



READ Act Deaf, DeafBlind, Hard of Hearing Working Group

Report to the Legislature

As required by Minnesota Statutes, chapter 115, article 3, section 6, subdivision 3

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Legislative Charge

Laws of Minnesota, 2023, chapter 55, article 3, section 6.

READ ACT DEAF, DEAFBLIND, AND HARD OF HEARING WORKING GROUP.

Subdivision 1.

Working group purpose.

The Department of Education must establish a working group to make recommendations on literacy training, screeners, and curriculum for students who cannot fully access sound-based approaches such as phonics.

Subd. 2.

Members.

The Department of Education must appoint representatives from the Center for Applied Research and Educational Improvement at the University of Minnesota; the Minnesota Commission of Deaf, DeafBlind and Hard of Hearing; the Minnesota State Academies; Metro Deaf School; intermediate school districts; regional low-incidence facilitators; a Deaf and Hard of Hearing teacher licensure preparation program in Minnesota approved by the Professional Educator Licensing and Standards Board; and teachers of students who are deaf, deafblind, or hard of hearing.

Subd. 3.

Report.

The working group must review curriculum, screeners, and training approved under the Read Act and make recommendations for adapting curriculum, screeners, and training available to districts, charter schools, teachers, and administrators to meet the needs of students and educators who cannot fully access sound-based approaches. The report must address how approved curriculum, screeners, and training may be modified and identify resources for alternatives to sound-based approaches. The working group must post its report on the Department of Education website and submit the report to the legislative committees with jurisdiction over kindergarten through grade 12 education no later than January 15, 2025.

Subd. 4.

Administrative provisions.

(a) The commissioner, or the commissioner's designee, must convene the initial meeting of the working group. At the first meeting, the department must provide members of the working group information on structured literacy and the curriculum, screeners, and training approved under the READ Act.

(b) Members of the working group are eligible for per diem compensation as provided under Minnesota Statutes, section 15.059, subdivision 3. The working group expires January 16, 2025, or upon submission of the report to the legislature under subdivision 3, whichever is earlier.

Introduction

The Minnesota Department of Education (MDE), in collaboration with the Minnesota Commission of Deaf, DeafBlind and Hard of Hearing (MNCDHH), statewide Deaf, DeafBlind, Hard of Hearing (DHH) districts, and the University of Minnesota's (UMN) DHH teacher preparation program, has responded to the Reading to Ensure Academic Development (READ) Act to address the specific needs of Deaf and Hard of Hearing (DHH) students.

The workgroup began meeting in September with an overview of structured literacy and the READ Act, which was presented by MDE, and then continued to convene through December 15 to determine recommendations for the use of screeners, curriculum, and professional development for Deaf and Hard of Hearing (DHH) and DeafBlind (DB) populations. They reviewed the current MDE approved screeners, professional development options, and the highly aligned curricular resources in order to provide feedback and recommendations. This collaborative effort emphasizes alternative, non-sound-based reading strategies, as evidence shows that DHH children can learn to read successfully through such approaches.

The report highlights three key areas for recommendations: screening, curriculum, and professional development. It advocates for the use of screeners that assess both language and literacy to cater to individual needs, the adoption of diverse, non-sound-based reading curricula, and the development of specialized professional development for DHH educators, including those who are DHH themselves.

The working group, while focusing on students unable to fully access sound-based approaches, also recommends the creation of additional working groups to address the needs of students with other low-incidence disabilities. These students require educators with specialized knowledge and skills to ensure they receive a free and appropriate public education. The report calls for the development of future legislation to better serve DHH students, supporting both their language development and literacy skills through flexible, evidence-based educational approaches.

Analysis

Report Considerations - Screening, Curriculum, and Professional Development (Deaf and Hard of Hearing)

Recommendations – Screeners (Deaf and Hard of Hearing)

Modifications: Due to the nature of vendor psychometrics and norming, modifications are not allowable for the screeners. Districts need to follow the administration guidelines provided by the vendor.

