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Conceptual Paper for Re-Validating the Teacher of Deafblind and Intervener Competencies

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Conceptual Paper for Re-Validating the Teacher of the Deafblind and Intervener Competencies

Division on Visual Impairments and Deafblindness (DVIDB)

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Learners who are Deafblind

Individuals who are deafblind are part of a small disability group of great diversity. Deafblindness may be congenital or adventitious, with leading causes being prematurity and hereditary syndromes. According to the 2017 National Child Count of Children and Youth who are Deaf-Blind, nearly half of the 10,000 identified children have either a moderate-severe, severe, or profound hearing loss. Nearly 60% are legally blind or have low vision, and about 10% have light perception only or total blindness. Eighty-seven

percent of the children have one or more additional disabilities (2017 National Child Count of Children and Youth who are Deaf-blind; Nelson & Bruce, 2019). It is critical that educational teams understand the impact of deafblindness and the implications for programming and staffing. It is not possible to understand the impact of deafblindness on an individual's learning by adding the impact of the visual impairment to the impact of the hearing loss. Vision and hearing are the two distance senses that are most important to learning. They interact with one another and support and verify the perceptions of the other. Without either distance sense intact, opportunities to access information and to learn through observation are greatly reduced. The impact of deafblindness on learning is sometimes described as multiplicative (Nelson & Bruce, 2019). In addition, many children who are deafblind experience health and physical issues that challenge their engagement in the classroom.

Students who are deafblind receive educational services in a continuum of education placements based on Individual Education Program team decisions. Such placements include the general education setting, special classes located in general education settings, separate schools or classes that serve children who have severe disabilities, or who are deaf/hard of hearing, blind/visually impaired, or deafblind. Other

placements include residential schools, and hospital or home settings (Nelson, Bruce, & Barnhill, in press). Because students who are deafblind may be served in various settings that are situated in different service delivery systems, both teachers of the deafblind and interveners also provide services in these diverse contexts, including some home and community-based environments, and are sometimes paid through different systemic funding streams.

If students who are deafblind are to fully partake in their educational programming, professionals from multiple disciplines should obtain knowledge about deafblindness and its implications. They must also share disciplinary knowledge across all collaborative team members. Such disciplines include Orientation & Mobility Specialists, Physical Therapists, Occupational Therapists, Speech and Language Pathologists (Therapists), Augmentative and Alternative Communication specialists, Adaptive Physical Education Specialists, Teachers of Students with Visual Impairments, Teachers of Students who are Deaf/Hard of Hearing, Audiologists, Interpreters, and Interveners (Nelson, Bruce & Barnhill, in press).

Two distinct levels of teaching personnel have been identified as particularly valuable to the education of children of who are deafblind. The

Teacher of the Deafblind (TDB) and the paraprofessional Intervener (Parker & Nelson, 2016; *What Every Special Educator Should Know, 2015).* While currently recognized in few states, the TDB fulfills many important roles in the education of children who are deafblind. The TDB can serve as a classroom teacher or as an itinerant teacher who visits many classes containing children who are deafblind. The TDB is charged with collaboratively assessing the needs of children who are deafblind and then making sure that the assessments are appropriately used in the development of individual education programs (IEPs). The TDB also helps to coach other team members to understand the interplay of deafblindness with each of the other disabilities so that educational opportunities can be maximized (Parker & Nelson, 2016). An intervener is typically a paraprofessional who has received specific training in deafblindness but who works under the direction of a licensed professional to help provide the child with access to the environment that he or she cannot hear and/or see, provide access to communication, provide experiences that lead to concept development, provide emotional support and help others interact with the child who is deafblind. In some instances, interveners who have earned professional credentials as interpreters are recruited to meet the specific communication needs of students who are deafblind (National Consortium

on Deafblindness, 2012). In most cases, this support is provided in one-on-one fashion (Nelson, Bruce, & Barnhill (in press); Parker & Nelson, (2016); What Every Educator Should Know, 2015). Critically, Interveners should receive initial and ongoing training and coaching from a TDB (Parker & Nelson, 2016).

