Concepts addressed:
Diversity and Exceptional Needs, and Supporting the Learning Environment: Creating a Developmentally Appropriate Setting: Structuring the environment to accommodate students with physical and emotional disabilities (e.g. placements of vision- and hearing-impaired students, space and paths for wheel chairs, children with challenging behaviors, functional behavior assessment guidelines).

Students should refer to:

Specifically, students should review:
I. Visual Assistive Technology
   a. ViewScan – projector for books, pictures
   b. Optacon – adds size & contrast
   c. Versa Braille – software program for Braille
   d. Total Talk – speech converter

II. Corrected Vision Strategies
   a. Distance correction may aggravate close work
   b. Observe behaviors when wearing glasses
   c. Refusal to wear strategy - Wearing in order to succeed & Reinforce wearing glasses with positive statements
   d. Create a need to see.

III. Uncorrected Vision Environmental & Instructional Strategies
   a. Seating Considerations
   b. Lighting Considerations
   c. Flat or Matte Finishes – glare is fatiguing
   d. Outlining Boundaries with dark colors
   e. Noise level Considerations – low for auditory cues to be heard
   f. Auditory Cues in different centers of the room
   g. Olfactory Cues in different centers of the room
   h. Provide tours after environmental changes
   i. Use raised labels
   j. Explicit Instructions with child’s name used before it as a cue
   k. Teach right & left directional cues

IV. Visual Curriculum Adaptations
   a. Self Esteem – body awareness, role models who where glasses, facial expression awareness, labeling body parts, labeling feelings with auditory cues to help decipher emotions, and encouraging movement from place to place within the environment.
b. Social Studies – field trips with small groups with tactile & auditory experiences, follow-up field trip activities with stories and dramatic play, differentiating between real objects and their representations, explore eye doctor experiences in dramatic play and field trips, and visit people with visual impairments or seeing eye dogs.

c. Language Arts
   i. Speaking – One & two-step directions, finger plays with paraprofessional to help with fine motor cues.
   ii. Listening – Facing people when speaking, practice locating sounds, matching sounds, classifying sounds, provide replicas of objects being discusses, use language to help children focus on their vision, concrete descriptors to more abstract descriptors (i.e. time), and use verbal descriptions of movement when moving freely.
   iii. Reading – Start with gross distinctions, shapes & then letters, combine tactile skills with making letter distinctions which is early Braille skills, use high contrast methods such as the overhead, and expose to different written languages.

d. Mathematics – teach tactile discriminations for shape, size, and weight, matching shapes, teach number concepts with real objects, matching dominoes (high contrast), use bodies to measure, use physical boundaries, use tactile surfaces to teach about patterns, and provide many matching experiences.

e. Science – learn about how the eye works, purpose of lens and magnifying lens, participate in changing physical substances, study weather, and use senses to identify pleasant and unpleasant smells and tastes.

V. Orthopedic & Neurological Intervention Techniques
a. Mobility Aids
   i. Splinting
   ii. Bracing
   iii. Short-Distance Mobility
   iv. Long-Distance Mobility

b. Transferring

VI. Orthopedic & Neurological Environmental & Instructional Strategies
a. Have “reachers” aided devices in classroom.
b. Include pictures of individuals using mobility devices in classroom.
c. Develop language and identifying feelings – ways to work through feelings.
d. Facilitate development of sexual identity and appropriate gender identity.
   Individuals with mobility impairments are often seen as asexual.
e. Take a wheelchair tour of the classroom and reevaluate the classroom set up.
f. Use adjustable tables for correct table height.
g. Use lighter equipment in block area to avoid fatigue.
h. Be sure that large equipment is stable and may be used to pull up to stand.
i. Move sand and sensory table away from wall to be accessed from all sides.
j. Use nonskid floor coverings.
k. Use adjustable handle grips for writing and art tools.
l. Stabilize snack equipment with high sides & use finger foods.
m. Use abduction block, wedges, and rolls to help stabilize.
n. Provide bags/knapsacks to carry things around room.
o. Use padded lapboards for children who are more comfortable sitting on the floor than in a chair.

p. Use bicycle gloves for pushing wheelchair or climbing.

q. Prioritize schedule and activities for children who tire quickly – more energy and/or concentration first.