Adaptations: The approved screeners with accommodations should be used if the team determines it is appropriate. Due to the accommodations being slightly different for each screener, the workgroup recommends

that the Minnesota Department of Education (MDE) creates a document to inform teachers which accommodations are allowable. For example, extended time is not allowable on a Dynamic Indicators of Basic Early Literacy Skills (DIBELS) probe, but it is allowable on portions of early Reading.

Oftentimes, districts are testing Deaf and Hard of Hearing (DHH) students without consulting with Teachers of the DHH students. To determine if an assessment is appropriate or not, the workgroup recommends that a teacher of the DHH must be consulted for students who are Deaf and Hard of Hearing. They also recommend the Individualized Education Program (IEP) team use a [Determination of Screener for Deaf and Hard of Hearing Students Flow Chart](#) as a guiding tool. IEP documents should have a place to mark this determination similar to the Minnesota Comprehensive Assessments (MCAs) to ensure the discussions are happening annually and documented.

The workgroup would like to see the Teacher of DHH students determine who is the best adult to administer the screener based on the student's language related needs. This determination should be stated in the IEP.

It should be noted that the working group did not come to a final consensus on the recommendations on the role of the IEP team in making a decision. Some group members recommended that the decision be deferred to the DHH teacher to make the determination if there was no consensus between the DHH teacher and IEP team.

Alternatives: An alternative screener (Body of Evidence) should be used when DIBELS and FastBridge are deemed inappropriate. The workgroup recommends the creation of a focus group of DHH teachers who teach reading, DHH reading and language researchers, and DHH teacher preparation professors to finalize a Body of Evidence Approach. This approach would include expanded language, chosen essential standards through a deaf and hard of hearing lens for each grade level assessed, review in relation to American Sign Language Standards, and provide examples specific to our populations (Example: What does phonemic awareness look like in American Sign Language). The Body of Evidence approach uses the Minnesota State Standards and the approved READ Act screener subtests to guide what kind of evidence to collect.

Non-standard administration of the READ Act approved subtests should only be looked at within a body of evidence approach. Any non-standard administration of assessment tools should be viewed with caution and boundaries of modification best practices should be provided. The workgroup provided an example starting document ([DRAFT Example of Body of Evidence for Kindergarten](#)) based on the Colorado READ Act Pathways for Screening: [Differentiated Pathways and Students with Disabilities](#)

Additionally, the Local Literacy Plan template should include the alternative screener (Body of Evidence) along with DIBELS and FastBridge in its dropdown list of screener options.

The Screening Tool Review Criteria should be updated to include an accessibility check for Web Accessibility Content Guidelines (WCAG) 2.2 levels of accessibility and be vetted for concepts accurately captioned. The cycle of review should be as often as the general education screening process is reviewed.

A focus group needs to be created to determine if language screeners exist for DHH or to create an alternative language screener to meet the forthcoming oral language screening READ Act requirements that would be appropriate for Deaf and Hard of Hearing students. This focus group should be developed in collaboration with licensed DHH teachers who teach reading including those who are DHH themselves and research experts in DHH reading and language including those who are DHH themselves.

For additional consideration, if a general education student scores as high risk on the reading and language screener, we recommend that the student have their hearing and vision screened before interventions are discussed in order to rule out hearing, vision or combined loss. Not all districts provide hearing and vision screening any longer.

The workgroup also requests that all Professional Development from screening vendors have professional captioning (not auto caption), and that legislation expands the definitions of phonological awareness and other terminology, including both spoken and signed languages ([Expanded Definitions and Examples](#)).

Recommendations – Curriculum (Deaf and Hard of Hearing)

Modifications: The group is not focused on modifying a sound-based program to meet the needs of students who are Deaf and Hard of Hearing at this time. The focus is on adapting resources from the highly aligned curricular resources list.

Adaptations: The workgroup recommends that the [Rubric](#) for reviewing curriculum be more inclusive with terms that encompass students who cannot fully access a sound-based approach ([Expanded Definitions](#)) and that all approved curriculum and intervention programs be screened for WCAG 2.2 accessibility and suggestions for accessibility be provided to the vendors. All currently approved curriculum programs must have consistent professional captioning throughout (not auto caption) and that captioning is vetted for accuracy of the concepts addressed.

