation and Tactile Information



Confirmation

Confirmation involves providing accessible feedback that validates performance, acknowledges attempts and increases understanding for students who are deafblind. This type of feedback is an important communication strategy that builds trust and can have a meaningful impact. With the use of confirmation, an educator or service provider is developing a feedback loop. Providing confirmational feedback for on-task behavior can assist in motivating and encouraging the participation of students who are deafblind. It is important that educators and service providers maintain proximity and

provide adequate attention to the student to not miss or ignore a performance attempt. Providers can also increase understanding by informing students about duration and quantity expectations by reviewing accomplishments and products developed. Processing time and wait time may be needed to elicit a movement response from students who are deafblind. Educators should present a request and then step back and wait for the student to initiate movement, then feedback can be provided. However, allow some time for trial and error before intervention to promote the students' exploration and discovery. This can also provide a great opportunity to instruct on self-advocacy skills such as requesting help or asking for clarity. Presenting information on spatial aspects of a task to a student who is deafblind can increase their cognitive mapping of where they are located in regard to others or objects. To provide this type of confirmation, observe the student closely and acknowledge immediate attempts of gaining more information by expanding or providing clarity. This can be accomplished by providing information as to where the equipment is located within the space or identifying who is around the student. Depending on the student's preference, confirmation and feedback can occur on the student's hand or back or be provided in their preferred mode of communication. It is important throughout and at the end of a session to review all that was accomplished or performed.

Adapted Equipment and Modifications

The majority of interventions and modifications for students with deafblindness are focused on social interaction, communication, motivation, and participation (Sundqvist et al., 2023). Adapted and general physical educators need to collaborate with members of the IEP team to learn strategies to address these areas. Successful movement programming requires thoughtful adaptation of equipment and environment to maximize accessibility and safety, while also maintaining a structured schedule and routine to increase predictability. It is also beneficial to start with familiar movements before progressing to unfamiliar movements to increase confidence and participation. Pulling from previous knowledge can add in concept development of similarities and differences related to movements.

Student input should be actively sought regarding modifications based on their level of vision and hearing and preferences. When it comes to various equipment students may prefer specific colors or have textures they prefer. Discovering and implementing students' preferences during movement activities can increase their level of motivation and participation. High contrast between objects and backgrounds improves visual access for students with residual vision. Reducing clutter and excessive noise minimizes distractions and enhances focus and attention. Audible balls and targets utilize natural

auditory cues and resources to provide feedback and orientation if a student who is deafblind can access some auditory information. The use of tactile markers such as mats on the floor, poly spots, or rope taped to the ground (similar to goalball court lines) can provide environmental markers for positioning that allows the student who is deafblind to independently explore to identify their location.

Using strategies from protactile communication can assist in providing information about visual cues and the environment to the student. Touch cues on the student's back can provide directional cues on where a ball may be or where other players are within the environment. Techniques for guiding students with vision loss can also be used with students with deafblindness, but additional support may be needed for balance, coordination, and communication. When human guide is provided, additional balance support could be achieved by the extension of the forearm toward the person for them to hold on to if needed by their other hand. The use of a tether can be used with the addition of tactile communication on their hand or body while moving to assist with guiding through activities. Activities should be developed which are fun and engaging but also can be performed within their home or community. Fitness equipment typically found in local recreation centers or health clubs, such as treadmills, stationary bicycles, row, and stair-climber machines can be modified with tactile stickers applied to

specific buttons to provide the student with the ability to control and stop the machines.

Conclusion

Physical education engagement with high expectations is a fundamental right and requirement for students with deafblindness under IDEA. Quality programming requires understanding the unique challenges these students face while maintaining high expectations for their capabilities. Through implementation of evidence-based practices including presuming competence, preteaching and environmental orientation, appropriate communication strategies, physical guidance, and thoughtful environmental and equipment adaptations, educators can develop meaningful physical education, sport and recreational experiences that promote lifelong health, fitness, and positive attitudes toward physical activity. Motor development serves as the foundation for independence, making physical education not merely an academic requirement but a critical component of comprehensive educational programming. When implemented effectively, physical activity provides students with deafblindness opportunities to develop not only physical competence but also social skills, self-esteem, communication abilities, and self-determination. These outcomes extend far beyond the gymnasium, contributing to overall quality of life and successful community

participation. The field continues to evolve as research and practice inform better understanding of effective strategies for serving students with deafblindness. Continued professional development, collaboration among specialists, and commitment to individualized programming will ensure that all students receive the high-quality services and access to physical activity.

