

DOMAIN I

UNDERSTANDING EXCEPTIONALITIES

PERSONALIZED STUDY PLAN



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COMPETENCY 1

HUMAN DEVELOPMENT AND BEHAVIOR AS RELATED TO STUDENTS WITH DISABILITIES

SKILL **Social and emotional development and behavior** 1.1

Children whose behavior deviates from society's standards for normal behavior for certain ages and stages of development are identified as having disabilities. Behavioral expectations vary from setting to setting; for example, yelling on the football field is acceptable, but yelling when the teacher is explaining a lesson to the class is not. Different cultures have different standards of behavior, further complicating the question of what constitutes a behavioral problem. People also have their personal opinions and standards for what is tolerable and what is not. Some behavioral problems are openly expressed; others are inwardly directed and not very obvious. As a result of these factors, the terms behavioral disorders and emotional disturbance have become almost interchangeable.

While almost all children at times exhibit behaviors that are aggressive, withdrawn, or otherwise inappropriate, the IDEA definition of serious emotional disturbance (SED) focuses on behaviors that persist over time, are intense, and impair a child's ability to function in society. The behaviors must not be caused by temporarily stressful situations or other factors such as depression over the death of a grandparent or anger over the parents' impending divorce. In order for a child to be considered seriously emotionally disturbed, he or she must exhibit one or more of the following characteristics over a *long period of time* and to a *marked degree* that *adversely affects* a child's educational performance.

- Inability to learn that cannot be explained by intellectual, sensory, or health factors
- Inability to maintain satisfactory interpersonal relationships
- Inappropriate types of behaviors
- General pervasive mood of unhappiness or depression
- Physical symptoms or fears associated with personal or school problems

Schizophrenic children are covered under this definition, and social maladjustment by itself does not satisfy this definition unless it is accompanied by one of the other conditions of SED.

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The diagnostic categories and definitions used to classify mental disorders come from the American Psychiatric Association’s publication **Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)**, the handbook used by psychiatrists and psychologists. The DSM-IV is a multi-axial classification system consisting of dimensions (axes) coded along with the psychiatric diagnosis. The axes are listed below.

Axis I	Principal psychiatric diagnosis (e.g., overanxious disorder)
Axis II	Developmental problems (e.g., developmental reading disorder)
Axis III	Physical disorders (e.g., allergies)
Axis IV	Psychosocial stressors (e.g., divorce)
Axis V	Rating of the highest level of adaptive functioning (includes intellectual and social). Rating is called Global Assessment Functioning (GAF) score.

While the DSM-IV diagnosis is one way of diagnosing SED, there are other ways of classifying the various forms in which behavior disorders manifest themselves. The following tables summarize some of these classifications.

Externalizing Behaviors	Internalizing Behaviors
Aggressive behaviors expressed outwardly toward others	Withdrawing behaviors that are directed inward to oneself
Manifested as hyperactivity, persistent aggression, irritating behaviors that are impulsive and distractible	Social withdrawal
Examples: hitting, cursing, stealing, arson, cruelty to animals, hyperactivity	Depression, fears, phobias, elective mutism, withdrawal, anorexia, and bulimia

Well-known instruments used to assess children’s behavior have their own categories and scales to classify behaviors. The following table illustrates the scales used in some of the widely used instruments.

Walker Problem Identification Checklist	Burks' Behavior Rating Scales (BBRS)	Devereux Behavior Rating Scale (Adolescent)	Revised Behavior Problem Checklist (Quay & Peterson)
Acting out	Excessive self-blame	Unethical behavior	<i>Major scales</i>
Withdrawal	Excessive anxiety	Defiant-resistive	Conduct Disorder
Distractibility	Excessive withdrawal	Domineering-sadistic	Socialized aggression
Disturbed peer relations	Excessive dependency	Heterosexual interest	Attention problems—immaturity
Immaturity	Poor ego strength	Hyperactive expansive	Anxiety—withdrawal
	Poor physical strength	Poor emotional control	<i>Minor scales</i>
	Poor coordination	Need approval, dependency	Psychotic behavior
	Poor intellectuality	Emotional disturbance	Motor excess
	Poor academics	Physical inferiority—timidity	
	Poor attention	Schizoid withdrawal	
	Poor impulse control	Bizarre speech and cognition	
	Poor reality contact	Bizarre actions	
	Poor sense of identity		
	Excessive suffering		
	Poor anger control		
	Excessive sense of persecution		
	Excessive aggressiveness		
	Excessive resistance		