Alternatives: The workgroup provided a [list of alternative curriculums](#) created for Deaf and Hard of Hearing populations sorted by pillars of literacy. These alternative curriculums could be used at any point, when deemed appropriate, by DHH teachers as each individual student's literacy skills evolve. It is also recommended that alternative curriculums created for Deaf and Hard of Hearing populations be included in allowable uses for READ Act allocations and that they should be posted on READ Act site as alternative curriculum options. Ideally there would be a tab or page stating: For Deaf or Hard of Hearing students, these curriculums were created for populations who cannot access sound based approaches, although other evidence-based curriculums can be used as well. These programs could also be helpful for other populations who struggle with the sound-based approaches.

The alternative curriculums listed have a varying evidence base. Research within the Deaf and Hard of Hearing field specific to literacy is emerging. With this low incidence population, there are very few resources created that are available to the field. We do not want to limit access to the few programs that exist created for our students who cannot fully access a sound-based approach. The workgroup reiterated that individual needs for Deaf and Hard of Hearing students be considered and that those individual needs may change over time. Additionally the group recommended that curriculum be reviewed annually by DHH reading teachers, DHH researchers, and DHH teacher preparation programs to make recommendations for any additional evidence based curriculum that may emerge and be added to the list.

The working group did not come to a final consensus about the wording of the specific population of students the alternative curriculums were created for.

The Local Literacy Plan template should include a box for describing the alternative curricula the local education agency is using for students who cannot fully access sound-based approaches.

Further recommendations include, school districts will consult with a Teacher of Deaf and Hard of Hearing when selecting new reading curriculums for district purchase, provide input on which curriculum or supplemental resources are appropriate and accessible for each individual student who is Deaf or Hard of Hearing, and the district in collaboration with the Teacher of Deaf and Hard of Hearing should review literacy curriculum/resources annually to ensure the individual needs of Deaf and Hard of Hearing students are being met as student needs evolve and to consider new students who may move into the district.

Additionally, teachers of Deaf and Hard of Hearing students should provide regular literacy instruction and interventions based on individual needs while collaborating closely with teachers/staff providing or supporting reading instruction.

All future rubrics for choosing curriculum, including any future created rubrics to focus on interventions, should include an accessibility check for *WCAG 2.2* levels of accessibility and be vetted for concepts accurately captioned and the READ Act should include members of the Deaf, Hard of Hearing and DeafBlind Working Group within the ongoing review of literacy materials on a state level.

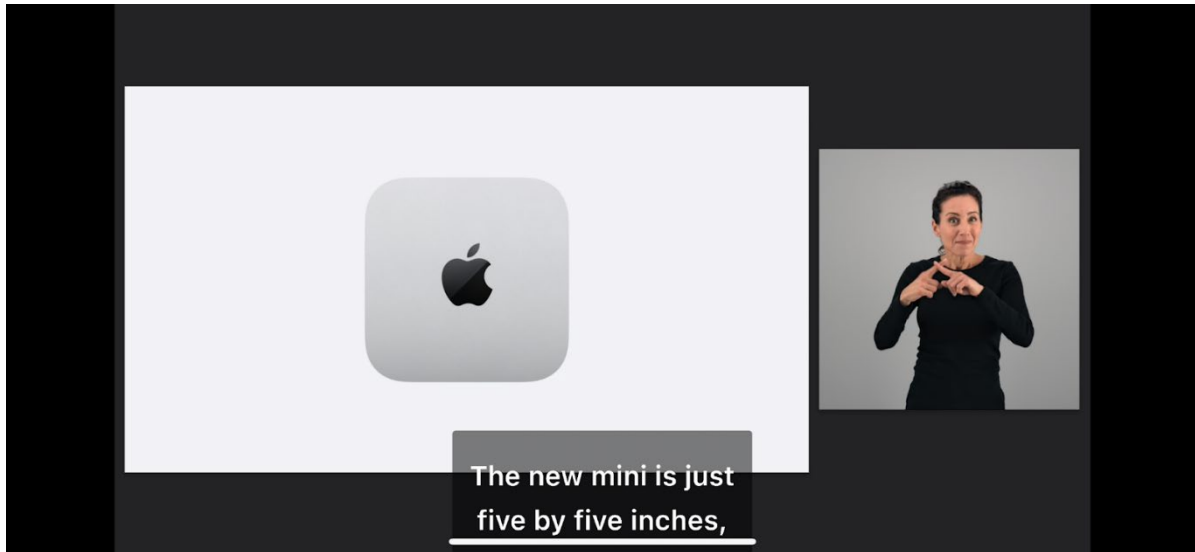
Recommendations – Professional Development (Deaf and Hard of Hearing)

