



# Professional Knowledge and Skills Standards:

## Initial Specialty Set: Blind and Visual Impairments

## Explanation Document

This document contains an explanation for each of the standards in the Blind and Visually Impaired Knowledge and Skills set for initial teacher preparation. It was created through a group effort and reflects the thinking of more than 15 teacher educators who provided feedback on the explanations for each of the standards that had been approved by the Council for Exceptional Children. It is our hope that this document provides clarity into the interpretation and meaning behind each standard.

This document is dedicated to the memory of Dr. Deborah Hatton. It was by her leadership and vision that we have standards that are updated and informative for our personnel preparation programs. She also wanted to ensure that our field was united in the interpretation and understanding of each standard and therefore, this document was created.

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| *Strand 1: Learner Development and Individual Learning Differences* | |
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| Knowledge | |
| **BVI.1.K1** | **Development of the human visual system and areas of the brain involved in processing visual images** |
| | Candidates must be prepared to explain the way vision develops and how disorders of the brain or eye may interfere in seeing and processing visual images, including being able to identify the different parts of the eye, areas of the brain involved in visual processing, and visual development. |
| **BVI.1.K2** | **Most prevalent causes of severe, uncorrectable visual impairment in children and youth ages birth to 22** |
| | Candidates must be prepared to readily identify severe, uncorrectable causes of visual impairment, including but not limited to cortical/cerebral visual impairment, optic nerve hypoplasia, and retinopathy of prematurity. The key words here are “severe” and “uncorrectable” as these are the conditions that necessitate the intervention of a TVI. It may also be necessary to identify conditions that are less severe but that have significant educational impact.<br><br>The most prevalent conditions are described in:<br>Hatton, D. D., Ivy, S. E., Boyer, C. (2013). Severe visual impairments in infants and toddlers in the United States. Journal of Visual Impairment & Blindness,107(5), 325-336. |
| **BVI.1.K3** | **Terminology related to diseases and disorders of the human visual system, including cerebral/cortical visual impairment** |
| | Candidates should especially take note of ocular and neurological visual impairment and the unique, complex issues associated with each type of condition as it pertains to the human visual system and its use for gathering information. |
| **BVI.1.K4** | **Implications of prevalent visual conditions** |
| | Candidates must be prepared to plan, implement, and monitor appropriate intervention based on specific visual conditions, functional use of senses, and child and family characteristics. To do so, candidates must have basic knowledge of specific visual conditions, the implications of these conditions for development and learning, and appropriate accommodations and modifications. |

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| **BVI.1.K5** | **Sensory development and its impact on development and learning when vision is impaired** |
| | Candidates should be aware of the development of children without visual or other impairments and how children with visual impairments differ; the implications on sensory development and its impact on learning are vital as children with visual impairments are unable to learn incidentally through vision. |
| **BVI.1.K6** | **Impact and implications of sociocultural/psychosocial factors on social-emotional development** |
| | Candidates must be prepared to explain these different factors as they pertain not only to the child, but to his/her family and their reciprocal impact on one another. |
| Skills | |
| **BVI.1.S1** | **Accurately read, interpret, and summarize eye reports and serve as liaison to families and other members of the educational team to individualize services** |
| | No additional explanations are needed. |
| **BVI.1.S2** | **Select and develop assessment and teaching strategies, accommodations and modifications that address age, visual impairment, family values and priorities, visual prognosis, and other individual characteristics** |
| | Other individual characteristics may include, but are not limited to, individual characteristics of the child's visual impairment, varying levels of visual functioning, additional disabilities and medical conditions, the child's cultural and linguistic background, and competence in the various areas of the core and Expanded Core Curriculum. |
| **BVI.1.S3** | **Use nonvisual/alternate strategies to promote attachment, early communication/literacy, orientation and mobility, and independence to address the effects of visual impairment on families and the reciprocal impact on individuals' self-esteem** |
| | Candidates must be prepared to address these issues at a very early age to ensure that the child with visual impairment is able to develop to his/her full potential. Families of children with visual impairments typically need additional guidance and intervention with attachment (to promote healthy bonds and relationships), early communication/literacy (to promote reading, writing, and learning), and orientation and mobility (to promote independent travel); these are all necessary to the promote independence as the child develops. |

