

Resource Notebook
Characteristics of Students with Disabilities
ETSP 551
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Mental Retardation

Federal Definition (Including IDEA) and other commonly used definitions)

"... significantly subaverage general intellectual functioning, existing concurrently with deficits in adaptive behavior and manifested during the developmental period, that adversely affects a child's educational performance." [34 *Code of Federal Regulations* §300.7(c)(6)]

<http://old.nichcy.org/pubs/factshe/fs8txt.htm#whatis>

"[Intellectual disability] is a disability characterized by significant limitations both in intellectual functioning and in adaptive behavior as expressed in conceptual, social, and practical adaptive skills. This disability originates before 18. (**AAMR Ad Hoc Committee on Terminology and Classification, 2002, p. 1**)

Causations of disabilities (when known)

Doctors have found many causes of mental retardation. The most common are:

Genetic conditions. Sometimes mental retardation is caused by abnormal genes inherited from parents, errors when genes combine, or other reasons. Examples of genetic conditions are Down syndrome, fragile X syndrome, and phenylketonuria (PKU).

Problems during pregnancy. Mental retardation can result when the baby does not develop inside the mother properly. For example, there may be a problem with the way the baby's cells divide as it grows. A woman who drinks alcohol or gets an infection like rubella during pregnancy may also have a baby with mental retardation.

Problems at birth. If a baby has problems during labor and birth, such as not getting enough oxygen, he or she may have mental retardation.

Health problems. Diseases like whooping cough, the measles, or meningitis can cause mental retardation. Mental retardation can also be caused by extreme malnutrition (not eating right), not getting enough medical care, or by being exposed to poisons like lead or mercury.

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- **Prenatal causes of intellectual disabilities.** Causes occurring during fetal development; some examples include chromosomal disorders, inborn errors of metabolism, developmental disorders affecting brain formation, and environmental influences.
- **Prenatal causes of intellectual disabilities.** Causes at birth; some examples are anoxia, low birthweight, and infections such as syphilis and herpes simplex.
- **Postnatal causes of intellectual disabilities.** Causes occurring after birth; can be biological (e.g., traumatic brain injury, infections) or psychosocial (an unstimulating environment).
- **Chromosomal disorder.** Any of several syndromes resulting from abnormal or damaged chromosome(s); can result in intellectual disability.
- **Down Syndrome.** A condition resulting from an abnormality with the twenty-first pair of chromosomes; the most common abnormality is a triplet rather than a pair (the condition sometimes referred to as trisomy 21); characterized by intellectual disability and such physical signs as slanted appearing eyes, hypotonia, a single palmar crease, shortness,, and a tendency toward obesity.
- **Chromosome.** A rod-shaped entity in the nucleus of the cell; contains genes, which convey heredity characteristics; each cell in the human body contains 23 pairs of chromosomes.
- **Trisomy 21.** A type of Down syndrome in which the twenty-first chromosome is a triplet, making forty-seven, rather than the normal forty-six, chromosomes in all.
- **Spina bifida.** A congenital midline defect resulting from failure of the bony spinal column to close completely during fetal development.

- **Williams syndrome.** A condition resulting from deletion of material in the seventh pair of chromosomes; often results in mild to moderate intellectual disabilities, hear defects, and elfin facial features; people affected often display surprising strengths in spoken language and sociability while having severe deficits in spatial organization, reading, writing, and math.
- **Fragile X syndrome.** A condition in which the bottom of the X chromosome in the twenty-third pair of chromosomes is pinched off; can result in a number of physical anomalies as well as intellectual disabilities; occurs more often in males than females; thought to be the most common hereditary cause of intellectual disability.
- **Prader-Willi syndrome.** Caused by inheriting from one's father a lack of genetic material on the fifteenth pair of chromosomes; leading genetic cause of obesity; degree of intellectual disability varies, but the majority fall within the mildly intellectually disabled range.
- **Phenylketonuria (PKU).** A metabolic genetic disorder caused by the inability of the body to convert phenylalanine to tyrosine; an accumulation of phenylalanine results in abnormal brain development.
- **Microcephalus.** A condition causing development of a small, conical-shaped head; proper development of the brain is prevented, resulting in intellectual disabilities.
- **Hydrocephalus.** A condition characterized by enlargement of the head because of excessive pressure of the cerebrospinal fluid.
- **Fetal alcohol spectrum disorders (FASD).** A range of disorders in children whose mothers consumed large quantities of alcohol during pregnancy; not itself a clinical diagnostic category, but it includes FAS, which is a clinical diagnostic category.
- **Fetal alcohol syndrome (FAS).** Abnormalities associated with the mother's drinking alcohol during pregnancy; defects include brain damage, facial deformities, growth deficits, and a variety of physical and mental abnormalities.
- **Rubella (German measles).** A serious viral disease, which, if it occurs during the first trimester of pregnancy, is likely to cause deformity in the fetus.
- **Anoxia.** Deprivation of oxygen; can cause brain injury.
- **Low birthweight (LBW).** Babies who are born weighing less than 5.5 pounds; usually premature; at risk for behavioral and medical conditions, including intellectual disabilities.
- **Syphilis.** A venereal disease that can cause mental subnormality in a child, especially if it is contracted by the mother-to-be during the latter stages of fetal development.
- **Herpes simplex.** A viral disease that can cause cold sores or fever blisters; if it affects the genital and is contracted by the mother-to-be in the later stages of fetal development, it can cause mental subnormality in the child.
- **Traumatic brain injury (TBI).** Injury to the brain (not including conditions present at birth, with trauma, or degenerative diseases or conditions) resulting in total or partial disability or psychosocial maladjustment that affects educational performance; may affect cognition, language, memory, reasoning, abstract thinking, judgment, problem solving, sensory or perceptual and motor abilities, psychosocial behavior, physical functions, information processing, or speech.
- **Meningitis.** A bacterial or viral infection of the linings of the brain or spinal cord.
- **Encephalitis.** An inflammation of the brain; an affect the child's mental development adversely.
(Hallahan, Kauffman, and Pullen, 2009, p. 151-153)