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GRADUATE PROGRAMS

Intervention Specialist: Visually Impaired Licensure Program

A 22-credit hour program offering graduate level coursework leading to licensure as a teacher of students with visual impairments (TSVI). The program is designed to be completed in one year and applicants must hold a valid Ohio teaching license. Coursework is mostly online with extensive face-to-face field and practicum experiences.

Intervention Specialist: Hearing Impaired Licensure Program

A graduate level, 24-credit hour program offering coursework leading to licensure as a teacher of the Deaf/hard of hearing. The program is designed to be completed in one year and applicants must hold a valid Ohio teaching license. Coursework is mostly online instruction with extensive face-to-face field experiences.

Certificate in Deafblindness Education

A graduate level, 15-credit hour program, leading to a certificate in Deafblind Education from Shawnee State University. This certificate will meet the post baccalaureate education needs of working professionals. The program courses provide in-depth knowledge of the needs of and supports for children with combined hearing-vision loss (also known as deafblindness) and is aligned with CEC standards for deafblindness

UNDERGRADUATE PROGRAM

Intervener Certificate Program

A 30-credit hour program offering undergraduate level coursework leading to a Shawnee State issued Intervener Certificate. The Intervener Program is designed to be completed in two years. Applicants must meet the admission requirements at Shawnee State University. An intervener provides consistent one-to-one support to a student who is Deaf, blind or dual sensory impaired (ages 3 through 21) throughout the instructional day. Coursework is primarily completed in an online format, culminating with a field based practicum experience.

- Online Coursework through our Consortium partner institutions of higher education
- Field based practicum/internship experience
- Funding support provided by the Ohio Department of Education and Workforce, Office for Exceptional Children
- Aligned with Ohio Priorities
- Made possible with support of the Ohio Deans Compact and the Ohio Department of Education and Workforce

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Establishing Interdisciplinary Collaboration: Suggestions for Administration

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There has been an increase in the prevalence of hearing loss or visual impairment (i.e. sensory disabilities) co-occurring with other disabilities. In 2005 only 13% of children who were Deaf-Blind had four or more additional disabilities. Now, approximately 44% of children who are Deaf-Blind have four or more additional disabilities and 88% of children who are Deaf-Blind have one or more additional disabilities (NCDB, 2022). The high prevalence of children with multiple disabilities demonstrates a need for interdisciplinary collaboration among highly-specialized service providers in order to fully support each child's diverse and specialized needs. Interdisciplinary collaboration helps children to make the most progress by considering the whole child instead of specific areas of needs individually. Many service providers, particularly those in the sensory disability areas, have tremendous depth of knowledge from specialized coursework in their

content area, but they can lack breadth of knowledge outside of their discipline. When working with children with multiple service providers, the tendency of providers might be to “work in silos” and focus on their specific area of expertise without crossing into other domains. With a nationwide shortage of service providers, especially those that provide therapy for children with sensory disabilities, collaboration is crucial to ensure that goals are being addressed across all disciplines, not only during specific therapy sessions.

The US Department of Education responded to these needs by funding grants with a focus on promoting interdisciplinary collaboration. A graduate program called LIMITLESS (#H325K190003) at Illinois State University was one of the programs funded. The program focused on early intervention and was designed with intentional interdisciplinary collaboration built into the coursework and practicums for scholars across three disciplines, teachers of the deaf, teachers of students with visually impairments, and speech language pathologists. The goal was to train scholars to be experts in their fields while preparing them to work effectively with other disciplines. This training in interdisciplinary collaboration gave the graduates confidence in supporting the whole child. Co-treating, teaming, and using a coaching method were emphasized to teach family members and professionals from other disciplines about their area of expertise in order to support the generalization of skills. Collaboration is essential to improving professional

practice and meeting children's needs. In order to support implementation of interdisciplinary collaboration, the following activities and practices from the LIMITLESS program may be useful while planning coursework, practicum experiences, and professional development.