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| **BVI.1.S4** | **Select, adapt, and use nonvisual/alternate instructional strategies to address co-occurring disabilities and other individual characteristics** |
| | Other individual characteristics here may include, but are not limited to, individual characteristics of the child's visual impairment, additional disabilities, varying levels of visual functioning, and competence in the various areas of the core and Expanded Core Curriculum. Nonvisual/alternative instructional strategies may include auditory and/or tactile strategies, as well as engaging the other senses. |
| ***Strand 2: Learning Environments*** | |
| Knowledge | |
| **BVI.2.K1** | **Physical and virtual environmental factors that impact the acquisition of spatial and positional concepts, access to and synthesis of data visualizations, and other concepts typically acquired through vision** |
| | Candidates must be prepared to clearly articulate environmental factors that mitigate the acquisition of spatial and positional concepts for students with visual impairments, including students with neurological visual impairments who are working toward improved vision using planned supports, such as factors that impact accessing print at near and distance, visual efficiency, using optical and non-optical devices, using technology and assistive technology, the use of other senses (e.g., proprioceptive, olfactory, and gustatory), and the role of listening skills, auditory cues, and tactile sense in facilitating the development of physical and virtual environmental concepts typically acquired through vision. |

| Skills | |
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| **BVI.2.S1** | **Identify and implement physical and virtual environmental accommodations and modifications to facilitate optimal sensory use and multisensory access to, and active participation in, individual and group activities in general and expanded core curriculum environments** |
| | Candidates must be prepared to demonstrate the ability to identify and implement accommodations and modifications for students with visual impairments, including students with neurological visual impairments who are working toward improved vision using planned supports, such as development of methods for accessing print at near and distance, the use of visual efficiency skills, the use of optical and non-optical devices, the use of widely used technology, the use of other senses (e.g., proprioceptive, olfactory, and gustatory), and specifically designed assistive technology, and the use of listening, auditory cues, and tactile sense in facilitating learning in the general and expanded core learning environments. |
| **BVI.2.S2** | **Collaborate with team members to design and implement environments that promote optimal sensory use, foundational orientation and mobility skills, independence, social engagement, and efficient storage of specialized materials** |
| | No additional explanations are needed. |
| **BVI.2.S3** | **Identify unique issues specific to visual impairment for accessing digital multimedia and virtually built environments** |
| | Because digital content is dynamic and impermanent, students with visual impairments have difficulty with digital media and virtually built environments, therefore candidates must be prepared to demonstrate the ability to assess students, explore and configure needed technology, and instruct students using a wide range of technology and specifically designed assistive technology that enable students with visual impairments to consume, produce, and interact with dynamic digital content. |

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| **BVI.2.S4** | **Use ergonomics and appropriate technology settings aligned with students' preferred learning media and low tech strategies to support ubiquitous computing to promote access to the general and expanded core curriculum** |
| | Candidates must be prepared to use ergonomics and appropriate technology settings aligned with students' preferred learning media and low tech options, such as illumination and size control, color and contrast (visual) settings, speech output (auditory) settings, switch access, braille input/output and other tactual displays, and mouseless computing (tactile) settings to support universal computing that promotes access to the general and expanded core curriculum. |
| **BVI.2.S5** | **Facilitate incidental learning experiences to address nonvisual access to physical and virtual environments** |
| | Candidates must be prepared to use explicit methods to facilitate incidental learning experiences through encouragement of directive and nondirective explorations of physical and virtual environments and access to print and other school-based materials located throughout classrooms and school environments. |
| **BVI.2.S6** | **Evaluate social skills and design behavior strategies for learners with visual impairments to maximize positive social engagement and interaction across environments** |
| | Candidates must be prepared to use social skills instruction and behavior strategies, such as social stories and presentation of different scenarios and exploration of role based solutions in online environments (e.g., social networking groups that facilitate social skills) and in-person environments. |
| **BVI.2.S7** | **Teach developmentally appropriate human guide, self-familiarization with new environments, protective, and alignment techniques for independent travel to promote safety across environments** |
| | No additional explanations are needed. |
| **BVI.2.S8** | **Teach orientation skills using environmental features, self-advocacy for optimal environmental accommodations and modifications, including requesting and refusing assistance as needed** |
| | No additional explanations are needed. |