Modifications: The professional development offerings need to offer additional guidance about each aspect of the science of reading that is an alternative for sound-based, providing guidance for Deaf and Hard of Hearing populations. The additional professional development should be in a similar on demand module webinar training format as the approved professional development and be developed in collaboration with researchers who are experts (see list of potential researchers to partner with at the end of this document) in alternatives to sound-based approaches for teaching students who are Deaf, and Hard of Hearing.

Researchers in the field of Deaf education have expressed concerns regarding how the literacy pillars apply to deaf and hard of hearing learners. It is recommended that professional development programs include targeted considerations of these specific issues raised in the research. Examples of additional training needed for each pillar of literacy as supported by research in the field of Deaf education:

- Access - provide a visual representation and use strategies such as but not limited to Cued American English, Fingerspelling, visual phonics, American Sign Language (ASL) Phonological Awareness, etc.
- Modifications for assessment and classroom application related to alternatives to sound-based approaches for Deaf and Hard of Hearing individuals (teachers and students) to pass the current assessments/expectations
 - Teachers - How to modify sound-based assessment questions; Example: How many phonemes in the word fox?
 - Students - How to modify classroom practices for sound-based activities with students

Adaptations: To begin, all currently approved professional development programs must be screened for WCAG 2.2 accessibility, and suggestions must be provided to the vendors. Deaf and Hard of Hearing educators across the state have reported participation within the approved READ Act training programs have been difficult to access the content intended even with captions. It is recommended that all approved programs have an option for American Sign Language Interpretation of the content in addition to captioning and that the interpreter is visually large enough to view the signing in the recording. All captioning should be professionally done and vetted for concepts and content and be large enough to see, without blocking content of the presentation, with color contrast that is visually accessible. Example:



Consider offering cohorts for Teachers of Deaf and Hard of Hearing to go through the professional development program together

Alternatives: The professional development offerings need to offer an alternative foundational science of reading training. We recommend connecting with the approved vendors to create a synthesized and shortened training of targeted content from the approved programs to ensure all teachers have a basic understanding. This revised version of the initially approved trainings would allocate professional development time for the Teacher of Deaf or Hard of Hearing students to learn a foundation of the general education science of reading and allow more time for continued learning in the training specific to Deaf and Hard of Hearing populations. It should be offered in a similar on demand module webinar training format as the approved professional development courses.

We suggest partnering with the approved READ Act Professional Development Program offerings to create an alternative synthesized training.

- **CAREIALL:** Advancing Language and Literacy (CAREIALL) has been an active member of the working group and provided our group members with access to their program without hesitation
- **Online Language and Literacy Academy (OL&LA)** has been in contact with the working group, but even with several emails and connections over months, there was a significant wait time for access as they

were just able to provide access to their program to our group to review in December, not leaving much time for the working group members to consider for our populations

- **Language Essentials for Teachers of Reading and Spelling (LETRS)** has not been a responsive partner, even with several emails and connections over months, LETRS has not yet provided the working group with access to their program for review

The alternative professional development should be developed in collaboration with researchers who are experts (see list of potential researchers to partner with at the end of this document) in alternatives to sound-based approaches for teaching students who are Deaf and Hard of Hearing to ensure the training does not deny the existence of those who do not use a sound-based approach to reading.

In order to support the instructional and unique needs of DHH students, any educator (general education/reading instructors/special education case managers, etc.) responsible for supporting reading instruction must participate in the additional professional development specific to this student population in conjunction and collaboration with the Teachers of Deaf and Hard of Hearing and should have the open opportunity to take additional professional development without financial penalty in order to expand their knowledge base as a professional.