Characteristics of disabilities

There are many signs of mental retardation. For example, children with mental retardation may:

sit up, crawl, or walk later than other children;
learn to talk later, or have trouble speaking,
find it hard to remember things,
not understand how to pay for things,
have trouble understanding social rules,
have trouble seeing the consequences of their actions,
have trouble solving problems, and/or
have trouble thinking logically.

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- **Self Regulation.** Refers generally to a person's ability to regulate his or her own behavior (e.g. to employ strategies to help in a problem-solving situation); an area of difficulty for persons who are intellectually disabled.

- **Metacognition.** A person's (1) awareness of what strategies are necessary to perform a task and (2) ability to use self regulation strategies.
- **Gullibility.** An inclination to believe highly questionable statements or claims, despite scanty evidence; considered by some to be a key characteristic of persons with intellectual disabilities, especially those who are mildly intellectually disabled.
(Hallahan, Kauffman, and Pullen, 2009, p. 157-158)

What does a student with (specific disability) need from a teacher (regarding structure and organization, curriculum, expectations, special adaptations, transition, and/or social relationships with peers)?

Tips for Teachers

- Learn as much as you can about mental retardation. The organizations listed at the end of this publication will help you identify specific techniques and strategies to support the student educationally. We've also listed some strategies below.
- Recognize that you can make an enormous difference in this student's life!
- Find out what the student's strengths and interests are, and emphasize them.
- Create opportunities for success.
- If you are not part of the student's Individualized Education Program (IEP) team, ask for a copy of his or her IEP. The student's educational goals will be listed there, as well as the services and classroom accommodations he or she is to receive.
- Talk to specialists in your school (e.g., special educators), as necessary. They can help you identify effective methods of teaching this student, ways to adapt the curriculum, and how to address the student's IEP goals in your classroom.
- Be as concrete as possible.
- Demonstrate what you mean rather than just giving verbal directions.
- Rather than just relating new information verbally, show a picture. And rather than just showing a picture, provide the student with hands-on materials and experiences and the opportunity to try things out.
- Break longer, new tasks into small steps.
- Demonstrate the steps. Have the student do the steps, one at a time.
- Provide assistance, as necessary.
- Give the student immediate feedback.
- Teach the student life skills such as daily living, social skills, and occupational awareness and exploration, as appropriate.
- Involve the student in group activities or clubs.
- Work together with the student's parents and other school personnel to create and implement an educational plan tailored to meet the student's needs.
- Regularly share information about how the student is doing at school and at home.
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Organizations that support, work for, or advocate for the disability.