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| **BVI.2.S9** | **Teach nonvisual and alternate strategies for promoting digital citizenship and secure online practices** |
| | Candidates must be prepared to use techniques to teach students to adapt to existing and new technology and to explicitly teach student safety online, including strategies for teaching social skills online and dealing with unwanted communication. |
| ***Strand 3: Curricular Content Knowledge*** | |
| Knowledge | |
| **BVI.3.K1** | **Relationship of individualized assessment, intervention planning/implementation, development of individualized education programs/individualized family service plans, progress monitoring, and placement specific to unique needs of visual impairment** |
| | No additional explanations are needed. |
| **BVI.3.K2** | **Advantages and disadvantages of a wide range of instructional and assistive technologies specific to visual impairment** |
| | Candidates must be prepared to clearly articulate the pros and cons of both low-tech and high-tech assistive technologies, including, but not limited to, bookstands, optical devices, electronic magnification systems, mainstream technologies with built in accessibility tools, mobile applications, braille notetaking devices, specialized and mainstream software, and emergent technologies.<br><br>Candidates must be prepared to clearly articulate the pros and cons of low-tech and high-tech communication systems, including but not limited to picture communication, tactile symbols, calendar systems, switches, and augmentative communication systems. |

| Skills | |
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| **BVI.3.S1** | **Demonstrate proficiency in reading, writing, proofreading, and interlining alphabetic and fully contracted Unified English Braille** |
| | Current proficiency recommendations are described in Lewis, D'Andrea, and Rosenblum (2012).<br><br>Lewis, S., D'Andrea, F. M., & Rosenblum, L. P. (2012). The development of accepted performance items to demonstrate competency in literary braille. *Journal of Visual Impairment and Blindness*, *106*(4), 197-211. |
| **BVI.3.S2** | **Demonstrate basic proficiency in reading and writing braille for mathematic and scientific notation and in using the abacus** |
| | Current proficiency recommendations are described in Smith & Rosenblum (2013).<br><br>Smith, D., & Penny Rosenblum, L. (2013). The development of accepted performance items to demonstrate braille competence in the Nemeth code for mathematics and science notation. *Journal of Visual Impairment & Blindness, 107*(3), 167–179. |
| **BVI.3.S3** | **Produce braille with brailler, slate and stylus, computer (including use of braille translation software), and braille production methods** |
| | Candidates must be prepared to produce developmentally appropriate and accurate braille materials for tactile learners within the academic and expanded core contexts. |
| **BVI.3.S4** | **Demonstrate basic proficiency in human guide, protective, alignment, and search techniques in orientation and mobility with developmentally appropriate modifications** |
| | No additional explanations are needed. |
| **BVI.3.S5** | **Identify specialized resources unique to visual impairment to address the specific communication needs of students with varied communication abilities, reading levels, and language proficiency** |
| | No additional explanations are needed. |

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| **BVI.3.S6** | **Develop, implement, and continuously monitor learning objectives and goals for optimizing sensory efficiency, developing concepts, and accessing the general and expanded core curriculum across settings** |
| | No additional explanations are needed. |
| **BVI.3.S7** | **Identify and adapt general education and visual impairment specific curricula for instruction of literacy, other academic areas, and the expanded core curriculum** |
| | Candidates must be prepared to demonstrate ability to adapt curricula for students with low vision, students who are blind, and students who have co-occurring disabilities so that the adaptations address the students' strengths, needs, and interests. |
| ***Strand 4: Assessment*** | |
| Knowledge | |
| **BVI.4.K1** | **Challenges of assessing students with visual impairments and co-occurring disabilities** |
| | Candidates must have knowledge of issues regarding reliability and validity of assessment, conducting assessments, determination of assessment tools, and interpretation of results. Candidates must also have knowledge of visual impairments, including neurological visual impairments. Co-occurring disabilities may include students with autism, deafblindness, physical disabilities, and intellectual disabilities. |
| **BVI.4.K2** | **Options for specialized assessment materials and equipment for unique sensory needs** |
| | Candidates must be familiar with the materials and equipment necessary for accurate assessment or evaluation of functional vision, learning media (e.g. print, braille, digital access needs), assistive technology, and expanded core curriculum. |
| **BVI.4.K3** | **Role of specialized, individualized assessment data unique to visual impairment for pre-referral, referral, annual, and tri-annual processes** |
| | No additional explanation needed. |
| **BVI.4.K4** | **Knowledge of federal and state requirements for eligibility and for timing of assessments** |
| | No additional explanation needed. |