Coursework

During the two-year master's program, all three disciplines participated simultaneously for the majority of the coursework. This provided opportunities for the scholars to learn not only the foundations of early intervention, but also to practice collaborative intervention strategies and learn from one another. Specific coursework was designed to address interdisciplinary collaboration across a variety of topics including co-treating and teaming, global assessments, intervention, and language and literacy. This led to rich class discussions among scholars, who approached each task from a different specialized framework.

Activities

A variety of activities and assignments were completed to prepare scholars in child development across all domains, not just their content area. Using global assessment tools as reference materials, scholars worked individually and in groups to sort and organize skills into domain and age range areas. Scholars spent time familiarizing themselves with the range of developmental domains and drawing connections to their specialty areas. Additionally, scholars were required to watch

videos of children who were receiving early intervention services and make note of the skills and intervention strategies being demonstrated. Working in groups with one student from each discipline, scholars were able to hear the perspectives of the other specialists, gaining insight into observations and conclusions that may have been missed without the interdisciplinary aspect. Each team created a simple, parent-friendly developmental chart that spanned at least six domains and six age ranges. Instruction and practices were consistently focused around skills across a variety of domains so that scholars could better be prepared to work across discipline areas.

Collaborative Roleplay

One of the key interdisciplinary activities was a collaborative role play, in which teams of scholars from each specialty area were represented. A professor playing the part of a parent was interviewed on a live video feed, providing information on their hypothetical child, who had a sensory disability. Based on information gleaned from the interview of the “parent” and observation of the “child,” each scholar contributed to a global assessment, resulting in a well balanced view of the needs of the family, the child’s unique strengths, and the challenges facing the child. Working together, scholars planned and organized activities for the parent, based on daily routines that were a priority for the family. This enabled scholars to build their understanding of the other disciplines and

embed their unique intervention techniques into an early intervention session. Various frameworks were utilized in order to help providers support parent involvement and guide the parent in planning the targeting of specific skills within existing family routines. The role play was followed by an in-person, interdisciplinary team assessment on campus of a child with a sensory disability.

Interdisciplinary Observations

Another impactful activity was observations of service providers from a different discipline. Scholars were required to observe three different providers outside of their discipline area. These interdisciplinary observations could include any early intervention service provider, such as occupational therapy, physical therapy, or feeding therapy. These observations were meaningful because they allowed students to see a child through the eyes of a provider with an entirely different perspective and area of expertise, glimpsing the depth of knowledge that the other disciplines utilize to support the child. Written reflection, emphasizing how interdisciplinary collaboration could have been useful, was an integral part of the observation process.

Practicum

After completing the interdisciplinary observations, scholars completed several observations within their discipline. They were then paired with an early intervention provider in their specialty area as a mentor for a practicum experience

spanning five sessions. During the practicum, scholars interviewed their mentor and the parent of a child on their mentor's caseload. Practicums culminated with an assessment of the child and scholars leading intervention sessions with the family. In this phase of the program, scholars submitted reflections and engaged in discussions with peers related to their experiences. Although this portion of the program was discipline-specific, having the opportunity to meet with their peers during class enabled participants to collaboratively share thoughts, ask questions, and continue developing relationships across disciplines, as they all prepared to enter the early intervention workforce in the coming months.

Conclusion

The LIMITLESS program provided soon-to-be professionals with an essential experience to develop collaborative skills through learning and working with various specialists. Through interdisciplinary coursework, roleplay activities, observations across specialties and an external practicum, scholars developed their personal craft with intentional embedding of interdisciplinary collaboration. The result was 34 graduates with expertise to serve children with sensory disabilities and work collaboratively with other disciplines in their field to support children with multiple disabilities. By understanding the goals and implementation of the LIMITLESS program, educators and administrators can implement similar concepts into their daily work, meetings, and programs to foster interdisciplinary

collaboration.

Practical suggestions for implementation:

- Provide time for interdisciplinary observations, discussions and planning
- Schedule professional development on topics that are indirectly related to the specialty area, such as occupational therapists presenting about sensory integration to educators
- Prioritize interdisciplinary, play-based evaluations with a variety of specialists
- Facilitate case studies of current students, emphasizing sharing information and problem solving about how their disabilities are impacting their functioning across developmental domains
- Disseminate scholarly articles from a variety of specialty areas to all providers and plan for ongoing discussion

Author Note

The authors represent former scholars and a faculty mentor from the LIMITLESS program at Illinois State University. Katie Stuepfert served as an adjunct lecturer and the SLP mentor for the program. Ellie Bell, teacher of the deaf and hard of hearing, was in the first cohort group of LIMITLESS from 2020-2022 and is currently a practicing Developmental Therapist-Hearing in early intervention after completion of the program. Mary Finnerty, current teacher of students with visual impairments, was in the second cohort group of LIMITLESS from 2022-2024 and is additionally working as a Developmental - Therapist-Vision in early intervention after completion of the program. Drawing from their distinct professional backgrounds and shared experiences in the LIMITLESS program, these authors come together to highlight the benefits of interdisciplinary collaboration in early intervention.

