


EDS 245:
Psychology in the Schools

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Academic Interventions


Need for Academic Intervention

- From 2001/02 to 2006/07 percent of students in special education increased from 13.4% to 13.6%.
 - 8.3 in 1976/77, 11.4 in 1990/91
- 40% of special education students are classified as LD
 - Number of students receiving services in other health impaired, autism, and developmental delay categories has increased.




Special Education Categories

- Title 5. Education
- Division 1. California Department of Education
- Chapter 3. Individuals with Exceptional Needs
- Subchapter 1. Special Education
- Article 3.1. Individuals with Exceptional Need
- 5 CCR § 3030
- **§ 3030. Eligibility Criteria.**




Special Education Categories

- (a) A child shall qualify as an individual with exceptional needs, pursuant to Education Code section 56026, if the results of the assessment as required by Education Code section 56320 demonstrate that the degree of the child's impairment as described in subdivisions (b)(1) through (b)(13) requires special education in one or more of the program options authorized by Education Code section 56361. The decision as to whether or not the assessment results demonstrate that the degree of the child's impairment requires special education shall be made by the IEP team, including personnel in accordance with Education Code section 56341(b). The IEP team shall take into account all the relevant material which is available on the child. No single score or product of scores shall be used as the sole criterion for the decision of the IEP team as to the child's eligibility for special education.




Special Education Categories

- (b) The disability terms used in defining an individual with exceptional needs are as follows:
 - (1) Autism means a developmental disability significantly affecting verbal and nonverbal communication and social interaction, generally evident before age three, and adversely affecting a child's educational performance. Other characteristics often associated with autism are engagement in repetitive activities and stereotyped movements, resistance to environmental change or change in daily routines, and unusual responses to sensory experiences.
 - (A) Autism does not apply if a child's educational performance is adversely affected primarily because the child has an emotional disturbance, as defined in subdivision (b)(4) of this section.
 - (B) A child who manifests the characteristics of autism after age three could be identified as having autism if the criteria in subdivision (b)(1) of this




Special Education Categories

- (2) Deaf-blindness means concomitant hearing and visual impairments, the combination of which causes such severe communication and other developmental and educational needs that they cannot be accommodated in special education programs solely for children with deafness or children with blindness.
- (3) Deafness means a hearing impairment that is so severe that the child is impaired in processing linguistic information through hearing, with or without amplification that adversely affects a child's educational performance.




Special Education Categories

- (4) Emotional disturbance means a condition exhibiting 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:
 - (A) An inability to learn that cannot be explained by intellectual, sensory, or health factors.
 - (B) An inability to build or maintain satisfactory interpersonal relationships with peers and teachers.
 - (C) Inappropriate types of behavior or feelings under normal circumstances.
 - (D) A general pervasive mood of unhappiness or depression.
 - (E) A tendency to develop physical symptoms or fears associated with personal or school problems.
 - (F) Emotional disturbance includes schizophrenia. The term does not apply to children who are socially maladjusted, unless it is determined that they have an emotional disturbance under subdivision (b)(4) of this section.




Special Education Categories

- (5) Hearing impairment means an impairment in hearing, whether permanent or fluctuating, that adversely affects a child's educational performance but that is not included under the definition of deafness in this section.
- (6) Intellectual disability means 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.
- (7) Multiple disabilities means concomitant impairments, such as intellectual disability-blindness or intellectual disability-orthopedic impairment, the combination of which causes such severe educational needs that they cannot be accommodated in special education programs solely for one of the impairments. "Multiple disabilities" does not include deaf-blindness.




Special Education Categories

- (8) Orthopedic impairment means a severe orthopedic impairment that adversely affects a child's educational performance. The term includes impairments caused by a congenital anomaly, impairments caused by disease (e.g., poliomyelitis, bone tuberculosis), and impairments from other causes (e.g., cerebral palsy, amputations, and fractures or burns that cause contractures).
- (9) Other health impairment means having limited strength, vitality, or alertness, including a heightened alertness to environmental stimuli, that results in limited alertness with respect to the educational environment that:
 - (A) Is due to chronic or acute health problems such as asthma, attention deficit disorder or attention deficit hyperactivity disorder, diabetes, epilepsy, a heart condition, hemophilia, lead poisoning, leukemia, nephritis, rheumatic fever, sickle cell anemia, and Tourette syndrome; and
 - (B) Adversely affects a child's educational performance.




Special Education Categories

- (10) Specific learning disability means a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, that may have manifested itself in the imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations, including conditions such as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. The basic psychological processes include attention, visual processing, auditory processing, sensory-motor skills, cognitive abilities including association, conceptualization and expression.
- (A) Specific learning disabilities do not include learning problems that are primarily the result of visual, hearing, or motor disabilities, of intellectual disability, of emotional disturbance, or of environmental, cultural, or economic disadvantage.




Special Education Categories

- (11) A pupil has a language or speech disorder as defined in Education Code section 56333, and it is determined that the pupil's disorder meets one or more of the following criteria:
- (12) Traumatic brain injury means an acquired injury to the brain caused by an external physical force, resulting in total or partial functional disability or psychosocial impairment, or both, that adversely affects a child's educational performance. Traumatic brain injury applies to open or closed head injuries resulting in impairments in one or more areas, such as cognition; language; memory; attention; reasoning; abstract thinking; judgment; problem-solving; sensory, perceptual, and motor abilities; psychosocial behavior; physical functions; information processing; and speech.
- (13) Visual impairment including blindness means an impairment in vision that, even with correction, adversely affects a child's educational performance. The term includes both partial sight and blindness.




