THE CAUSATION AND PREVENTION OF A DISABILITY

No one knows exactly what causes learning disabilities. There is a wide range of possibilities that make it almost impossible to pinpoint the exact cause. Listed below are some factors that can attribute to the development of a disability.

**Problems in Fetal Brain Development** - During pregnancy things can go wrong in the development of the brain, which alters how the neurons form or interconnect. Throughout pregnancy, brain development is vulnerable to disruptions. If the disruption occurs early, the fetus may die, or the infant may be born with widespread disabilities and possibly mental retardation. If the disruption occurs later, when the cells are becoming specialized and moving into place, it may leave errors in the cell makeup, location, or connections. Some scientists believe that these errors may later show up as learning disorders.

**Genetic Factors** - Learning disabilities can run in families, which show that there may be a genetic link. For example, children who do not have certain reading skills, such as hearing the separate sounds of words, are likely to have a parent with a similar problem. A parent's learning disability can take a slightly different form in the child. Due to this, it is unlikely that specific learning disorders are directly inherited.

**Environment** - Additional reasons for why learning disabilities appear to run in families stem from the family environment. Parents with expressive language disorders may talk less to their children or their language may be muffled. In this case the lack of a proper role model for acquiring good language skills causes the disability.

**Tobacco, Alcohol, and Other Drug Use** -- Many drugs taken by the mother pass directly to the fetus during pregnancy. Research shows that a mother's usage of cigarettes, alcohol, or other drugs during pregnancy may have damaging effects on the unborn child. Mothers who smoke during pregnancy are more likely to have smaller birth weight babies. Newborns, who weigh less than 5 pounds, are more at risk for learning disorders.
Heavy alcohol use during pregnancy has been linked to fetal alcohol syndrome, a condition resulting in low birth weigh, intellectual impairment, hyperactivity, and certain physical defects.

New studies are questioning the effect of the father’s drug abuse influencing learning disabilities, ADHD and other possibilities.

**Problems During Pregnancy or Delivery**  Complications during pregnancy can also cause learning disabilities. The mother's immune system can react to the fetus and attack it as if it were an infection. This type of problem appears to cause newly formed brain cells to settle in the wrong part of the brain. In addition, during delivery, the umbilical cord can become twisted and temporarily cut off oxygen to the fetus, resulting in impaired brain functions.

**Toxins in the Environment** -- New brain cells and neural networks are produced for a year after the child is born. These cells are vulnerable to certain disruptions. There are certain environmental toxins that may lead to learning disabilities. Cadmium and lead are becoming a leading focus of neurological research. Cadmium is used in making some steel products. It can get into the soil and then into the foods we eat. Lead was once common in paint and gasoline, and is still present in some water pipes.

Children with cancer who have been treated with chemotherapy or radiation at an early age can also develop learning disabilities. This is very prevalent in children with brain tumors who received radiation to the skull.

In order to prevent disabilities from occurring, information on the causes of disabilities should be widely available so that parents can take the necessary steps to safeguard their children from conception up until the early years of life. While some of the causes of disability are unavoidable or incidental, there are many causes that can be prevented.

**IDENTIFY CHARACTERISTICS OF CHILDREN WITH EMOTIONAL DISTURBANCES**

Children with emotional disturbances or behavioral disorders are not always easy to identify. It is, of course, easy to identify the acting-out child who is constantly fighting, who cannot stay on task for more than a few minutes, or who shouts obscenities when angry. It is not always easy to identify the child who internalizes his/her problems, on the other hand, or may appear to be the “model” student, but suffers from depression, shyness, or fears. Unless the problem becomes severe enough to impact school performance, the internalizing child may go for long periods without being identified or served.
Studies of children with behavioral and emotional disorders, share some general characteristics:

**Lower Academic Performance:** While it is true that some emotionally disturbed children have above average IQ scores, the majority are behind their peers in measures of intelligence and school achievement. Most score in the “slow learner” or “mildly mentally retarded” range on IQ tests, averaging about 90. Many have learning problems that exacerbate their acting out or “giving-up” behavior. As the child enters secondary school, the gap between her and nondisabled peers widens until the child may be as many as 2 to 4 years behind in reading and/or math skills by high school. Children with severe degrees of impairment may be difficult to evaluate.

**Social Skills Deficits:** Students with deficits in this area may be uncooperative, selfish in dealing with others, unaware of what to do in social situations, or ignorant of the consequences of their actions. This may be a combination of lack of prior training, lack of opportunities to interact, and dysfunctional value systems and beliefs learned from their family.

**Classroom Behaviors:** Children who are emotionally disturbed, often, display classroom behavior that is highly disruptive to the classroom setting. The students are often out of their seat or running around the room, hitting, fighting, or disturbing their classmates, stealing or destroying property, defiant and noncompliant, and/or verbally disruptive. They do not follow directions and often do not complete assignments.