Disturbance may also be categorized in degrees: mild, moderate, or severe. The degree of disturbance will affect the type and degree of interventions and services required by the student with an emotional disturbance. Degree of disturbance also must be considered when determining the least restrictive environment and the services named for free, appropriate education for these students. An example of a set of criteria for determining the degree of disturbance is the one developed by P. L. Newcomer:

CRITERIA	DEGREE OF DISTURBANCE		
	MILD	MODERATE	SEVERE
Precipitating Events	Highly stressful	Moderately stressful	Not stressful
Destructiveness	Not destructive	Occasionally destructive	Usually destructive
Maturational Appropriateness	Behavior typical for age	Some behavior untypical for age	Behavior too young or too old
Personal Functioning	Cares for own needs	Usually cares for own needs	Unable to care for own needs
Social Functioning	Usually able to relate to others	Usually unable to relate to others	Unable to relate to others
Reality Index	Usually sees events as they are	Occasionally sees events as they are	Little contact with reality
Insight Index	Aware of behavior	Usually aware of behavior	Usually not aware of behavior
Conscious Control	Usually can control behavior	Occasionally can control behavior	Little control over behavior
Social Responsiveness	Usually acts appropriately	Occasionally acts appropriately	Rarely acts appropriately

Source: Understanding and Teaching Emotionally Disturbed Children and Adolescents, (2nd ed., p. 139), by P. L. Newcomer, 1993, Austin, TX: Pro-De. Copyright 1993. Reprinted with permission.

Sample Test Questions and Rationale

(Average)

1. Which behavior would be expected at the mild level of emotional/behavioral disorders?
- Attention seeking
 - Inappropriate affect
 - Self-injurious
 - Poor sense of identity

Answer: A. Attention seeking

Children who exhibit mild behavioral disorders are characterized by:

- Average or above average scores on intelligence tests
- Poor academic achievement; learned helplessness
- Unsatisfactory interpersonal relationships
- Immaturity; attention seeking

(Rigorous)

2. Short attention span, daydreaming, clumsiness, and preference for younger playmates are associated with:
- Conduct disorder
 - Personality disorders
 - Immaturity
 - Socialized aggression

Answer: C. Immaturity

These disorders show immaturity. The student is not acting age-appropriately.

SKILL 1.2 Language development and behavior

LANGUAGE is the means whereby people communicate their thoughts, make requests, and respond to others. **COMMUNICATION COMPETENCE** is an interaction of **cognitive competence**, social knowledge, and language competence. Communication problems can occur in any or all of these areas and have a direct impact on the student's ability to interact with others. Language consists of several components, each of which follows a sequence of development.

Brown and colleagues were the first to describe language as a function of developmental stages rather than age (Reid, 1988 p 44). They developed a formula to group the mean length of utterances (sentences) into stages. Counting the number of morphemes per one hundred utterances, one can calculate a mean length of utterance (MLU). Total number of morphemes / 100 = MLU, e.g., 180/100 = 1.8.

LANGUAGE: the means whereby people communicate their thoughts, make requests, and respond to others

COMMUNICATION COMPETENCE: the interaction of cognitive competence, social knowledge, and language competence

MLU AND LANGUAGE DEVELOPMENT		
Stage	MLU	Developmental Features
L	1.5–2.0	14 basic morphemes (e.g., in, on, articles, possessives)
LI	2.0–2.5	Beginning of pronoun use, auxiliary verbs
LII	2.5–3.0	Language forms approximate adult forms; beginning of questions and negative statements
IV	3.0–3.5	Use of complex (embedded) sentences
V	3.5–4.0	Use of compound sentences

Components of Language

Language learning is composed of five components: phonology, morphology, syntax, semantics, and pragmatics. Developmentally, children progress through each component.

Phonology

PHONOLOGY is the system of rules about sounds and sound combinations for a language. A phoneme is the smallest unit of sound that combines with other sounds to make words. Most phonemes have no meaning in isolation ('a' and 'I' are exceptions). Generally, a phoneme must be combined with other phonemes to compose words or other morphemes. Problems in phonology may be manifested as developmental delays in acquiring consonants, reception problems such as misinterpreting words because a different consonant was substituted, or difficulty learning the sound-symbol code (phonics).