VII. Orthopedic & Neurological Curriculum Adaptations

a. Social Studies – personalize equipment; represent equipment in the classroom, guests that play a role in child’s life – osteopath, orthopedic surgeon.

b. Language Arts

i. Speaking – using communication boards and schedules, expanding on child’s utterances when they use telegraphic speech.

ii. Listening – Sit in chairs during group time, read stories about children who have orthopedic impairments, use flannel boards, use stories with vocabulary to introduce orthopedic vocabulary.

iii. Reading – Provide experiences and field trips to places read about.

iv. Writing – Use writing without tools first, provide a variety of fine motor experiences, use materials that have some resistance, use gripping materials for writing tools, warm up muscles with clay or dough before writing, use finger plays to develop fine motors skills, and use computers to write.

c. Mathematics – May take longer to do hands-on math given muscle tone issues, learn about relationships of distance and speed, measuring and weighing related to the need to replace braces as they grow, discuss shapes that rolls and those that don’t.

d. Science – Cause and effect tools, causal relationships, learn about pulleys and wheeled items – moving something that they may not be able to move otherwise, Use objects of various size and textures, exploring the basic principles of physics and gravity.

e. Movement – large motor – strength & endurance

   i. Climbing – do not assist to climb higher than they can.

   ii. Encourage using equipment - again do not assist beyond their level.

   iii. Work at vertical surfaces for muscle endurance.

   iv. Pushing something weighted as they walk.

   v. Mounting toys on walls.

   vi. Put up safeguards on walls for children prone to bumping edges, etc.

f. Movement – fine motor – manipulation

   i. Magnetic toys, blocks that snap together, using Velcro on blocks, pegboard toys, pop beads, stringing boards with reinforced string ends, use clothespins for hanging clothes, special handled scissors, use pipe cleaners for stringing instead of laces.

   ii. Blowing bubbles encourages lung usage.

g. Sensory Integration

   i. Expose to different textures, placing beanbags on difference body parts, movement activities, separating two motions or different actions and then combine the motions again.

   ii. Play tetherball – eye/hand coordination.

VIII. Specific Learning Disabilities Instructional Strategies & Environmental Considerations
a. Be consistent and predictable.
b. Keep room orderly and organized.
c. Feedback needs to be frequent.
d. Self-correcting materials can provide feedback.
e. Make directions simple, brief, and clear.
f. If problems learning a particular task, check if child as mastered prerequisite skills.
g. Use concrete objects while teaching.
h. Give time to process information.
i. Use differentiated instructions.
j. Alternate quiet times with hands-on work.
k. Provide many activities that encourage movement.

IX. Interventions for ADD/ADHD

a. Medications
   i. Stimulant medications – interact with dopamine, nor epinephrine, and serotonin transmitters.
   ii. Studies are inconsistent regarding efficacy. Close monitoring for dosage and behaviors needs to occur.

b. Early Identification
   i. 0-3, difficult temperament?, hyperactivity in toddlers
   ii. 3-6, power struggles, impulsive, and noncompliant, irregular eating, tantrums, motor clumsiness

c. Strategies for Guidance/Discipline
   i. Seating closer to the teacher
   ii. Consider assigning two chairs to a child who has ADHD.
   iii. Visual & behavioral directions away from distractions
   iv. Reduce visual and auditory distractions
   v. Keep classroom orderly and organized
   vi. Teach in manageable chunks
   vii. Model or demonstrate activities
   viii. Decrease wait time
   ix. Increase time for assignments, do not penalize.
   x. Feedback needs to be frequent, visual, verbal, and tactile.
   xi. Have pre-established consequences for misbehavior. Remain calm, state the infraction of the rule and avoid debate. Administer consequences immediately and monitor proper behavior.
   xii. Enforce classroom rules consistently
   xiii. Decide which behaviors to ignore.
   xiv. Label belongings, possibly have a second set of books at home to do homework and to be able to write or highlight in the books.