**Aggressive Behaviors:** Aggressive children often fight or instigate their peers to strike back at them. Aggressiveness may also take the form of vandalism or destruction of property. Aggressive children also engage in verbal abuse.

**Delinquency:** As emotionally disturbed, acting-out children enter adolescence, they may become involved in socialized aggression (i.e. gang membership) and delinquency. Delinquency is a legal term, rather than a medical, and describes truancy, and actions that would be criminal if they were committed by adults. Not every delinquent is classified as emotionally disturbed, but children with behavioral and emotional disorders are especially at risk for becoming delinquent because of their problems at school (the primary place for socializing with peers), deficits in social skills that may make them unpopular at school, and/or dysfunctional homes.

**Withdrawn Behaviors:** Children who manifest withdrawn behaviors may consistently act in an immature fashion or prefer to play with younger children. They may daydream or complain of being sick in order to “escape”. They may also cry often, cling to the teacher, and ignore those who attempt to interact, or suffer from fears or depression.
Schizophrenia and Psychotic Behaviors: Children may have bizarre delusions, hallucinations, incoherent thoughts, and disconnected thinking. Schizophrenia typically manifests itself between the ages of 15 and 45, and the younger the onset, the more severe the disorder. These behaviors usually require intensive treatment beyond the scope of the regular classroom setting.

Gender: Many more boys than girls are identified as having emotional and behavioral problems, especially hyperactivity and attention Deficit disorder, autism, childhood psychosis and problems with under control (agression, socialized aggression). Girls, on the other hand, have more problems with over control (i.e. withdrawal and phobias). Boys are much more prevalent than girls in problems with mental retardation and language and learning disabilities.

Age Characteristics: When they enter adolescence, girls tend to experience affective or emotional disorders such as anorexia, depression, bulimia, and anxiety at twice the rate of boys, which mirrors the adult prevalence pattern.

Family Characteristics: Having a child with an emotional or behavioral disorder does not automatically mean that the family is dysfunctional. However, there are family factors that create or contribute to the development of behavior disorders and emotional disturbance.
- Abuse and neglect
- Lack of appropriate supervision
- Lax, punitive, and/or lack of discipline
- High rates of negative types of interaction among family members
- Lack of parental concern and interest
- Negative adult role models
- Lack of proper health care and/or nutrition
- Disruption in the family

Children with Mild learning, intellectual, and behavioral disabilities

Some characteristics of students with mild learning and behavioral disabilities are as follows:
- Lack of interest in schoolwork
- Prefer concrete rather than abstract lessons
- Possess weak listening skills
- Low achievement; limited verbal and/or writing skills
- Respond better to active rather than passive learning tasks
- Have areas of talent or ability often overlooked by teachers
- Prefer to receive special help in regular classroom
- Higher dropout rate than regular education students
- Achieve in accordance with teacher expectations
- Require modification in classroom instruction and are easily distracted.
Identify characteristic of students who have a learning disability:

- **Hyperactivity**: a rate of motor activity higher than normal
- **Perceptual difficulties**: visual, auditory, and perceptual problems
- **Perceptual-motor impairments**: poor integration of visual and motor systems, often affecting fine motor coordination.
- **Disorders of memory and thinking**: memory deficits, trouble with problem-solving, concept formation and association, poor awareness of own metacognitive skills (learning strategies)
- **Impulsiveness**: acts before considering consequences, poor impulse control, often followed by remorselessness.
- **Academic problems** in reading, math, writing or spelling; significant discrepancies in ability levels.

Identify characteristics of individuals with mental retardation or intellectual Disabilities:

- IQ of 70 or below
- Limited cognitive ability; delayed academic achievement, particularly in language-related subjects
- Deficits in memory which often relate to poor initial perception, or inability to apply stored information to relevant situations
- Impaired formulation of learning strategies
- Difficulty in attending to relevant aspects of stimuli: slowness in reaction time or in employing alternate strategies.

Identify characteristics of individuals with Autism

This exceptionality appears very early in childhood. Six common features of autism are:

- **Apparent sensory deficit** – The child may appear not to see or hear or react to a stimulus, then react in an extreme fashion to a seemingly insignificant stimulus.
- **Severe affect isolation**—The child does not respond to the usual signs of affection such as smiles and hugs.
- **Self-stimulation** – Stereotyped behavior takes the form of repeated or ritualistic actions that make no sense to others, such as hand flapping, rocking, staring at objects, or humming the same sounds for hours at a time.
- **Tantrums and self-injurious behavior (SIB)** – Autistic children may bite themselves, pull their hair, bang their heads, or hit themselves. They can throw severe tantrums, and direct aggression and destructive behavior toward others.
- **Echolalia**—also known as “parrot talk.” The autistic child may repeat what is played on television, for example, or respond to others by repeating what was said. Alternatively, the child may simply not speak at all.
- **Severe deficits in behavior and self-care skills**. Autistic children may behave like children much younger than themselves.
Teachers of special education students should be aware of the similarities between areas of disabilities as well as differences.