Morphology

MORPHEMES are the smallest units of language that convey meaning or function. **FREE MORPHEMES** are morphemes that can stand alone as root words, such as *walk* or *dog*. **BOUND MORPHEMES** are morphological units that do not stand alone. They convey or alter meaning when attached to other morphemes. Prefixes and suffixes (e.g., pre-, -less), and inflectional endings (-ed, -ing) are examples of bound morphemes. **MORPHOLOGY** is composed of all the rules for making words, including rules for making plurals, possessives, and inflections in verbs. **Content words** carry the meaning in a sentence, and **functional words** join phrases and sentences. Generally, students with problems in this area may not use

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MORPHOLOGY: the rules for making words, including rules for making plurals, possessives, and inflections in verbs

inflectional endings in their words, may not be consistent in their use of certain morphemes, or may be delayed in learning such morphemes as are used in irregular past tenses.

Syntax

SYNTAX RULES, commonly known as grammar, govern how morphemes and words are correctly combined to make sentences. Wood, (1976, p.115) describes six stages of syntax acquisition.

- **Stages 1 and 2 (birth to about 2 years):** Child is learning the semantic system.
- **Stage 3 (ages 2 to 3 years):** Simple sentences contain subject and predicate.
- **Stage 4 (ages 2½ to 4 years):** Elements such as question words are added to basic sentences (e.g., where); word order is changed to ask questions. The child begins to use and combine simple sentences and to embed words within the basic sentence.
- **Stage 5 (about 3½ to 7 years):** The child uses complete sentences that include word classes of adult language. The child is becoming aware of appropriate semantic functions of words and differences within the same grammatical class.
- **Stage 6 (about 5 to 20 years):** The child begins to learn complex sentences and sentences that imply commands, requests, and promises.

SYNTAX RULES:
govern how morphemes and words are correctly combined to make sentences

The child with a language disability manifests syntactic deficits by using sentences that lack length or complexity for a child that age. Such a child may have problems understanding or creating complex sentences and embedded sentences.

Semantics

SEMANTICS is language content: the linguistic meaning of morphemes, words, phrases, and sentences. As with syntax, Wood (1976) outlines stages of semantic development:

- **Stage 1 (birth to about 2 years):** The child is learning meaning while learning his first words. Sentences are one word, but the meaning varies according to the context. Therefore, *doggie* may mean “This is my dog,” “There is a dog,” or “The dog is barking.”
- **Stage 2 (about 2 to 8 years):** The child progresses to two-word sentences about concrete actions. As more words are learned, the child forms longer sentences. Until about age seven, items are defined in terms of visible actions. The child begins to respond to prompts (e.g., *pretty/flower*); at about age eight, the child can respond to a prompt with an opposite (e.g., *pretty/ugly*)

SEMANTICS: language content: the linguistic meaning of morphemes, words, phrases, and sentences

- **Stage 3 (begins at about age 8):** The child’s word meanings relate directly to experiences, operations, and processes. Vocabulary is defined by the child’s experiences, not the adult’s. At about age twelve, the child begins to give dictionary definitions, and the semantic level approaches that of adults.

Semantic problems take the form of the following:

- Limited vocabulary
- Inability to understand figurative language or idioms; interprets literally
- Failure to perceive multiple meanings of words, changes in word meaning from changes in context, resulting in incomplete understanding of what is read
- Difficulty understanding linguistic concepts (e.g., before/after), verbal analogies, and such logical relationships as possessives, spatial, and temporal
- Misuse of transitional words such as *although*, *regardless*

Pragmatics

Commonly known as the speaker’s intent, **pragmatics** are used to influence or control the actions or attitudes of others. **COMMUNICATIVE COMPETENCE** depends on how well one understands the rules of language and such social rules of communication as taking turns and using the correct tone of voice.

Pragmatic deficits are manifested by failures to respond properly to indirect requests after age eight (e.g., “Can’t you turn down the TV?” elicits a response of “No” instead of “Yes” and the child turning down the volume). Children with these deficits have trouble reading cues that indicate the listener does not understand them. Whereas a person would usually notice this and adjust one’s speech to the listener’s needs, the child with pragmatic problems does not do this.

Pragmatic deficits are also characterized by inappropriate social behaviors such as interruptions or monopolizing conversations. Children may use immature speech and have trouble sticking to a topic. These problems can persist into adulthood, affecting academic, vocational, and social interactions.

Problems in language development often require long-term interventions and can persist into adulthood. Certain problems are associated with different grade levels.