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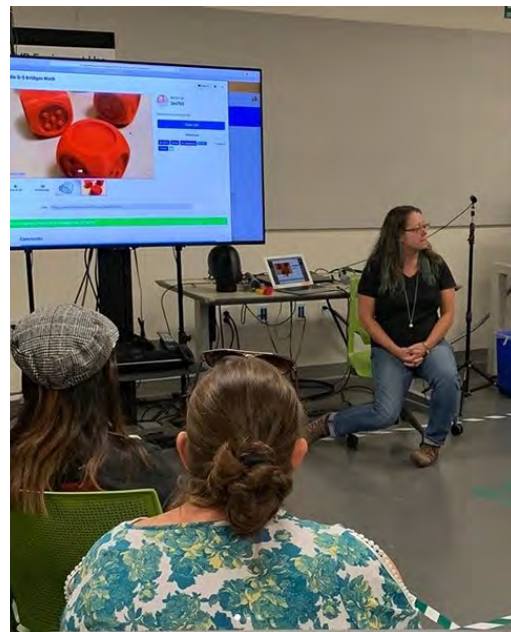
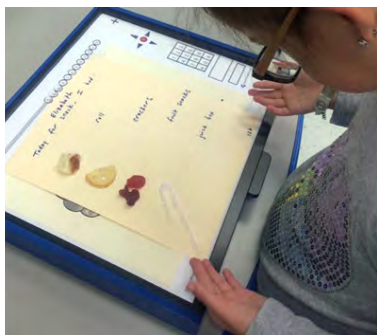


The Education Specialist Credential Program in Visual Impairment (VI)

prepares highly qualified educators to teach and empower a diverse range of blind and low vision students aged birth to 22 and their families. Our program prepares educators to bridge current evidence-based literature with practice-orientated instructional strategies that are focused on promoting students' access to core and expanded core curriculum areas, while emphasizing barrier-free membership in school, home, and community settings. We commit to exercising culturally responsive pedagogy as aligned with principles of anti-racism and anti-ableism. Candidates are expected to demonstrate skills in working with an array of professionals as well as families in order to facilitate learner participation and growth within the context of their educational experience.

Graduates from our program:

- Demonstrate competence in assessment and instruction to promote functional literacy in braille, print and auditory methodologies
- Have skills in collaborating with an array of professionals as well as families
In order to facilitate learner participation and growth
- Participate in field assignments that include diverse populations, and issues related to the effects of cultural and linguistic differences
- Demonstrate knowledge and skills regarding the effects of adventitious and congenital visual impairments as well as the impact of various conditions on learning and development



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San Francisco State University Program in Visual Impairment

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The first students to enter the Program in Visual Impairment at San Francisco State University (SFSU) arrived in 1955. Among the graduates from that inaugural cohort were future leaders and luminaries in the field of blind and visually impaired education such as Phil and Sally Mangold, Fred Sinclair and Phil Hatlen. In the years since those initial graduates began what would become exemplary careers, the SFSU VI Program has continued to produce highly skilled and knowledgeable teachers to serve students who are Blind and Visually Impaired in California.

Figure 1

SFSU VI Program Historical Photo



As one of only two programs in California offering a credential in Teacher of Students with Visual Impairment (TSVI), the San Francisco State University program is an important contributor of educational professionals in the state. The SFSU VI Program first began offering distance education courses for students outside of the population centers of San Francisco and Los Angeles in the 1980s and 1990s under the guidance of Dr. Sally Mangold. With the advent of the internet and the proliferation of online coursework, the VI Program now stands out as the only online teaching certification program in the SFSU Department of Special Education and enables individuals from even the most remote areas of California to obtain the TSVI credential.