Students with disabilities (in all areas) may demonstrate difficulty in social skills. For a student with hearing impairment, social skills may be difficult because of not hearing social language. However, the emotionally disturbed student may have difficulty because of a special type of psychological disturbance. An autistic student, as a third example, would be unaware of the social cues given with voice, facial expression, and body language. Each of these students would need social skill instruction but in a different way.

Students with disabilities (in all areas) may demonstrate difficulty in academic skills.

A student with mental retardation will need special instruction across all areas of academics while a student with a learning disability may need assistance in only one or two subject areas.

Students with disabilities may demonstrate difficulty with independence or self-help skills. A student with a visual impairment may need specific mobility training while a student with a specific learning disability may need a checklist to help in managing materials and assignments.

Special Education Teachers should be aware that although students across disabilities may demonstrate difficulty in similar ways, the causes may be very different. For example, some disabilities are due to specific sensory impairments (hearing or vision), some due to cognitive ability (mental retardation), and some due to neurological impairment (autism or some learning disabilities). The reason for the difficulty should be a consideration when planning the program of special education intervention.

Additionally, Special Education Teachers should be aware that each area of disability has a range of involvement. Some students may have minimal disability and require no services. Others may need only a few accommodations and have 504 Plans. Some may need an IEP that outlines a specific special education program which might be implemented in an inclusion/resource program, self-contained program, or in a residential setting.

A student with ADD may be able to participate in the regular education program with a 504 Plan that outlines a checklist system to keep the student organized and additional communication between school and home. Other students with ADD may need instruction in a smaller group with fewer distractions and would be served in a resource room.
Special educators should be knowledgeable of the cause and severity of the disability and its manifestations in the specific student when planning an appropriate special education program. Because of the unique needs of the child, such programs are documented in the child’s IEP – Individualized Education Program.

**Skill 1.02**  Knows how the developmental, academic, social, career, and functional characteristics of individuals with disabilities relate to levels of support needed, and applies knowledge of human development and disabilities to plan and implement appropriate curriculum.

The characteristics of individuals with disabilities directly correlate to the level of support required for them. Each individual with a disability has unique needs that cannot always be applied to every individual with the same or similar disability. In order to adequately assess what type of curriculum should be implemented the teacher needs to do an individual assessment of each student and then obtain information from other sources such as the IEP team, general education teacher, parents, and other interested parties to determine the appropriate curriculum to match his/her IEP objectives.

Students with mild learning, intellectual, and behavior disabilities are identifiable by academic and social behaviors that deviate from those of their classmates. Generalities can be made about this population. First, students with mild intellectual disabilities, learning disabilities, and behavior disorders are the largest subgroup of students receiving special education services. The total group of students with mild intellectual, learning, and behavior disabilities comprise about half of the total special education population. Second, they are served during their school-aged years. Mild disabilities are often unrecognized before and after school years. Third, no nationally accepted criteria exist; therefore, the categories of mental retardation, learning disabilities, and behavior disorders are unreliable. Each state has developed its own criteria, and so a student may be eligible for special education service delivery in one state and not necessarily so in another. Regardless, while many students with mild disabilities receive special education services, there are some who are incorrectly identified as having a mild disability and others who have a mild disability are overlooked. Last, students with mild disabilities are most likely to be placed in the regular classroom and in resource services. Effective collaboration between general and Special Education Teachers is vital.
Skill 1.03 Knows theoretical explanations for behavior disorders, and analyzes the varied characteristics of behavior disorders and their effect on learning.

Behavior disorders can range from mild to serious. A child is said to have a specific disorder when their behavior occurs frequently and is severe. The diagnosis is seen as the best guess based on a particular child’s behaviors that they may have a specific mental health disorder and not just a problem that all children have occasionally.

One theoretical explanation for behavior disorders is *time-stable individual differences*. The main premise of this approach is that certain characteristics of the individual predispose them to criminal behavior. For example, traits such as emotional instability, antisocial personality and impulsiveness, combined with lower intelligence levels are deemed to incline individuals towards criminal activities as well as a range of reckless behaviors. People with high impulsivity are thought to be unable to commit to conventional activity and are less likely to establish relationships or persist in educational activities.

A second theory is the *Social and Environmental Theory*. This theory is based on the premise that specific social and environmental factors influence the decision to commit certain behaviors. Through interacting with others, youths learn techniques for engaging in delinquency and learn definitions of the law, which include attitudes, norms, beliefs, and rationalizations for not following rules and regulations.