Preschool and Kindergarten

The child’s speech may sound immature. The child may not be able to follow simple directions and often cannot name such concepts as the days of the week and colors. The child may not be able to discriminate between sounds and the letters associated with the sounds. The child might substitute sounds and have

COMMUNICATIVE COMPETENCE:

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trouble responding accurately to certain types of questions. The child may play less with his peers or participate in nonplay or parallel play.

Elementary school

Problems with sound discrimination persist, and the child may have problems with temporal and spatial concepts such as before and after. As the child progresses through school, he or she may have problems making the transition from narrative to expository writing. Word retrieval problems may not be very evident because the child begins to devise strategies such as talking around the word he cannot remember or using fillers and descriptors. The child might speak more slowly, have problems sounding out words, and get confused with multiple-meaning words. Pragmatic problems such as failure to correctly interpret social cues and adjust to appropriate language, inability to predict consequences, and inability to formulate requests to obtain new information show up in social situations.

Secondary school

At this level, difficulties become more subtle. The child cannot use and understand higher-level syntax, semantics, and pragmatics. If the child has problems with auditory language, he may also have problems with short-term memory. Receptive and expressive language delays impair the child's ability to learn effectively. The child often cannot organize and categorize the information received in school. Problems associated with pragmatic deficiencies persist but, because the child is aware of them, he becomes inattentive, withdrawn, or frustrated.

Sample Test Questions and Rationale

(Rigorous)

1. Skilled readers use all but which one of these knowledge sources to construct meanings beyond the literal text:

- A. Text knowledge
- B. Syntactic knowledge
- C. Morphological knowledge
- D. Semantic knowledge

Answer: C. Morphological knowledge

The student is already skilled, so morphological knowledge is already in place.

(Rigorous)

2. Celia, who is in first grade, asked, "Where are my ball?" She also has trouble with passive sentences. Language interventions for Celia would target:

- A. Morphology
- B. Syntax
- C. Pragmatics
- D. Semantics

Answer: B. Syntax

Syntax refers to the rules for arranging words to make sentences.

Sample Test Questions and Rationale (cont.)

(Rigorous)

3. Mr. Mendez is assessing his students' written expression. Which of these is not a component of written expression?

- A. Vocabulary
- B. Morphology
- C. Content
- D. Sentence structure

Answer: B. Morphology

Morphology is correct. Vocabulary consists of words, content is made up of ideas, which are expressed in words, and sentences are constructed from words. Morphemes, however, are not always words. They may be prefixes or suffixes. Problems in this area would usually be considered problems with the mechanics of language, not expression.

SKILL Cognition 1.3

Beginning with preoperational thought processes and moving to concrete operational thoughts, children go through patterns of learning. Eventually they begin to acquire the mental ability to think about and solve problems in their heads because they can manipulate objects and ideas symbolically. Even children who can use such symbols as words and numbers to represent objects and relations need concrete reference points. Children must be encouraged to use and develop the thinking skills that they possess in solving problems that interest them. The content of the curriculum must be relevant, engaging, and meaningful to the students.

The teacher of students with special needs must have a general knowledge of cognitive development. Although children with special needs have a cognitive development rate that may be different than other children, a teacher needs to be aware of some of the activities of each stage as part of the basis to determine what should be taught and when it should be taught.

The following information about cognitive development was taken from the Cincinnati Children's Hospital Medical Center Web site at www.cincinnatichildrens.org. Here are some common features indicating a progression from simple to more complex cognitive development:

<p>Children (Ages 6–12)</p>	<p>Begin to develop the ability to think in concrete ways. Concrete operations are operations performed in the presence of the object and events that are to be used.</p> <p>Examples: how to combine (addition), separate (subtract or divide), order (alphabetize and sort and categorize), and transform objects and actions (change items such as 25 pennies = 1 quarter)</p>
<p>Adolescents (Ages 12–18)</p>	<p>Adolescents begin to develop more complex thinking skills, including abstract thinking, the ability to reason from known principles (form own new ideas or questions), the ability to consider many points of view according to varying criteria (compare or debate ideas or opinions), and the ability to think about the process of thinking.</p>

What cognitive developmental changes occur during adolescence?

During adolescence (between twelve and eighteen years of age), the developing teenager acquires the ability to think systematically about all logical relationships within a problem. The transition from concrete thinking to formal logical operations occurs over time. Every adolescent progresses at varying rates in developing the ability to think in more complex ways. Each adolescent develops his or her own view of the world. Some adolescents may be able to apply logical operations to school work long before they are able to apply them to personal dilemmas. When emotional issues arise, they often interfere with an adolescent’s ability to think in more complex ways. The ability to consider possibilities, as well as facts, may influence decision making in either positive or negative ways.