The Arc of the United States
1010 Wayne Avenue, Suite 650
Silver Spring, MD 20910
301.565.3842
Info@thearc.org E-mail
www.thearc.org Web
www.TheArcPub.com Web (Publications)

**American Association on Intellectual and Developmental Disabilities
(formerly the American Association on Mental Retardation, AAMR)**
444 North Capitol Street NW, Suite 846
Washington, DC 20001-1512
202.387.1968; 800.424.3688 (outside DC)

www.aaid.org/ Web

Division on Developmental Disabilities
The Council for Exceptional Children
1110 North Glebe Road, Suite 300
Arlington, VA 22201-5704
888.232.7733; 703.620.3660
866.915.5000 **TTY**
cec@cec.sped.org E-mail
www.dddcec.org Web
<http://old.nichcy.org/pubs/factshe/fs8txt.htm>

Long term implications of the disability on adolescents and adults

About 87% of people with mental retardation will only be a little slower than average in learning new information and skills. When they are children, their limitations may not be obvious. They may not even be diagnosed as having mental retardation until they get to school. As they become adults, many people with mild retardation can live independently. Other people may not even consider them as having mental retardation.
<http://old.nichcy.org/pubs/factshe/fs8txt.htm#whatis>

Current trends

- **Functional academics.** Practical skills (e.g., reading a newspaper or telephone book) rather than academic learning skills.
- **Systematic instruction.** Teaching that involves instructional prompts, consequences for performance, and transfer of stimulus control; often used with students with intellectual disabilities.
- **Constant time delay.** An instructional procedure whereby the teacher makes a request while simultaneously prompting the student and then over several occasions makes the same request and waits a constant period of time before prompting; often used with students with intellectual disabilities.
- **Progressive time delay.** An instructional procedure whereby the teacher makes a request while simultaneously prompting the student and then over several occasions gradually increases the latency between the request and the prompt; often used with students with disabilities.
- **Functional behavioral assessment.** Evaluation that consists of finding out the consequences (what purpose the behavior serves), antecedents (what triggers the behavior), and setting events (contextual factors) that maintain inappropriate behavior.
- **Positive behavior intervention and support (PBIS).** Systemic use of the science of behavior to find ways of supporting desirable behavior rather than punishing undesirable behavior; positive reinforcement (rewarding) procedures that are intended to support a student's appropriate or desirable behavior.
- **Curriculum-based measurement (CBM).** A formative evaluation method designed to evaluate performance in the curriculum to which students are exposed; usually involves giving students a small sample of items from the curriculum in use in their schools; proponents argue that CBM is preferable to comparing students with national norms or using tests that do not reflect the curriculum content learned by the students.
- **Progress monitoring.** Brief, frequent measures of performance used to determine whether a student is learning as expected; if student is not learning as expected, the teacher can make changes to the instruction.
- **Self-determination.** The ability to make person choices, regulate one's own life, and be a self-advocate; a prevailing philosophy in education programming for people with intellectual disabilities. Having control over one's life, not having to rely on others for making choices about one's quality of life; develops over one's life span.
- **Person-centered planning.** A type of transition model; consumer-driven in that professionals are viewed as working individuals.
- **Community residential facility (CRF).** A place, usually a group home, in an urban or residential neighborhood where about three to ten adults with intellectual disabilities live under supervision.
- **Supported living.** An approach to living arrangements for those with intellectual disabilities that stresses living in natural settings rather than institutions, big or small.
- **Competitive employment.** A workplace that provides employment that pays at least minimum wage and in which most workers are nondisabled.

- **Supported competitive employment.** A workplace where adults who are disabled earn at least minimum wage and receive ongoing assistance from specialists or job coach; the majority of workers in the workplace are nondisabled.
- **Job coach.** A person who assists adult workers with disabilities (especially those with intellectual disabilities), providing vocational assessment, instruction, overall planning, and interaction assistance with employers, family, and related government and service agencies.
(Hallahan, Kauffman, and Pullen, 2009, p. 161-176)

Annotated bibliography of at least 6 resources (websites, booklist, articles) for each disability area

- The National Association for Down Syndrome (NADS), was founded in 1961 by a group of parents. Its Website at www.nads.org provides information on resources as well as links to other sites devoted to Down Syndrome.
- The Williams Syndrome Association is devoted to providing information to affected families: www.williams-syndrome.org.
- The National Fragile X Foundation is devoted to providing information to affected families: www.fragilex.org/html/home.shtml.
- The Prader-Willi Association (USA) is devoted to providing information to affected families: www.pwsausa.org/
 - The propensity for those with Prader-Willi to crave food has raised ethical issues pertaining to allowing them to eat and the concept of least restrictive environment. The Prader-Willi Association (USA) has issued a policy statement on the subject. See: www.pwsausa.org/position/ps002.htm
 - “The Teaching of Jon” is a documentary that chronicles the life of a man with Down Syndrome from birth to adulthood. To find out more about his life visit <http://www.teachingsofjon.com/index.html>.
 - “The Collector of Bedford Street” is an excellent documentary about Larry Selman, a man with intellectual disabilities, and how his neighbors banded together to help him. Visit the film’s website to learn about Larry and his struggle for self-determination: <http://www.thecollectorofbedfordstreet.com>

(Hallahan, Kauffman, and Pullen, 2009, p. 161-173)