Over the years, the SFSU VI program has employed a number of widely recognized faculty members. In addition to the previously mentioned leaders from the program's initial cohort of students, prominent state and national leaders such as Dr. Amanda Lueck, Dr. Sharon Sacks and Dr. Yue-Ting Siu have all served as faculty members in the SFSU VI Program. Current instructors include individuals representing a wide range of experiences, professions and areas of expertise.

Among the instructors lending their knowledge in blind and low vision instruction and assessment are practicing TSVIs and optometrists, current and former employees of the San Francisco LightHouse for the Blind, the president of the San Francisco chapter of the National Federation of the Blind, employees from the

Center for Assistive Technology Training-Northwest (CATT-NW) and faculty and staff from the California School for the Blind (CSB). In addition, individuals from California DeafBlind Services, the Disability Cultural Center of San Francisco, San Francisco LightHouse Little Learners program, American Printing House for the Blind, and graduates and faculty from the University of California Berkeley school of Optometry are frequently featured as guest lecturers.

While students in the SFSU VI program attend classes and complete their coursework online, on one weekend each semester students from across the state travel to the Bay area to gather and learn together in-person. During these face-to-face “lab weekends” students work together with their fellow classmates to practice hands-on assessment and instruction techniques in collaboration with students, faculty and staff from the California School for the Blind, the San Francisco LightHouse and other organizations dedicated to the Blind and Low Vision community in Northern California. Students are also required to attend two in-person courses, basic Orientation and Mobility (O&M) and assistive technology, both of which are week-long courses taught over the summer at CSB.

Many of the courses offered in the VI Program are also required for students that are earning their Certified Orientation and Mobility Specialist (COMS) credential from SFSU’s O&M Program. While San Francisco State University does not offer a dual certification program for students who are interested in

working as both a TSVI and a COMS, students that complete one of these programs are able to take advantage of an express re-enrollment process that enables them to immediately begin working on completing the second certification. As a result of this opportunity for expedited re-admission, many students from both the O&M and VI Programs are able to obtain both a TSVI and COMS credential without having to take a break from their studies. For those who wish to take their studies in the field of visual impairment even further, both the VI and O&M Programs at San Francisco State University offer additional research courses that enable students to earn a master's degree while simultaneously completing their internship or student teaching requirements in the final semester of the certification program. In addition, the SFSU Graduate College of Education maintains a joint doctoral program in collaboration with the University of California Berkeley for those students that are interested in pursuing a Ph.D. in Special Education with an emphasis in Visual Impairment.

One of the hallmarks of the SFSU VI Program through the years has been its involvement and partnerships with the Blind and Low Vision communities and organizations in Northern California. Perhaps one of the best examples of this type of community cooperation can be found each February when the SFSU VI Program collaborates with the California School for the Blind, San Francisco LightHouse Little Learners Program and California DeafBlind Services to host the

Lowenfeld-Akeson Early Years Symposium. This single day event brings nationally recognized professionals from both the medical and educational fields, as well as parents and family members, to the CSB campus to discuss innovations, strategies and issues related to the development of infants and toddlers who are blind, visually impaired, and DeafBlind. It is one of the few opportunities for many families in California to share their experiences with each other and with professionals from the fields of medicine, education and Early Childhood Intervention at the same time.

Figure 2

Lowenfeld-Akeson Early Years Symposium



This dedication to community and professional partnerships is set to grow even further in the coming years. Beginning in the 2026-2027 school year the SFSU VI Program has agreed to join with other organizations in Northern California to develop a Center on Cortical Visual Impairment (CVI) Collaboration. This project would build upon the existing relationships with CSB, Little Learners and the UC Berkeley College of Optometry by supporting professionals in the educational, early childhood and medical fields in the implementation of CVI screening and evaluation tools and instructional strategies. In addition, this collaboration will provide masters and doctoral students in the SFSU VI program the opportunity to participate in, and potentially present research on, CVI assessment and instruction with VI professionals from a variety of different professional disciplines.

From the braille curriculum and instructional aids developed by Sally and Phil Mangold, Fred Sinclair's work in distributing braille and talking book materials to blind and visually impaired students, and Phil Hatlen's contributions to the development and adoption of the Expanded Core Curriculum, graduates from the Program in Visual Impairment at San Francisco State University have been providing significant contributions to the field of blind and low vision education since its inception. In the 70 years since the first cohort of students began their teaching careers, the SFSU Program in Visual Impairments has

produced countless professionals that have made significant impacts for students, their family members and the profession of blind and low vision education.