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| **BVI.4.K5** | **Implications of short and long term use of accommodations and modifications unique to students with visual impairments** |
| | Use of accommodations and modifications have the potential to have short and long term implications related to college and career transition, future employment, and other post-secondary activities. It is important that candidates teach these implications to students so they can self-advocate. |
| Skills | |
| **BVI.4.S1** | **Interpret medical reports and multiple sources of data, including background information and family history, to plan and implement nondiscriminatory assessments** |
| | Candidates must be familiar with an array of assessment tools and the intended purpose of the tools and audience for whom they are most appropriate. Candidates must be prepared to select appropriate tools with consideration of additional disabilities, including autism, deafblindness, physical, and intellectual disabilities, as well as for students with neurological visual impairment. |
| **BVI.4.S2** | **Use multiple sources of valid information/data, including data from formal/informal assessments to evaluate the effectiveness of intervention, instruction, specialized media, materials, equipment, and the physical environment** |
| | Candidates must be prepared to develop an assessment plan that involves evaluation using multiple sources of data. Furthermore, the application of the standard should consider other populations, such as students with autism, deafblindness, physical, and intellectual disabilities, as well as students with neurological visual impairment. |
| **BVI.4.S3** | **Use valid assessment results and medical reports to determine eligibility for vision specific services, for students with and without specific visual diagnoses** |
| | Candidates must be prepared to interpret functional implications of medical information, including the potential impact of the medical diagnosis and pathology on functional vision, and convey the information using language free of jargon, and apply this information to eligibility requirements. |

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| **BVI.4.S4** | **Use valid assessment data and knowledge of the potential impact of visual impairment on psychosocial functioning to identify when referral for services is needed** |
| | Candidates must be familiar with typical and atypical development and the impact of a visual impairment on development, including psychological, emotional, and social implications related to visual impairment, and use this knowledge for referral of services as needed. |
| **BVI.4.S5** | **Adapt assessments when tests are not validated on individuals with visual impairments to determine baseline performance** |
| | Candidates must be prepared to adapt assessments that are provided to other students in various formats (including digital) and make them accessible to students with visual impairments, using currently accepted guidelines for these adaptations. Adaptations must retain construct validity of the intended purpose of the assessment for which adaptations were made and be described in assessment reports. |
| **BVI.4.S6** | **Identify assessment items and measures that are biased and make recommendations for non-visual or alternate accommodations and modifications** |
| | Candidates must be prepared to determine when assessment items and measures are experientially or visually biased due to the presence of a visual impairment, including neurological visual impairments. |
| **BVI.4.S7** | **Collaborate with team members and families to plan and implement assessment and interpret assessment results on issues specific to visual impairment** |
| | No additional explanation needed. |
| **BVI.4.S8** | **Conduct individualized functional vision, learning media, assistive technology and other expanded core curriculum-related assessments** |
| | Candidates must be prepared to conduct specialized assessments of children birth-22 years old, with and without additional disabilities, with consideration to ocular and neurological visual impairment. |
| **BVI.4.S9** | **Interpret and/or assess cognitive, motor, social, and language concepts unique to individuals with visual impairments** |
| | Candidates must be prepared to describe typical and atypical development and the impact of a visual impairment on development in these areas in order to assess them and interpret results. |

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| **BVI.4.S10** | **Use multiple sources of data to determine appropriate learning and literacy media (braille, print, or dual) and assistive technology** |
| | No additional explanation needed. |
| **BVI.4.S11** | **Interpret assessment results to determine individual needs to support acquisition of skills in the general and expanded core curriculum** |
| | Candidates must be prepared to describe typical and atypical development, including the scope and sequence of skill development while interpreting assessment results. Candidates must be prepared to link assessment results to appropriate instructional planning and interventions within both the general education curriculum and the ECC, while keeping in mind current and future needs. |
| **BVI.4.S12** | **Advocate for reasonable nonvisual and alternate accommodations and modifications on standardized assessments** |
| | No additional explanation needed. |
| **BVI.4.S13** | **Address limitations of standard scores and non-standard data when communicating visual impairment specific assessment data to educational teams and families** |
| | Candidates must be prepared to describe required state standardized and alternate assessments and the process for determining the need for alternate assessments. Candidates must be prepared to interpret assessment data, given the limitations of valid and reliable measures for students with visual impairments, including neurological visual impairments. |
| **BVI.4.S14** | **Assess accessibility needs of individuals who are visually impaired who are English learners or from diverse backgrounds** |
| | Candidates must be prepared to explain the language and literacy implications of being an English language learner, testing biases, and the impact of learning English on assessment results, and advocate for culturally relevant and/or bilingual testing for students with ocular and neurological visual impairments. |
| **BVI.4.S15** | **Use results of clinical low vision evaluation, functional vision, learning media, and assistive technology assessments to identify optimal assistive technology** |
| | No additional explanation needed. |