Some common features indicating a progression from simple to more complex cognitive development can be seen in early, middle, and late adolescence.

Early Adolescence

During early adolescence, the use of more complex thinking is focused on personal decision making in school and home environments, including the following:

- Begins to demonstrate use of formal logical operations in school work
- Begins to question authority and society standards
- Begins to form and verbalize thoughts and views on a variety of topics, usually more related to his or her own life, such as:
 - Which sports are better to play
 - Which groups are better to be included in
 - What personal appearances are desirable or attractive
 - What parental rules should be changed

Middle Adolescence

With some experience in using more complex thinking processes, the focus of middle adolescence often expands to include more philosophical and futuristic concerns, including the following:

- Often questions more extensively
- Often analyzes more extensively
- Thinks about and begins to form a code of ethics
- Thinks about different possibilities and begins to develop own identity
- Thinks about and begins to systematically consider possible future goals
- Thinks about and begins to make his or her own plans
- Begins to think long term
- Systematic thinking begins to influence relationships with others

Late Adolescence

During late adolescence, complex thinking processes are used to focus on less self-centered concepts and personal decision making, including the following:

- Develops idealistic views on specific topics or concerns
- Debates and develops intolerance of opposing views
- Begins to focus thinking on making career decisions
- Begins to focus thinking on emerging role in adult society
- Has increased thoughts about such global concepts as justice, history, politics, and patriotism

What encourages healthy cognitive development during adolescence?

Include adolescents in discussions about a variety of topics, issues, and current events.

Encourage adolescents to share ideas and thoughts with adults.

Encourage adolescents to think independently and develop their own ideas.

Help adolescents set their own goals.

Stimulate adolescents to think about possibilities of the future.

Compliment and praise adolescents for well-thought-out decisions.

Help adolescents reevaluate poorly made decisions for themselves.

SKILL 1.4 Physical development, including motor and sensory

The teacher must be aware of the physical stages of development and how the child's physical growth and development affect learning. Factors determined by the physical stage of development include the ability to sit and attend, the need for activity, the relationship between physical skills and self-esteem, and the degree to which physical involvement in an activity (as opposed to being able to understand an abstract concept) affects learning.

Children with physical impairments possess a variety of disabling conditions. Although significant differences exist among these conditions, so do similarities. Each condition usually affects one particular system of the body—either the cardiopulmonary system (blood vessels, heart, and lungs) or the musculoskeletal system (spinal cord, brain nerves). Some conditions develop during pregnancy, birth, or infancy because of known or unknown factors that may affect the fetus or newborn infant. Other conditions occur later because of injury (trauma), disease, or factors not fully understood.

In addition to motor disorders, individuals with physical disabilities may have such multi-disabling conditions as concomitant hearing impairments, visual impairments, perceptual disorders, speech defects, behavior disorders or mental handicaps, performance deficits, or deficits in emotional responsiveness.

The following are some characteristics that may present in individuals with physical disabilities and other health impairments:

- Lack of physical stamina; fatigue
- Chronic illness; poor endurance
- Deficient motor skills; normal movement may be prevented
- Physical limitations or impeded motor development; a prosthesis or an orthosis may be required
- Limited mobility and exploration of one's environment
- Limited self-care abilities
- Progressive weakening and degeneration of muscles
- Frequent speech and language defects; communication may be prevented; echolalia may be present
- Pain and discomfort throughout the body
- Emotional (psychological) problems that require treatment

- Need for social adjustments; may display maladaptive social behavior
- Need for long-term medical treatment, which may become a financial burden on the family
- Embarrassing side effects from certain diseases or treatment
- Erratic or poor attendance patterns, which lead to the child missing many skills and the parent or caregiver missing days of work

In 1981, the condition of autism was moved from the exceptionality category of Seriously Emotionally Disturbed to that of Other Health Impaired by virtue of a change in language in the original definitions under Public Law 94-142 (“Education of Handicapped Children.” *Federal Register*, 1977). With IDEA, in 1990, autism was made into a separate exceptionality category.

Sample Test Question and Rationale

(Average)

1. **Muscular Dystrophy is a condition which affects the _____ system of the body.**
- A. cardiopulmonary
 - B. musculoskeletal
 - C. neurological
 - D. All of the above

Answer: B. musculoskeletal

As the name implies, Muscular Dystrophy affects the musculoskeletal system.