Through ongoing partnerships, research, collaboration and practice, the current faculty, staff and students of the SFSU VI Program continue to lay the groundwork for the next 70 years of impactful contributions of VI professionals in California and beyond.

Figure 3

2026 Student Teachers & Faculty



Join the Braille Challenge Movement!

Over the last 26 years, Braille Challenge has become a worldwide movement. As the only academic program of its kind for students in grades 1-12 who are blind and visually impaired, the program has motivated students to practice and hone their braille literacy skills, which are essential to academic achievement, career opportunities, and lifelong independence.



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Bradley's Legacy: Bridging Lived Experience and Research in Parental Self-Efficacy

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My trajectory into the field of special education was deeply influenced by my son's birth in 1982. He was born with a trisomy so rare (resulting in Agenesis of the Corpus Callosum) that medical professionals could offer no guidance, and his initial prognosis was a survival period of only two weeks. This lack of information created a sense of isolation for our family, reflecting a time when interdisciplinary services in public schools was limited, especially where we lived in Nebraska. Despite the grim initial predictions that Bradley would never walk or speak, my son's life became a testament to the power of time, patience, and an abundance of understanding and love. His 41 years, 3 months and 7 days on earth left an indelible impression on everyone he touched, proving that he taught us far more than we could have ever taught him. This experience continues to drive my commitment to parental self-efficacy and supporting families navigating the complexities of deafblindness and other incidence disability challenges.

From a first-hand perspective, my early exposure to the concept of parental self-efficacy was grounded in four decades of lived experience navigating the healthcare system for a child with complex medical needs. My spouse and I spent extensive time in hospital and clinical waiting rooms, engaging in informal yet vital knowledge-sharing with other parents who, like us, were looking for information to enhance their children's quality of life. These interactions revealed that many families managed even more advanced or critical medical conditions than our own, highlighting a shared struggle for guidance. Through these interactions, several recurring themes emerged: the necessity of effective communication, the demands of long-term and continuous round-the-clock care, the prevalence of caregiver burnout, and the critical need for respite services and early intervention strategies. Personally speaking, it's important to note that although the terms caregiver burden or burnout are common in research literature, I do not believe they applied to our family, as we always considered Bradely to be a blessing from heaven. Academically, these experiences align with the definition of parental self-efficacy as a cognitive assessment of an individual's belief in their ability to successfully manage the multifaceted challenges and tasks associated with raising a child with exceptionalities. Such beliefs are essential, as they reflect the extent to which parents perceive themselves as capable of performing the varied tasks required in their unique caregiving roles.

The unexpected journey of raising a child with complex special needs, a path for which no parent can truly plan, served as the primary compass guiding both my spouse and I toward our professional careers in special education. My wife's trajectory was defined by deep interest in communication, leading her to become a certified educational interpreter, a deaf educator, and eventually the coordinator for the Deaf and Hard of Hearing Regional Programs for the State of Nebraska. I followed a parallel path into the field of deaf education, teaching both center-based and itinerant programs where my caseload often included children with Usher Syndrome, a reality that necessitated my additional certification as a Teacher of Students with Visual Impairments (TSVI) and a Supervisor of Special Education endorsement. Our effectiveness as professional advocates were significantly bolstered by our lived experience, as were walking the same path as the parents we served and could relate to their challenges with genuine empathy. After two decades of service in these capacities, I chose to return to the University of Nebraska- Lincoln upon learning of the Special Education Intervention Design PhD program, which offered a structured opportunity to bridge my practice with systemic research. My doctoral research is now dedicated to investigating parental self-efficacy among families of children with deafblindness, specifically addressing the isolation and uncertainty parents face when navigating a system that may often leave them feeling they have nowhere to turn. By focusing on this low-

incidence population, I aim to fill critical literature gaps and develop evidence-based strategies that empower parents to manage the multifaceted task of raising children with dual sensory loss and complex comorbidities.