Professional Development for Instructional Support Staff (paraprofessionals) should include the same accessibility standards as the approved programs and should also include additional guidance for those working with students who cannot fully access sound-based approaches.

A thorough survey of Deaf and Hard of Hearing teachers should be completed explicitly requesting information on the demographics of the educator and further information about each aspect of the READ Act (Screening, Curriculum, Professional Development). This survey should be created in conjunction with researchers in Deaf Education at the University of Minnesota. The data collected from this survey would be used to support next steps.

Appendix A provides a list of DHH Researchers of Literacy who have addressed language and literacy development in deaf individuals in the past 10 years in their scholarly work. Bolded are the names of deaf researchers who are more actively engaged with this topic and hearing researchers who are fluent in American Sign Language, deeply immersed in deaf communities, and who approach their work on deaf literacy through a deaf-centric lens.

Report Considerations - Screening, Curriculum and Professional Development (DeafBlind)

Combined hearing and vision loss (deafblindness) was included in the READ Act's requirement to establish a Deaf, Hard of Hearing, and DeafBlind Working Group to make recommendations on literacy training, screeners, and curriculum for students who cannot fully access sound-based approaches such as phonics.

In addition to not having full access to sound-based approaches, students who have combined hearing and vision loss (deafblindness) are unable to rely on vision to fill in the gaps that those who are Deaf or Hard of Hearing with typical sight (Sighted) do. They are also unable to rely on hearing to fill in the gaps that those who are Blind or Visually Impaired with typical hearing (Hearing) do. DeafBlind students thus miss much more

inferential linguistic, environmental, social and curricular information than those Sighted students who are Deaf or Hard of Hearing. This impacts their access to speechread clearly and fully, receive American Sign Language at a conversational or instructional pace, filter or see in a visually cluttered setting, observe and overhear peers and others when practicing or working with information and materials. Therefore, special consideration needs to be given to what they actually do access through residual hearing and vision.

It is also important to understand that deafblindness is not total deafness and total blindness (1% of the DeafBlind population) but any combination of hearing and vision loss that meets [eligibility criteria for special education services under the Minnesota Deaf/Hard of Hearing and Blind and Visually Impaired categories](#).

Within that student population (birth to age 22), approximately 80-85% of DeafBlind students have additional disabilities which complicate receiving and expressing language, communication and responses, which may include, but not be limited to, physical disabilities, developmental and cognitive disabilities.

Despite these complexities, students with combined hearing and vision loss (deafblindness) are included in the READ Act literacy expectations. Special education educators, literacy instructors and administrators must understand the unique and significantly more complex challenges that students with both hearing loss and vision loss (deafblindness) experience when being screened and instructed with alternative curricula for Sighted Deaf and Hard of Hearing students, as well as general education literacy curricula for Hearing and Sighted or Hearing and Blind or Visually Impaired students.

The heterogeneity of students who are DeafBlind is multitudinous with some consistent themes. Combinations of different types and levels of vision and hearing are significant. It is critical that Individualized Education Program (IEP) teams review the evaluation and IEP information to determine the impact of deafblindness on the student's access to materials and instruction and review IEP accommodations to determine if they are comprehensive and current in their applicability to literacy instruction. This heterogeneity also includes the full spectrum of spoken and sign languages.

For students who are DeafBlind (combined hearing and vision loss), both Teachers of Deaf and Hard of Hearing and Teachers of the Blind and Visually Impaired must be consulted to determine the complex access and language needs for screening and curricula. Prior to testing IEP, accommodations should be reviewed to determine the student's access to printed materials (e.g., font size, color contrast and spacing) or the need for tactile access (e.g., braille). If the DeafBlind student's language of instruction and communication is American Sign Language (ASL), then visual access, including clothing/skin contrast as well as speed and distance of signing and fingerspelling must be also considered.

The DeafBlind student's access to spoken language, including access to speechreading, cued speech, and placement and facial expressions, should include fluency of receptive and expressive language skills. If the DeafBlind student uses an Alternative Augmentative Communication (AAC) device, the visual accessibility must also be determined and accommodations made for both visual and auditory access.