| *Strand 5: Instructional Planning & Strategies* | |
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| Knowledge | |
| **BVI.5.K1** | **Proper use and care of braille and braille production devices and technology equipment, including maintenance of devices and software updates** |
| | No additional explanation needed. |
| **BVI.5.K2** | **Importance of creating positive, productive learning environments that foster independence and student achievement, and that reduce the tendency of others to engender learned helplessness in learners with visual impairments** |
| | Candidates must be prepared to recognize the need to direct paraeducators and interveners, classroom teachers, and ancillary personnel to support students' direct engagement in learning and to facilitate self-determination. |
| **BVI.5.K3** | **Knowledge of evidence-based practices for teaching students with visual impairments** |
| | It may be necessary to include evidence-based practices that have been identified as effective for other populations, such as students with autism, deafblindness, and intellectual disabilities, and consider their application to populations of students with visual impairment, including those with neurological visual impairment. |
| Skills | |
| **BVI.5.S1** | **Develop, coordinate, and implement appropriate programs for infants and young children with visual impairment, including those with co-occurring disabilities, and their families** |
| | Candidates must be prepared to apply the CEC Division for Early Childhood Recommended Practices related to providing services to young children and their families, including the principles of family-based practices, providing services in natural environments and within daily routines, adult learning principles, learning characteristics of young children, and transdisciplinary teaming. |
| **BVI.5.S2** | **Obtain resources, including published curricula, for braille codes currently in use** |
| | Please see the Braille Authority of North America website (http://www.brailleauthority.org) for a list of braille codes currently in use. |

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| **BVI.5.S3** | **Use digital resources, hardware, and software to produce and access materials in accessible media including the conversion of print materials into braille, tactile, and/or digital formats** |
| | No additional explanation needed. |
| **BVI.5.S4** | **Teach varied visual, nonvisual, and multi-sensory devices, programs, and software to launch, navigate, save, and retrieve information on devices and local systems and online** |
| | No additional explanation needed. |
| **BVI.5.S5** | **Select and use various visual, nonvisual, multisensory, and adaptive methods to teach technology skills by integrating students' assessed needs into instructional methods for teaching sensory efficiency skills, use of learning media, individual keyboarding, reading, writing, editing, and listening skills** |
| | Candidates must be prepared to conduct or review assessment data, consider LMA needs, select relevant low-tech to high-tech options, and develop a plan to provide instruction in core and expanded core curriculum areas. Note that the phrase "individual keyboarding" includes other methods of input, depending on the needs of the student. |
| **BVI.5.S6** | **Plan and implement explicit instruction in assistive technology, including digital citizenship, that integrates students' ability to meet, manage, and advocate for their own needs** |
| | Candidates must be prepared to provide instruction so that their students can effectively use the Internet and other digital technology to participate appropriately and responsibly in social and civic activities. See http://www.digitalcitizenship.net/nine-elements.html |
| **BVI.5.S7** | **Integrate basic principles of accessibility to select, create, adapt, and format text, images, and media to promote usability and accessibility to meet the individual needs of students with visual impairments** |
| | Candidates must be prepared to make instructional materials and documents that are provided to other students in various formats (including digital) accessible to students with visual impairments, using currently accepted guidelines for these adaptations and based on their individual student's needs. |
| **BVI.5.S8** | **Provide systematic, explicit braille literacy instruction using embossed materials and digital technologies to meet individual needs** |
| | No additional explanation needed. |