Under the mentorship of esteemed faculty members including Drs. Makenzie Saviano, Michael Herbert, Derrick Rodgers, Marc Goodrich and Susan Lovall, this mentorship has facilitated my exposure to and involvement in scholarly projects ranging from aiding in research on teaching handwriting to children with visual impairments, a book review for art instruction for individuals who are blind or have low vision, as well as an Institute of Education Sciences supported research project through the University of Nebraska which explores writing instruction practices among K-12 teachers serving students with visual impairment in Nebraska. These experiences have deepened my commitment to advancing evidence-based practices within the fields of individuals with dual sensory loss.

A central component of my doctoral program has been serving as the project manager for the Nebraska Deafblind Project, a statewide initiative dedicated to supporting students with dual sensory loss. This role naturally aligns with my undergraduate and master's level training, and it provides a practical platform to apply my previous experience as an itinerant deaf educator and TSVI. In this capacity, I am privileged to help facilitate family engagement resources and

provide targeted technical assistance to school districts across the state, many of whom may be welcoming a student with deafblindness into their community for the very first time. A hallmark of this position is our annual Nebraska Deafblind Summer Institute, a multi-day workshop where invited experts provide intensive training on specialized communication and instructional strategies. Given the rural nature of Nebraska, many of our smaller communities often face professional isolation and may be unsure where to turn when navigating the unique challenges of a low-incidence population. Our institute bridges this gap by offering special education providers from all professional walks the opportunity for collaborative exposure to best practices and evidence-based teaching strategies. In a truly full-circle moment, I am now able to lend critical support to parents and educational professionals who find themselves in a position of need like the one my family faced in 1982. By transforming my personal lived experience into professional advocacy, I strive to ensure that every child with deafblindness and their family received the understanding and educational support necessary to thrive.

My current research dissertation study seeks to explore the nature of parental self-efficacy among the parents of children with deafblindness ranging from birth to 21 years of age, an inquiry aimed at determining what specific interventions can effectively enhance their confidence in providing comprehensive care. Through my literature review efforts, I have discovered a profound scarcity of information

concerning this subject, particularly regarding how parental involvement and confidence directly intersect with the unique developmental trajectories of these children. Leveraging my position as project manager of the Nebraska Deafblind Project, I have been able to network with peers across the United States to gather a dataset from the families that they serve, focusing on key variables such as special education self-advocacy, perceived social support and broader attitudes toward dual sensory losses and disabilities in general. At this writing, I am beginning the data cleaning process with the definitive goals of defending this study in the early fall of 2026, marking a significant milestone in my academic and professional journey.

Looking beyond my dissertation, I plan to continue my research within the family sphere, specifically pivoting to explore the often -overlooked sibling-related aspects of families raising a child with a low-incidence disability. This interest is deeply rooted in my personal experience as parent in a family equation where the intensive needs of one child can easily eclipse the individual needs, wants and aspirations of their siblings. Research suggest that typically developing siblings often experience unique pressures such as growing up faster, as a result of a family dynamic where parental time and resources are disproportionately allocated. I am particularly interested in employing a mixed-method research approach to

understanding both the short-term and long-term psychological consequences of this unique sibling relationship.

Ultimately, my work is a continuation of the unexpected journey that began with the birth of my son. Every research question I pose and every family I support is a tribute to the lessons he taught me during his life. As a parent who has navigated the same landscape of uncertainty and hope, I remain steadfast in my mission to enhance the lives of parents raising children with deafblindness. The challenges may be complex, but the goal is simple: to ensure that no family ever feels they have nowhere to turn, honoring the legacy of the son who remains my greatest inspiration.



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- **[For Families](#):** Find support and resources for families of children who are blind or low vision.
- **[For Job Seekers & Employers](#):** Find employment information, tools, and guidance for job seekers who are blind or low vision or for employers who work with individuals who are blind or low vision.
- **[VisionAware](#):** Designed for adults and seniors who are living with vision loss.
- **ConnectCalendar:** For use by the entire blindness field to find and promote events, all in one place. [Promote and share](#) your organization's event by adding it to the Calendar or [discover upcoming events](#).
- **[APH ConnectCenter Transition Hub](#):** Planning for graduation and life after school brings up a lot of questions. Find information about transition programs that emphasize empowerment, career exploration, and work experiences for teens and young adults who are blind or low vision.



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For those who do not have a Facebook account, you can view our page by going to the following URL:
<https://www.facebook/pages/Division-on-Visual-Impairments-and-Deafblindness/248244976215>