Screening

For DeafBlind students, the IEP team should determine who is the most appropriately trained staff person to administer the screener based on the student's hearing, vision and language-related needs. Due to the

complexity of combined hearing and vision loss, it is important that the person administering the screener be familiar with the DeafBlind student and their accessibility and processing time needs.

For students who are DeafBlind (combined hearing and vision loss), Teachers of Deaf and Hard of Hearing in collaboration with Teachers of the Blind and Visually Impaired along with the Individualized Education Program (IEP) manager and/or Special Education Teacher must be consulted to determine the access and language needs. A review of the IEP accommodations or consideration of amended accommodations for screener access and literacy instruction is recommended prior to testing. The visual and auditory accessibility of Augmentative and Alternative Communication (AAC) devices for input and response must also be reviewed for students who use them.

Curricular Resources

Modifications: The current working group is not focused on modifying sound-based curricular resources to meet the needs of students who have both hearing and vision loss (deafblindness).

Accommodations: The [Rubric](#) for reviewing curriculum needs to be updated to be more inclusive with terms that encompass students who cannot access or have limited access to a typical sound-based and sight-based approach. For students with combined hearing and vision loss (deafblindness), this may include challenges to accessing both sound-based and print-based approaches.

All currently approved curriculum and soon to come intervention programs must be screened for *WCAG 2.2* accessibility, and suggestions for accessibility must be provided to the vendors. They must have consistent professional captioning throughout (not auto-caption) and needs to be vetted for accuracy of the concepts captioned. Curricula for students with combined hearing and vision loss (deafblindness) and additional disabilities should include multiple presentation formats, such as paper with enlarged print, Braille, tactile, and not solely digital.

Alternatives: Although alternative curricula might be accessible for sighted Deaf and Hard of Hearing students, they might be not accessible for DeafBlind students without accommodations for vision and physical access. Consequently, [Alternative curricula that are available for Deaf and Hard of Hearing students](#) should be reviewed by both Teachers of the Blind and Visually Impaired and Teachers of Deaf and Hard of Hearing to determine accessibility for DeafBlind students, especially those who use ASL. [Alternative Literacy Curricula for DeafBlind Students with Complex Disabilities](#) should be considered for those DeafBlind students who have additional disabilities that include, but are not limited to, developmental and cognitive, health and physical disabilities. [Literacy Resources for Students Who Are DeafBlind](#) is a compilation of literacy resources that include students who have additional disabilities as well as those who may access the general education curriculum alongside Sighted Deaf and Hard of Hearing and/or Hearing Sighted and Blind and Visually Impaired peers.

Recommendations: For DeafBlind Students with complex needs, a team of professionals, including Teachers of Blind and Visually Impaired and Teachers of Deaf and Hard of Hearing, in collaboration with other Special Education Teachers with licenses such as developmental cognitive disabilities and physical impairments, need to provide input on which curriculum or supplemental resource is appropriate and review accessibility and accommodations needed for each individual student who is DeafBlind.

For DeafBlind students who are accessing the general education curriculum in the same setting as hearing and sighted peers, accessibility should be determined by the Teacher of Deaf and Hard of Hearing and the Teacher of Blind and Visually Impaired.

For DeafBlind students who are accessing alternative curricula with the language of instruction being American Sign Language in the same setting as Deaf and Hard of Hearing sighted peers, accessibility should be determined by the Teacher of Deaf and Hard of Hearing and the Teacher of Blind and Visually Impaired.

The district, in collaboration with the Teacher of Deaf and Hard of Hearing and the Teacher of Blind and Visually Impaired, should review literacy curriculum/resources annually to ensure the individual needs of DeafBlind students are being met as student hearing and vision levels may fluctuate, needs evolve and to consider new students who may move into the district.

All future rubrics for choosing curriculum, including any future created rubrics to focus on interventions, should include an accessibility check for WCAG 2.2 levels of accessibility and be vetted for concepts accurately captioned.

Professional Development

Alternatives: Additional Professional Development training needs to be developed to align with the above alternative approaches to meet the needs of educators instructing students who are DeafBlind and should be in a similar on demand module webinar training format as the approved professional development. It should be developed in collaboration with researchers who are experts in literacy and deafblindness (e.g., Center for Literacy and Disabilities Studies with support from the Minnesota DeafBlind Project and the National Center on DeafBlindness etc.) and in alternatives to sound-based approaches combined with vision loss when teaching students who are Deafblind.