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| **BVI.5.S9** | **Teach the use of the abacus, accessible calculator, tactile graphics, adapted equipment, and appropriate technology for mathematics and science instruction to meet individual needs** |
| | No additional explanation needed. |
| **BVI.5.S10** | **Teach students to access, interpret, and create increasingly complex printed and digital graphics in visual and/or tactile forms, including maps, charts, diagrams, and tables, based on individual needs** |
| | Because students with visual impairments must be prepared to not only access and interpret complex printed and digital graphics, but to create their own graphics, candidates must be prepared to teach these skills, being cognizant of the quality expected by national and state assessment bodies. |
| **BVI.5.S11** | **Teach students with low vision to use optical, electronic, and non-optical devices to optimize visual efficiency and independently use dual learning media such as visual and auditory information, or auditory and tactile information** |
| | Candidates need to possess knowledge and skills to assess, plan for, and teach students with visual impairments to optimize visual efficiency. They must be familiar with the characteristics of both ocular and neurological-based causes of visual impairment. For students whose low vision is related to neurological impairment, candidates must consider both their needs for vision habilitation and for developing non-visual strategies for accomplishing tasks when vision is inefficient. |
| **BVI.5.S12** | **Promote and reinforce sensorimotor and physical skills, including gross and fine motor skills, posture, balance, purposeful movement, and strength to meet individual needs unique to visual impairment** |
| | Candidates must be prepared to collaborate with other professionals who are focused on the development of motor and physical skills, including occupational therapists, physical therapists, orientation and mobility specialists, and physical educators. |

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| **BVI.5.S13** | **Teach basic orientation, body image, spatial, temporal, positional, directional, and environmental concepts based on individual needs to promote motor skill development, orientation and mobility, and academic and social inclusion** |
| | Although this standard applies to all students with visual impairments, for students with neurological-based impairments, special consideration may be needed for the development of orientation skills of students with dorsal stream dysfunctions; when the ventral stream is dysfunctional, attention may need to focus on movement through space. |
| **BVI.5.S14** | **Teach and reinforce human guide techniques to students with visual impairment, their peers, and others who interact with them** |
| | No additional explanation needed. |
| **BVI.5.S15** | **Orient students to unfamiliar environments** |
| | No additional explanation needed. |
| **BVI.5.S16** | **Reinforce skills taught by orientation and mobility specialists to support the use of mobility devices and dog guides, for orientation and mobility** |
| | No additional explanation needed. |
| **BVI.5.S17** | **Teach independent living and organization skills using alternate and nonvisual strategies** |
| | No additional explanation needed. |
| **BVI.5.S18** | **Teach social communication skills related to appropriate body language, non-verbal communication, and social etiquette** |
| | Collaboration with speech-language pathologists and other team members may be appropriate, depending on the needs of the student, when teaching social communication skills |
| **BVI.5.S19** | **Teach development and monitoring of relationships and friendships, and knowledge of self, including human sexuality** |
| | No additional explanation needed. |
| **BVI.5.S20** | **Teach skills usually acquired visually to develop and enhance participation in fitness/leisure/recreation activities, hobbies, and team and spectator sports to facilitate inclusion across settings** |
| | No additional explanation needed. |

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| **BVI.5.S21** | **Teach students to recognize and report behaviors that they may not perceive visually that may threaten their personal safety and well being** |
| | Candidates must have skills to teach students to identify potential threats to their personal safety in both real and online environments. For example, students must be taught to guard against and report unwanted touching by adults, how to safely use public and private transportation services, when to report inappropriate cyber-advances or bullying by individuals, and to recognize when they might be followed when traveling. |
| **BVI.5.S22** | **Teach students their legal rights and responsibilities related to being a citizen with a visual impairment** |
| | Among the skills that may need to be explicitly taught to students with visual impairments are those related to understanding the provisions of the Americans with Disabilities Act that may apply to their rights for equal access when using communication tools (including the internet) and when traveling, particularly with a dog guide, and the protections afforded to them when seeking housing or engaging in employment. |
| **BVI.5.S23** | **Prepare students with progressive visual conditions to transition to alternative skills** |
| | When planning and delivering instruction, candidates must be sensitive to the psychosocial issues related to progressive vision loss, as well as to the long-term needs that may result when students experience vision loss over time. |
| **BVI.5.S24** | **Collaboratively develop, implement, and continuously monitor communication goals, objectives, and systems for students with visual impairments and co-occurring disabilities** |
| | No additional explanation needed. |
| **BVI.5.S25** | **Select, adapt, and use nonvisual/alternate instructional strategies to address co-occurring disabilities** |
| | Candidates must be prepared to educate and work with the educational team to facilitate students' access to the curriculum and engagement in daily routines, taking into consideration various factors related to the students' visual functioning, among which include etiology, need for habilitation, acuity, fields, visual stamina, and so forth. |