Standards for the role of TDB had their genesis in a partnership between the Hilton Perkins Foundation and several university partners. The group came to consensus that there were seven major categories of knowledge and skills needed by professionals in deafblindness: (a) deafblindness, (b) personal identity, relations, and self-esteem, (c) communication, (d) hearing and vision) (f) orientation and mobility, (g) environment and materials, and (h) professional issues. Lead authors, McCletchie & Riggio, 1997, aligned these with CEC Common Core Knowledge and Skills for all beginning special education teachers in 1997. In 2009, the CEC Division on Visual Impairments and Deafblindness initiated competency efforts for both TDB and Interveners (Zambone & Alsop, 2009). In 2015, both the TDB and Intervener knowledge and skills sets were organized according to the current 7 guiding standards rather than the prior 10 (Parker & Nelson, 2016).

The role of interveners and the process of intervention for individuals who are deafblind were developed in Canada in the 1970s (National Consortium on Deaf-Blindness, 2012). John McInnes and colleagues described an intervener as one who provides consistent access to communication, environmental information, and social supports to promote the full inclusion of individuals who are deafblind, both children and adults. Canada sustains both higher education and professional development models for preparing interveners to work in home, community-based, and school settings. In the United States the role of the intervener has been cultivated and recognized in specific local and state educational and community systems for children and youth who are deafblind. Like Canada, the U.S. has intervener preparation programs at universities as well as state professional development approaches to support personnel to become interveners (National Consortium on Deaf-Blindness, 2012).

In 2009, the Division on Visual Impairment and Deafblindness developed competencies for interveners that aligned with the Council for Exceptional Children's paraprofessional general competencies (Zambone & Alsop, 2009). The development of the CEC's competencies was informed by the work of the National Intervener Taskforce and the work of state

partners who had adopted and were cultivating the model (Zambone & Alsop, 2009).

In 2011, the Office of Special Education Programs (OSEP) directed the National Consortium on Deaf-Blindness to develop recommendations for improving intervener services in the United States. After systematic engagement with the community, a review of relevant documents, structured focus groups, interviews, and surveys, a set of recommendations was published that was meant to provide guidance to community partners including state deafblind projects, family organizations, universities, and advocates (NCDB, 2012). One of the key recommendations centered on the development of an open-access multimedia set of modules that could be used to design comprehensive intervener training programs or used in pieces to provide greater equity and access for rural and remote communities to support the practice of intervention. Over the course of five years, 27 multimedia modules were developed using a highly participatory approach that involved cycle of development, field-testing, refinement, revision and release for state and university adoption (Parker, et. al, 2017). Since their release, a national certification system has also been developed to recognize interveners who

have been prepared using a university-based approach or a state personnel development system.

The field of deafblindness has seen many changes in practice as well as advances in technology and research. It has been ten years since the last significant revision of the knowledge and skills sets, and the Division of Visual Impairment and Deafblindness proposes to reexamine the sets with an eye on evidence-based practices in the field presented below.

Evidence-based Practices in Deafblindness

Ferrell, Bruce, and Luckner (2014) reviewed research in 12 topical areas in deaf/hard of hearing, visual impairments, and deafblindness for the Collaboration for Effective Educator Development, Accountability, and Reform (CEEDAR) Center, University of Florida. They calculated the level of evidence for each identified evidence-based practice (EBP)) as being emerging, limited, moderate, or strong, according to the evidence level definitions provided by the Center. Since that time, the evidence levels of some practices have been recalculated and are reflected in this document. These EBPs are intended to guide practice, while also suggesting future research needs. Information on the studies that correspond to each identified EBP and the definitions of levels of evidence can be found in the above document. Given the small size of the population and its great

heterogeneity, it is often impossible to construct experimental designs that are associated with higher levels of evidence.

Early identification

Early identification is essential to providing appropriate augmentation of hearing and vision and individually appropriate early educational programming (Anthony, 2016; Parker, McGinnity, & Bruce, 2012). Early identification requires professionals to identify the vision and hearing losses, and to understand the eligibility criteria for identification of deafblindness, including that most children who are deafblind have some functional vision and/or hearing and additional disabilities. EBPs in early identification and early intervention are at the emerging level of evidence (relying primarily on professional literature) and include: the need for early identification and intervention to reduce the impact of deafblindness on development, the role of collaborative teams to develop highly individualized programming, supporting caregivers to improve responsiveness, establishing predictable routines in the home, and adults providing responses that are contingent on the child's performance (Ferrell, et al., 2014).