Recommendations: Since teachers may not be familiar with the lack of access and thus needs of DeafBlind students who experience multiplicative impacts including access to auditory and visual information as well as the need for instruction to consider pacing, processing time and background information, teachers of DeafBlind students should be made aware of and access resources available from the Minnesota DeafBlind Project. Any educator (general education/reading instructors/special education case managers, Teachers of Deaf and Hard of Hearing and Teachers of Blind and Visually Impaired) working with students who are DeafBlind, and responsible for supporting literacy instruction must participate in the additional professional development and should have the open opportunity to take additional professional development specific to students who have combined hearing and vision loss (deafblindness) without financial penalty to expand their knowledge base as a professional.

School districts may consult with and receive free technical assistance from the Minnesota DeafBlind Project when selecting new literacy curricula for DeafBlind students.

Conclusion

Modifications, Accommodations, and Alternatives for Deaf and Hard of Hearing persons:

Screeners

When using screeners with accommodations, it's essential to create a document to inform teachers about the allowed accommodations, as these can vary depending on the screener. Both language and reading screeners should be considered and Teachers of Deaf and Hard of Hearing (DHH) should be consulted to determine whether assessments are appropriate for DHH students, as this step is often overlooked. A flowchart can help guide the IEP team's decision-making regarding assessments for these students. Additionally, IEPs should include a section to document accommodation decisions, ensuring they are reviewed and discussed annually, similar to how accommodations are recorded for the Minnesota Comprehensive Assessments (MCAs).

Curriculum

The group is currently not focused on adjusting sound-based programs for Deaf and Hard of Hearing (DHH) students, but there is a push to update the rubric for reviewing curricula to better include students who cannot fully access sound-based learning. This includes screening all curricula and intervention programs for WCAG 2.2 accessibility and ensuring that professional, accurate captioning is used instead of auto-captioning. A list of alternative curricula for DHH students is provided, though consensus on the specific student population for these programs has not been reached. These alternative programs should be included in READ Act funding, despite their emerging evidence base.

Recommendations include consulting with Teachers of Deaf and Hard of Hearing when selecting curricula, tailoring literacy instruction to individual student needs, and collaborating with other educators. Curriculum rubrics should include accessibility checks and ensure accurate captioning. The READ Act should involve DHH reading research experts to review literacy materials, and districts should work with DHH teachers and the UMN DHH teacher preparation program to annually review and update literacy resources to meet students' evolving needs. Overall, the goal is to ensure curricula are accessible, inclusive, and continuously evaluated to meet the needs of DHH students.

Professional Development

Current professional development (PD) programs need to be adapted to better accommodate Deaf and Hard of Hearing (DHH) learners and educators, particularly in areas focusing on sound-based approaches.

An alternative, condensed version of existing PD programs should be created for Teachers of Deaf and Hard of Hearing, providing a basic understanding of the science of reading while dedicating more time to specialized Deaf education training. This PD should be developed with Deaf literacy experts to ensure inclusion of non-sound-based reading approaches. Additional PD focused on the science of reading for DHH populations should be offered in an on-demand, module-based webinar format and incorporate visual literacy strategies such as Cued American English, fingerspelling, and ASL phonological awareness.

PD should be accessible to all educators working with DHH students without financial penalties and in collaboration with Teachers of Deaf and Hard of Hearing. The Instructional support staff professional learning should also include specific guidance for working with students who cannot access sound-based approaches. All PD programs should meet accessibility standards, including accurate captioning and ASL interpretation. These adaptations should include accessibility features like WCAG 2.2 standards, American Sign Language (ASL) interpretation, and professional captioning for all training content.

A survey of the DHH education field is recommended to gather demographic data and feedback on the READ Act's components, in collaboration with Deaf education researchers. This comprehensive approach aims to ensure PD for educators working with DHH students is accessible, effective, and based on the latest research in Deaf education.