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| **BVI.5.S26** | **Knowledge of a range of cost effective technological devices from low to high tech for the instructional needs specific to visual impairment** |
| | No additional explanation needed. |
| ***Strand 6: Professional Learning and Ethical Practice*** | |
| Knowledge | |
| **BVI.6.K1** | **Roles and responsibilities of teachers and support personnel in providing services for students with visual impairments in a range of settings** |
| | Candidates must be prepared to clearly articulate their role in providing services to students with visual impairments and to appropriately support students in residential, itinerant, resource room, general education, homeschool, and homebound/hospital settings. |
| **BVI.6.K2** | **Current knowledge of incidence and prevalence of severe, uncorrectable visual impairment in children and youth ages birth to 22** |
| | Candidates must be prepared to clearly articulate the approximate number of students with visual impairments in the US, citing estimations from the World Health Organization, national registry data, and the current number of students in his/her candidacy state. |
| **BVI.6.K3** | **Current knowledge of eligibility criteria for specialized services, funding, and materials sources specific to visual impairment** |
| | Candidates must be prepared to clearly articulate the qualifications for a student with visual impairments in their candidacy state. In addition, candidates must be prepared to clearly describe how to register a student for Quota Funds and materials provided through the NIMAC in their candidacy state. |
| **BVI.6.K4** | **Historical, political, and sociocultural forces unique to the education of students with visual impairments** |
| | Candidates need to clearly articulate the history, political, and socio-cultural forces that have influenced the education of students with visual impairments. Most notably, candidates should be aware of influential persons in the field found at the APH Hall of Fame and articulate a modified timeline of events in the field that stresses the major activities that shaped the education of persons with visual impairments to the present day. |
| **BVI.6.K5** | **Awareness of the impact of nonverbal reactions and behaviors that are not accessible to students with visual impairments** |
| | No additional explanations are needed. |

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| **BVI.6.K6** | **Role in determining and recommending appropriate type and amount of services based on evaluation of needs in all areas of the expanded core curriculum** |
| | Candidates must be prepared to clearly articulate his/her role in determining and recommending appropriate type and amount of services based on evaluation and assessments that are appropriate for children and use proper tools in determining type and amount of services in their candidacy state. |
| **BVI.6.K7** | **Current knowledge of laws that impact and protect individuals with visual impairments** |
| | Candidates must be prepared to clearly articulate federal and applicable state laws that protect the rights of persons with visual impairments. |
| **BVI.6.K8** | **Roles of all members of educational/vision care teams** |
| | Candidates must be prepared to describe the role of vision care team members, which may include optometrists, ophthalmologists, opticians, and low vision specialists. In addition, candidates should articulate the role of IEP team members required in their candidacy state. |
| Skills | |
| **BVI.6.S1** | **Develop and maintain professional learning and practice by actively participating in professional organizations** |
| | No additional explanations are needed. |
| **BVI.6.S2** | **Articulate instructional and professional philosophies and ethical practices to address the specific needs of students with visual impairment across settings including the expanded core curriculum** |
| | No additional explanations are needed. |
| **BVI.6.S3** | **Articulate and advocate for individual needs regarding placement, service delivery models, type and amount of service, and key components of services unique to visual impairment across ages and settings** |
| | No additional explanations are needed. |
| **BVI.6.S4** | **Advocate for reasonable nonvisual and alternate accommodations and modifications on standardized assessments** |
| | Candidates must be prepared to articulate the nonvisual and alternate accommodations and modifications needed for students with visual impairments in their candidacy state. |

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| **BVI.6.S5** | **Advocate for evidence-based educational policy related to visual impairment and low incidence disabilities** |
| | No additional explanations are needed. |
| **BVI.6.S6** | **Articulate a plan for maintaining continuous professional development to remain current on all areas of the expanded core curriculum, with particular attention to assistive and instructional technology, most prevalent causes of and medical treatments for severe visual impairment, and co-occurring disabilities** |
| | No additional explanations are needed. |
| **BVI.6.S7** | **Use tools for online engagement in communities of practice specific to visual impairment** |
| | No additional explanations are needed. |
| **BVI.6.S8** | **Evaluate and discern credible and scholarly sources of information about visual impairments, including knowledge of valid and reliable research techniques** |
| | No additional explanations are needed. |
| ***Strand 7: Collaboration*** | |
| Knowledge | |
| **BVI.7.K1** | **Role in conveying, to families and teams, information about the impact and implications of visual impairment on development and learning and access to the general and expanded core curriculum** |
| | No explanation needed. |
| **BVI.7.K2** | **Role in working collaboratively with families and teams for referral for counseling, therapy, or other services to address the unique needs of visual impairment** |
| | No explanation needed. |
| **BVI.7.K3** | **Role in increasing awareness of accessibility in physical and virtual environments and improving equitable access to information for families and the educational team** |
| | Classrooms now implement an increasing range of web-based and digital learning media, such as online curricula, learning management systems, and online portals for parents and students. Accessibility needs of these learning media must be communicated to families and educational teams to ensure that all students have equitable learning experiences. |