d. Challenging Behavior
   i. Look for patterns
      1. Appropriate for developmental level?
      2. Lack of perspective taking?
      3. Skill needed that child lacks?
   ii. Behavior modification
   iii. Applying logical consequences
   iv. Taking breaks to regain control
v. Satiation of behavior
vi. Incompatible alternatives method
vii. Know when to refer & when not to refer
e. 504 Accommodation if not met under IEP
f. Curriculum Adaptations for ADD/ADHD
   i. Self-Esteem: Teach how and when to seek assistance, monitor ratio of discipline to reinforcement/praise, encourage positive self-talk, teach difference between acceptable feelings and acceptable behavior, and teach positive ways to deal with feelings.
   ii. Social Studies: Teach children to read the social cues of others. Emphasize group belonging and courtesy to group members (e.g. property rights, space to play, etc).
   iii. Language Arts:
     1. Speaking – encourage to develop and focus their questions, encourage children to restate directions to each other.
     2. Listening – gain child’s attention before speaking, when giving directions – maintain eye contact, make verbal instructions clear, avoid multiple commands, recognize when child is tired and give a break.
     3. Reading – Expose children to a variety of print and its function. Gain information from pictures and formulate their answers about the pictures, respond to reading through active dramatics, movement, acting out story. Provide opportunities for children to learn a small reading vocabulary – begin with names of children in class. Expose children to a variety of genres.
     4. Writing – Support children’s attempts at writing. Attach a visual strip of letters and numbers to writing area, teach children how to use the index finger of the non-writing hand to identify the letter or word they want to copy. Encourage children to use the keyboard if they find writing laborious.
     5. Mathematics – Provide running commentary when possible; help children develop patterning and seriating concepts by starting with simple repeating patterns. Provide children with picture sequences of the classroom routine. Teach children the vocabulary of time.
     6. Science – Encourage children to use their senses in isolation and in combination. Facilitate their ability to become accurate observers (i.e. picture detectives, hidden objects in a picture), classification skills underlie both science and mathematics, cause and effect reasoning may help to develop internal control. Use scientific method and emphasize that wrong answers and inaccurate predictions are part of the scientific method and it puts their ability to hypothesize into a framework to continue rather than a dichotomy of right & wrong answers.
     7. Use Movement and Large Motor Activities throughout the day to release frustrations and energy.

Helpful websites include:
Low Vision & Blindness:

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American Council of the Blind: http://www.acb.org
American Foundation for the Blind: http://www.afb.org
American Printing House for the Blind: http://www.aph.org
Library of Congress National Library Service for the Blind and Physically Handicapped:
http://www.loc.gov/nls
Lighthouse International: http://www.lighthouse.org/Default.htm
National Association for Parents of the Visually Impaired (NAPVI):
http://www.spedex.com/napvi

Orthopedic & Neurological Disorders:
American Spinal Injury Association (ASIA): http://www.asia-spinalinjury.org/
Brain Injury Association: http://www.biausa.org
iCan ONLINE: http://www.ican.com
National Paralysis Foundation: http://www.spinalvictory.org/default.htm

Learning Disabilities:
Association for Children and Adults with Learning Disabilities (ACLD):
http://www.acldonline.org
The Center for Opportunities and Outcomes for People with Disabilities:
http://www.tc.columbia.edu/centers/oopd/
LD Online: http://www.ldonline.org
National Center for Learning Disabilities: http://www.ncld.org

ADD/ADHD
Children and Adults with Attention Deficit Disorder (CHADD):
http://www.chadd.org/index.html
Uniquely ADD/ADHD: http://www.uniquely adhd.cocm/add_adhd.html