Assessment

Appropriate instructional programs are grounded in comprehensive assessment conducted by individuals who are familiar with the child, deafblindness, and the instruments and procedures being used (Ferrell, et al, 2014; Bruce, Luckner, & Ferrell, 2018**)**. Comprehensive assessment includes ongoing evaluation of student performance, the instructional program, and environments (Riggio & McLetchie, 2008). Dynamic approaches, such as the van Dijk approach to assessment, are important to understanding how the child learns in the context of new and familiar activities (Nelson, van Dijk, McDonnell, & Thompson, 2002; Nelson, van Dijk, Oster, & McDonnell, 2009). EBPs in assessment are at the emerging level (relying largely on practitioner literature) and include the following recommendations: the use of informal assessment instruments and procedures (not just formal instruments); conduct assessments across environments; early childhood assessment should identify family needs and strengths; and conduct functional hearing assessment, functional vision assessment, and learning media assessments. Additional EBPs are to use person centered approaches to assessment; individually select assistive technologies based on assessment; align accommodations stated in the IEP with those used in the classroom and in assessment; assess the

visual, auditory, and tactile characteristics of each environment and their potential impact on the learner; and use caution when identifying additional disabilities because the diagnostic criteria for the additional disability may not be appropriate for children who are deafblind (Bruce, Luckner and Ferrell, 2018; Ferrell, et al., 2014; Geenens, 1999; Nelson, Bruce, & Barnhill, in press; Nelson, van Dijk, Oster, & McDonnell, 2009).

Communication

Communication development is central to educational programming for children who are deafblind. Communication intervention is highly individualized and occurs in the context of daily activities in their natural contexts (Bruce & Borders, 2015). Van Dijk's child-guided approach has been adopted internationally with emphasis on the establishment of trusting relationships, anticipatory and memory strategies, coactive movement routines, and dialogues (Janssen, Riksen-Walraven, & van Dijk, 2003; Parker, McGinnity, & Bruce, 2012). Ferrell et al. (2014) identified the following EBPs in communication, specific to deafblindness, that have a moderate level of evidence: application of the systematic instructional approach to increase the child's rate of expressive communication, increase vocabulary, and increase the variety of intents/functions expressed; tangible representations/symbols as a communication form for

individuals who are prelinguistic; tactile approaches and strategies (including touch cues, tactile signs and tactile sign language); and coaching adults to improve responsiveness (Bruce, Nelson, Perez, Stutzman, & Barnhill, 2016). Additionally, there is limited evidence for van Dijk's child-guided approach for improving dialogue, likely due to the relative difficulty in conducting studies on its efficacy.

Instructional Programming

Communication intervention grounds all educational programming for children who are deafblind (Parker, McGinnity, & Bruce, 2012; Parker, Davidson & Banda, 2007). Thus, the EBPs in communication are applicable across all instructional programming efforts. The field of deafblindness has adopted an expansive definition of literacy that extends beyond the traditional definition that includes reading, writing, and spelling to also include communication, language, participation in literacy events, and the application of technologies to support conversations (Bruce & Borders, in press; McKenzie, 2009; McKenzie & Davidson, 2007). Literacy lessons include story boxes, daily schedules, authentic choice-making, experience books, and interactive journals (Ferrell, et al., 2014; Luckner, Bruce, & Ferrell, 2015/2016). These literacy lessons are both individualized (including the selection of appropriate instructional targets, modification of

materials, and the use of individually selected assistive technologies) to meet the child's needs, and personalized (about the child and his/her lived experiences; Bruce, Janssen, & Bashinski, 2016). There is a dire need for research on EBPs in every content area of instruction. Research in math and science from the field of visual impairment, suggest the following EBPs that require further research involving participants who are deafblind: consider the child's experiences, vocabulary, and need for curricular modifications, adaptations, and accommodations in science and math; and provide direct instruction on the use of mathematics equipment and specialized approaches in math instruction, such as mental math (Ferrell, et al., 2014).

Social-Emotional

The area of social-emotional learning includes consideration of both the individual's strengths and needs in interacting with others and in responding to environmental demands. Social-emotional development includes forming attachments, developing and maintaining friendships, and the abilities to self-regulate and self-monitor (Hartshorne & Schmittell, 2016). Individual strengths might include a sense of humor, patience with others, and initiation of problem-solving skills when faced with a difficult situation. Unacceptable behaviors may result from pain, lack of sleep,

limited communication skills (and the associated frustration), the environment (both physical and social, including the responses of others), sensory sensitivities and needs, anxiety, and characteristics of a specific syndrome (Hartshorne, Stratton, Brown, Madhavan-Brown, & Schmittel, 2017; Hartshorne & Schmittel, 2016). There is a moderate level of evidence for the impact of deafblindness on behavior and for the application of behavioral principles (such as differential reinforcement of other behaviors, contingency awareness, and token economies) in behavioral intervention. Other EBPs are at the emerging level, although they have been more extensively researched with other disability populations, including: identify reason for unacceptable behavior through functional behavioral assessment, teach communicative behaviors to replace unacceptable behaviors, and knowledge of how changes in the curriculum, environment, and adult responses to unacceptable behaviors may positively impact child's behavior (Ferrell, et al., 2014).