Modifications, Accommodations, and Alternatives for DeafBlind persons:

Screeners

IEP teams should ensure that appropriately trained staff are selected for screening DeafBlind students, considering their specific accessibility and processing needs. Teachers of Deaf/Hard of Hearing and Blind/Visually Impaired must collaborate to assess the students' access to language and literacy needs.

IEPs should be reviewed to ensure accommodations are in place for visual and auditory access, including considerations for ASL and AAC devices. Additionally, students' needs regarding print materials, such as font size, color contrast, and spacing, as well as tactile access like Braille, must be thoroughly evaluated.

Curriculum

Curriculum rubrics should be updated to better include students with combined hearing and vision loss (deafblindness), ensuring that all curricula and intervention programs meet WCAG 2.2 accessibility standards. Professional captioning must be accurate and consistent across all materials. Curricula for DeafBlind students should incorporate multiple formats, such as Braille, tactile, and enlarged print, and should not rely solely on digital formats. Collaboration between Teachers of Deaf and Hard of Hearing and Blind and Visually Impaired is essential to address the complex access and language needs of DeafBlind students.

A team of professionals, including specialized teachers, should collaborate to select and review curricula for DeafBlind students, ensuring accessibility and addressing individual needs. Annual curriculum reviews should be conducted to accommodate changing needs and varying levels of vision and hearing.

Alternative curricula for Deaf and Hard of Hearing students should be reviewed for accessibility for DeafBlind students, particularly those who use ASL. Additionally, alternative literacy curricula for DeafBlind students with additional disabilities should be considered. Support for implementation of this curricula should align with these alternative approaches and be developed in collaboration with literacy and DeafBlindness experts. Literacy resources for DeafBlind students should include both general education materials and specialized resources for those with additional disabilities. Rubrics for curriculum selection must always include checks for accessibility and ensure the accuracy of captioning.

Professional Development

Educators working with DeafBlind students should receive specific training to enhance their literacy instruction. Professional development opportunities on DeafBlind education should be offered without financial barriers. The Minnesota DeafBlind Project is a state-wide resource that may provide technical assistance for selecting new curricula.

These recommendations provided by the DHH and DB Working Group seek to provide a comprehensive approach that ensures educators working with Deaf, Hard of Hearing and DeafBlind students have accessible, effective, and grounded practices informed by the latest research in Deaf education.

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Appendix A – DHH Researchers of Literacy

Names that are bolded with an asterisk are the names of deaf researchers who are more actively engaged with this topic and hearing researchers who are fluent in American Sign Language, deeply immersed in deaf communities, and who approach their work on deaf literacy through a deaf-centric lens.

Deaf Researchers of Literacy

Carol Padden
Tom Humphries
Marlon Kuntze*
Carrie Lou Garberoglio
Stephen Nover
Michael Skyer*
Andrew Byrne
Heidi MacGlaughlin
Hannah Dostal*
Julie Mitchiner
Leala Holcomb*
Ashley Greene
Natalie Delgado
Melissa Herzig*

Deaf-Centric Hearing Researchers of Literacy

Debbie Golos*
Jessica Scott*
Kimberly Wolbers
Maribel Garate
Rachael Gabriel*
Michele Berke*

Hearing Researchers of Literacy Completing Research with Deaf and Hard of Hearing Children

Stacey Tucci
Karen Erickson

Deaf Researchers of Language

Wyatte Hall* (Language deprivation)
Marla Hatrak (Language deprivation and language development)
Julie Rems Smario (Language deprivation and language development)
Tom Humphries (Language deprivation and language development)
Poorna Kushalnagar* (Language deprivation and language development)
Peter Hauser* (Language and cognition and ASL assessments)
Raylene Paludneviciene (ASL Assessments)
Stephanie Cawthon (Alternative accommodations in assessments)

Deaf-Centric Hearing Researchers of Language

Matt Hall* (Language Deprivation)

Jessica Scott (Language Development)

Naomi Caselli* (Language Development)

Mary Diane Clark (Language Development)

Charlotte Enns* (Language Assessments)

Diane Lillo-Martin (Bi-Modal Language Development)

Jenny Singleton (Language Impairments / Disorders)

Mary Diane Clark (Language Development)

Kristin Secora (Speech Language Pathologist)