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| **BVI.7.K4** | **Importance of role models with visual impairment for a full range of individual learners across settings** |
| | Appropriate role models for a full range of individual learners may need to be identified based on age, visual functioning, use of sensory channel(s), types of preferred media, career interests, cultural and linguistic diversity that students represent, as well as types of assistive technology options utilized. |
| Skills | |
| **BVI.7.S1** | **Collaborate with educational team and families on service delivery issues unique to visual impairment** |
| | It is important that the range of educational placement options be available for students with visual impairments, including inclusive settings with no support, inclusive settings with itinerant support, resource room settings, specialized school settings, short term placement settings, combinations of different settings as appropriate. It is also necessary that families and the educational teams understand the differences between IEPs and 504 Plans. Candidates must be prepared to advocate for student placement options based on identified needs, not solely by the availability of programmatic resources. |
| **BVI.7.S2** | **Collaborate with technology and curriculum development staff on accessibility needs** |
| | Technology and curriculum development staff may include information and technology support personnel, certified assistive technology instructional specialists, academic coaches, standardized test developers, etc. |
| **BVI.7.S3** | **Serve as liaison between medical care providers, families, and other members of the educational team** |
| | No explanation needed. |
| **BVI.7.S4** | **Collaborate with vision care professionals to facilitate access to the general and expanded core curriculum** |
| | Vision care professionals may include medical personnel for eye care (optometrists, ophthalmologists, opticians) and low vision therapists. |
| **BVI.7.S5** | **Collaborate with families and orientation and mobility specialists to reinforce orientation and mobility skills and other expanded core curriculum skills** |
| | Candidates must be prepared to assist the child's educational team to reinforce diverse skills and reflect the needs of the child and the family across environments (e.g., home, school, community). |

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| **BVI.7.S6** | **Collaborate with families and other team members to plan and implement transitions** |
| | Transition can include evaluation, planning, services, implementations, and instruction on related skills. Transitions can be age-based, placement-based, or needs based such as from early childhood to school-based settings, school-based to postsecondary and/or community settings, education to employment settings, or changes of classroom placement or vision that impact learning needs. Recognition of family and transition priorities are critical to successful collaboration; adequate supports will be needed for the student and related services team. Collaboration partners can include (but not be limited to): Parents/guardians, student, related services providers, rehabilitation counselors as appropriate, administrator, school psychologist, family advocate, etc. |
| **BVI.7.S7** | **Instruct and supervise paraeducators, and provide information to families and the educational team in nonvisual strategies that promote independence and autonomy** |
| | Non-visual strategies may include information acquisition through multiple sensory channels, such as sight, touch, sound and body movement. Paraeducators might include teaching assistants, braillists, and interveners. Although paraeducators can be supervised by district/county personnel, paraeducators' training and student supports/services must be overseen by a teacher of students with visual impairments, candidates must be prepared for this role. |
| **BVI.7.S8** | **Instruct and supervise paraeducators and braille transcribers, and provide information to families and the educational team – on the production of accessible media** |
| | Accessible media includes braille, large print, audio, electronic documents, image and video descriptions, tactile graphics, and 3D models, etc. |

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| **BVI.7.S9** | **Collaborate with families and the educational team to promote literacy development** |
| | It is important to understand that literacy plans are determined by individualized student and familial needs as captured by a holistic evaluation process and use of multiple assessment tools that yield comprehensive data. These data could result from comprehensive functional vision, learning media, expanded core curriculum, and technology assessments. Literacy plans can include traditional print and/or braille media or non-traditional literacy media, such as tactile or picture symbols. Collaboration with families and the educational team are needed to identify the student's strengths, needs and priorities for instructional methods. |
| **BVI.7.S10** | **Collaborate with assistive technology professionals to identify and support customized tools to meet the accessibility needs of individuals with visual impairment** |
| | Accessibility needs may include student access and support for configuration and maintenance of assistive technology device(s). |