Transition

Transition planning should be based on a vision of what constitutes a quality of life for the individual who is deafblind, including aspects such as residence, relationships, community engagement, work, leisure, medical and physical needs, and finances (Zatta & McGinnity, 2016). Petroff,

Pancsofar, and Shaaban (2019) found that higher reading and problem-solving skills were associated with placement in inclusive settings in secondary education and with more positive post-graduation outcomes. Additionally, research in intellectual disability suggests a positive relationship between employment experiences in secondary education and post-graduation employment, an area in need of more research in Deafblindness (Ferrell, et al., 2014). Although there is extensive practitioner research on the application of Personal Futures Planning to youth who are deafblind, research evidence is at the emerging level.

Complementary Roles of Teachers of the Deafblind and Interveners

Teacher of Students who are Deafblind and Interveners are responsible for implementing aspects of the evidence-based practices in similar and divergent ways based on their roles. Currently, the CEC identifies interveners as paraprofessionals in educational and community-based systems; while teachers function as professionals with associated responsibilities such as assessment and creating appropriately designed, student-centered instructional programs.

Like the roles of educational interpreters, interveners may, in the future, be categorized as professionals but that projection is beyond the

scope of this competency revision process. Interveners provide essential supports to students with deafblindness in accessing people and information in the world around them. The first challenge of students who are deafblind is having consistent access to communication partners that recognize their communicative initiations and respond throughout their day. Like teachers of students who are deafblind, interveners must possess specific competencies to appropriately support students in diverse contexts.

Proposed Professional Roles

Teacher of Students who are Deafblind: Responsibilities and Competencies

Teachers of students who are deafblind are special educators with specialized preparation specific to deafblindness that allows them to:

- Identify children who are deafblind to support the provision of appropriate augmentation of vision and hearing, and early individualized intervention services (Anthony, 2016; Parker, McGinnity, & Bruce, 2012).
- Apply knowledge about the implications of each child's etiology (such as impact on health, vision, hearing, and social-emotional well-being) when planning and implementing individualized

educational programming (Bruce, Nelson, & Stutzman, in press; Hartshorne & Schmittel, 2016).

- Support families to develop routines for the child and high levels of responsiveness, (Ferrell, et al., 2014), and provide them with resources in deafblindness.
- Implement tangible representations/symbols when appropriate to a specific child (Ferrell, 2014; Bruce & Borders, 2015; Rowland & Schweigert, 1989; 2000).
- Implement tactile approaches and strategies, including learning through touch, tactile signs/sign language, and tangible representations/symbols when appropriate for a specific child (Chen, Downing, & Rodriguez, 2001; Ferrell, et al, 2014; Miles, 2003; Nelson, Bruce, & Barnhill, in press; Rowland & Schweigert, 1989, 2000).
- Conduct comprehensive assessments of the child, environments (including the visual, auditory, and tactile characteristics), and educational programs (Bruce, Luckner, & Ferrell, 2018; Ferrell, et al., 2014).
- Interpret medical vision and hearing reports, functional vision and hearing reports, and learning media assessments, and

support members of the educational team to understand the implications of these reports on educational programming (Ferrell, et al, 2014).

- Conduct comprehensive assessments using formal and informal assessment approaches and instruments, including the child-guided approach, person centered planning, functional behavior assessment (Rowland, Stillman & Mar, 2010).
- Use coaching of adults to improve the quality of communication (Janssen, Riksen-Walraven, & van Dijk, 2003a; Janssen, Riksen-Walraven, & van Dijk, 2003b; Damen, Janssen, Schuengel, & Ruijssenaars, 2015).
- Plan and implement communication interventions that are associated with the child-guided approach, including establishing trust, coactive movement routines, memory and writing strategies (Bruce & Borders, 2015; Ferrell, et al., 2014; Nelson & Bruce, 2019).
- Plan and implement communication interventions that are associated with the systematic instruction approach, especially to expand vocabulary, rate of intentional communication and varied intents of communication (Ferrell, et al., 2014; Bruce,

Nelson, Perez, Stutzman, & Barnhill, 2016; Nelson & Bruce, 2019).