A third theory is the *Interaction Theory*. The interaction theory attempts to explicitly define interactions between characteristics of the individual and features of the social environment that are considered integral to the decision to offend. Within this perspective there are two main approaches. Dynamic-behavior theory focuses on developmental aspects, while the functional analysis model offers an explanation for the maintenance of the behavior.

A fourth theory is the *Instinct Theory*. This theory focuses on the innate and evolutionary nature of aggression. Freudian theory purports two basic instincts, sex and aggression or death instinct. Psychic energy used for aggression is always being created and requiring an outlet. The release of aggression is considered a catharsis and decreasing aggressive energy through safe outlets such as observing aggressive sports or allowing direct but limited release of aggressive desires toward appropriate targets.
The *biophysical perspective* emphasizes the relationship between physical and biological factors, including body chemistry and genetics, and that of behavior. Drug therapy, with careful monitoring between school, home, and physician, is building. It is believed that the id, ego, and superego act as a system of checks and balances on behavior. The id is the pleasure seeking, impulsive force that is dominant in childhood. The superego is the conscience, which represents moral and ethical beliefs. The ego mediates between the id and the superego. The ego guides actions by taking into account the natural consequences of behavior.

The *psychodynamic approach* underscores the need to understand why students are disruptive. It emphasizes the connection between how a student feels and how a student acts. The Psychoeducational framework is developmental in nature. It integrates clinical insights in behavior with practical methods for managing behavior. Treatment emerged from the need to merge behavior management with psychodynamic theory.

The *behaviorist position* views observable behavior as the critical element. Treatment strategies are focused on modifying environmental factors that reinforce appropriate behavior. The key points of behavioral theory and practice are summarized as follows.

1. Behaviorists view inappropriate and appropriate behavior as learned. Behavior is a response to a person’s interaction with the environment.
2. Learning occurs when environmental conditions reinforce a specific behavior. Reinforcement takes several forms, including imitation, modeling, and operant conditioning (i.e. consequences that shape behavior).
3. Inappropriate behavior is learned through environmental conditioning and new, appropriate behaviors can be learned with proper reinforcement.
4. Effective implementation of behavior treatments in classrooms requires observable descriptions of behavior to be changed, targeting of new behaviors, systematic application of reinforcers, and collection of pre- and post-data to determine treatment effectiveness. (Henley, Ramsey, & Algozzine, 1993, 125).

A synthesis of these models highlights the interactional nature of behavior and emotional disorders. The ecological model promotes the idea that children are influenced by many different environments and that any attempt to help children with behavior or emotional problems must focus on all key elements in a youngster’s life.
Typically, a combination of these treatment approaches is used in many classrooms. For instance, one student may be taking medication to facilitate concentration and adequate attention span. Other students may be participating in a token system designed to reinforce task completion, while yet others are actively involved in a class meeting or discussion session. The different treatments reflect the various assumptions that people have about behavior disorders.

The most common behavior disorders include the following:

**Adjustment Disorders** – are demonstrated with emotional or behavioral symptoms that children display when they cannot adapt to stressful events that occur in their lives. The symptoms usually occur with three months of a stressful even and last no more than six months after the stressor end. There are a range of behaviors associated with different types of adjustment disorders including fear or anxiety to truancy, vandalism, or fighting.

**Anxiety Disorders** are a large family of disorders (School Phobia, Post Traumatic Stress Disorder (PTSD), Avoidant Disorder, Obsessive-Compulsive Disorder (OCD), Panic Disorder, Panic Attack, etc.) where the primary feature is exaggerated anxiety. Anxiety disorders can result in expressed physical symptoms, disorders in conduct, or as inappropriate emotional responses such as giggling or crying. Anxiety is also a brief normal reaction to stressful events, but when the anxiety is intense and persistent and it interferes with the child’s functioning it may then result in a diagnosis of anxiety disorder.

**Oppositional Defiant Disorder (ODD)** The primary feature of Oppositional Defiant Disorder (ODD), which occurs at rates of 2 to 16%, is a recurrent pattern of negative, defiant, disobedient and hostile behaviors towards authority figures, which lasts for at least six months. Typical behaviors include arguing with adults, defying or refusing to follow adult directions, deliberately annoying people, blaming others, or being spiteful or vindictive.

**Conduct Disorder** is a disorder with a primary feature of repetitive and persistent pattern of behavior in which the basic rights of others or major age appropriate social norms or rules are violated. Children with conduct disorder may bully or threaten others and be physically cruel to animals and people.

**Attention Deficit / Hyperactivity Disorder** is a condition, that affects 3%-5% of children, where the child shows symptoms of inattention that are not consistent with his/her developmental level. The key feature of Attention Deficit Hyperactivity Disorder is a persistent pattern of inattention and/or hyperactivity-impulsivity that is more frequent and severe than is typically observed in individuals at a similar level of development.