- Plan and implement traditional and expanded literacy lessons that are individualized and personalized, including story boxes, choice-making experiences, the daily schedule/anticipation shelf/calendar system, experience stories/books and journals. (Ferrell, et al., 2014; Luckner, Bruce, & Ferrell, 2015/2016; Nelson & Bruce, 2019).
- Provide instruction 1:1 or in small groups to maximize access, engagement, opportunities to respond and for feedback (Bruce, Ferrell, & Luckner, 2016; Ferrell, et al., 2014).
- Serve as members of interprofessional collaborative teams (IPCP), the term recommended by the World Health Organization), to meet the complex needs of children and youth who are deafblind (Bruce & Bashinski, 2017; Ogletree, 2017).
- As part of the interprofessional collaborative team (IPCP) ensure that assistive technologies and accommodations are included in the IEP, used in daily practice, and in assessment (Bruce, Luckner, & Ferrell, 2018; Bruce & Bashinski, 2017).

- Transition planning, conducted by the IPCP, family, and friends should be based on a vision of what constitutes a quality of life for the individual who is deafblind, including aspects such as residence, relationships, community engagement, work, leisure, medical and physical needs, and finances (Zatta & McGinnity, 2016).
- Advocate for appropriate services and service delivery systems for children who are deafblind and support children and youth to participate as advocates/educators in their communities (Bruce & Parker, 2012).

Proposed Paraprofessional Roles

Interveners: Responsibilities and Competencies

Interveners for students who are deafblind are typically paraeducators with specialized preparation specific to deafblindness that allows them to:

- Provide 1:1 intervention varying the level and intensity of input to reinforce and support student engagement, self-regulation, and learning (Janssen, Riksen-Walraven, & van Dijk, 2002).
- Provide consistent access to instruction and environmental information that is usually gained by typical students through vision

and hearing, but that is unavailable or incomplete to an individual who is deafblind (Janssen, Riksen-Walraven, & van Dijk, 2003).

- Provide access to and/or assist in the development and use of receptive and expressive communication skills using multiple modes as preferred/needed by the student (Rowland & Parker, 2014)
- Facilitate direct learning experiences (Janssen, Riksen-Walraven, & van Dijk, 2003).
- Use touch to supplement auditory and visual input to convey information (Janssen, Riksen-Walraven, & van Dijk, 2004).
- Facilitate the individual's use of touch and other senses for learning and interaction (Chen, Downing, Rodrigues-Gil, 2001; Miles, 2003).
- Embed communication, language, and concept development into routines and meaningful activities (Rowland & Parker, 2014).
- Facilitate the development and maintenance of trusting, interactive relationships that promote social and emotional well-being (Janssen, Riksen-Walraven, & van Dijk, 2003; van den Tillaart et. al, 2014).
- Provide support to help a student form relationships with others and increase social connections and participation in activities (Hunt, Alwell, Farron-Davis, & Goetz, 1996).

- Follow the student's IEP and the modifications and instructional techniques recommended by transdisciplinary team members (Grisham-Brown, Schuster, Hemmeter, & Collins, 2000).
- Foster student independence, self-determination, and internal motivation.
- Recognize and support individual preferences, strengths, and learning styles (Parker, Davidson & Banda, 2007).
- Support students they use and maintain amplification, cochlear implants, and assistive listening devices as directed (Stremel & Malloy, 2006).
- Support students as they use and maintain glasses, low vision devices and prostheses, as directed (Clyne, Wolfe, Blaha, & Hertzog, 2015).
- Make adaptations for the cognitive and physical needs of the individual, recognizing the impact of additional disabilities on individuals with deafblindness
- Utilize strategies that promote independent and safe movement and active exploration of the environment (Joffee & Rikhye, 1991; Parker, 2017).

- Participate in IEP meetings and student staffing meetings, as needed (Kennedy et. al., 2014).
- Share observation and communication data with the educational team (Rowland & Parker, 2014).
- Adhere to the intervener code of ethics, including confidentiality (Kennedy et. al., 2015).
- Utilize teaming skills, sharing observation data with the individualized education team about the student's needs as appropriate (Kennedy et. al., 2014).
- Interact with families as directed

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