Special Education Categories

- (13) Visual impairment including blindness means an impairment in vision that, even with correction, adversely affects a child's educational performance. The term includes both partial sight and blindness.



Referral Rates


- Academic problems most prevalent (Bramlett, Murphy, Johnson, & Wallingsford, 2002)
- Composition of total referrals
 - 57% for reading
 - 43% for written expression
 - 39% for task completion
 - 27% for mathematics
- Academic referrals exceed behavior referrals by almost five to one (Shapiro, 2004)



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Legislative Issues and Academic Interventions



Legislative Impetus for Focus on Academic Progress

- Every Student Succeeds Act (ESSA)
- Individuals with Disabilities Education Act (IDEA)
- Common themes
 - Research based practice
 - Early Intervention



Federal Efforts

- National Research Council (2002)
 - Research in education could apply same principles as other sciences
- Educational Sciences Reform Act (2002)
 - Established Institute of Education Sciences
 - <http://www.ed.gov/about/offices/list/ies/index.html>



Federal Efforts

- What Works Clearinghouse
 - Summarize evidence on programs, products, strategies
 - <http://ies.ed.gov/ncee/wwc/>
 - National Research Council Committee on Research in Education (CORE)
 - <http://www7.nationalacademies.org/core/>




Another Resource

- The Florida Center for Reading Research
 - <http://www.fcr.org/>




Three Tiered Model

- Assessment by response to intervention
 - Tier 1: Primary Intervention
 - Provide classroom support
 - Tier 2: Secondary Intervention
 - Provide more intensive support
 - Tier 3: Tertiary Intervention
 - Consider special education
- Monitor and evaluate at all stages




Tier I Interventions

- Within classroom
- Often part of regular curriculum
- Provided by teacher, aides, volunteers
- Instituted early for identified and at-risk students
- Individualized and flexible grouping
- Guidance and feedback
- Ongoing assessment




Tier II: Supplemental Instruction

- Goes beyond classroom instruction
- Provided in small group or one to one
- Systematic, integrated program
- Provided by trained persons
- Frequent, intense




**Tier Three: Special Education
"Like"**

- Require more thorough evaluation
- Intense and prolonged
- Individual program
- Possible instructional accommodations




**CA Regulations Regarding
Instruction**

- Standards
- Curriculum Frameworks
- Textbook adoptions
- Teacher requirements
- Regulations regarding instructional time
- Regulations regarding types of instruction




**Components of California
Standards**

- Domain
 - Six domains
 - Addressed at all grade levels
- Strand
 - Within each domain there are strands across grade levels
 - Addressed at all grade levels (exception of math)
- Substrand
 - Change at each grade



California Standards


- Mathematics
- Language Arts
- History/social studies
- Science
- Visual and Performing Arts
- English Language Development



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Learning Theory and Academic
Interventions




**Development and Learning
Theory**

- Expectations for children's learning need to be appropriate for developmental level.
 - Important to consider developmental level not just chronological age
- Children's learning varies across stages of development
- Many different factors affect learning.




Theory Regarding Instruction

- Is instruction different for certain populations?
 - Modality
 - Subject matter
 - Culture
- Is effective instruction different for regular and special education students?




Direct Instruction Has Strong Research Base

- Effective for students in both regular and special education programs
- Effective for children living in poverty.
- "Scripting" is a key element
 - Level of scripting can vary



Theory Regarding Qualities of Effective Classrooms

- Classroom management
- Engaged learning time
- Levels of processing



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The Practice of Academic Intervention

Practice of Academic Intervention


- *Problem Solving Model*
- Designing Interventions

**Background information:
Terms**

- Impairment
 - biological difference
- Disability
 - functional difference
- Handicap
 - environmental/situational difference
- Problem
 - difference between what is expected and what the person can do


[How Are Problems Solved?]

- Orientation to causes of psychological problems
 - Direct-indirect
 - Skills deficit, performance deficit




[Problem Solving Models]

- Represent a “mind – set” or practice constraints
- Recursive
- Focus on reducing discrepancy
 - Changes focus from within child to child/environment interaction
- Changes question from diagnostic/eligibility to which intervention strategy might work best?
- Useful for both regular and special education
 - Within particular service delivery system intensity varies depending on level of intervention.




[Four Questions] (Tilley, 2003)

- What is the problem?
- Why is it happening?
- What should be done about it?
- Did it work?




Basic Principles of All Problem Solving Models

- > Functional Assessment
 - > Contrasted to diagnostic or eligibility decisions
- > Progress Monitoring
 - > Emphasis on formative evaluation for decision making
- > Outcome Criterion for Decisions
 - > Setting clear criterion as goals




Differences Between Traditional and Problem Solving Approaches

I. Assumptions	Traditional	Problem-Solving
Cause of problem experienced by individual	Problems viewed as reflection of underlying traits or state within the individual	Problems viewed as discrepancy between individual's performance and the expectations of the environment. Conditions maintaining the problem are sought in environment.



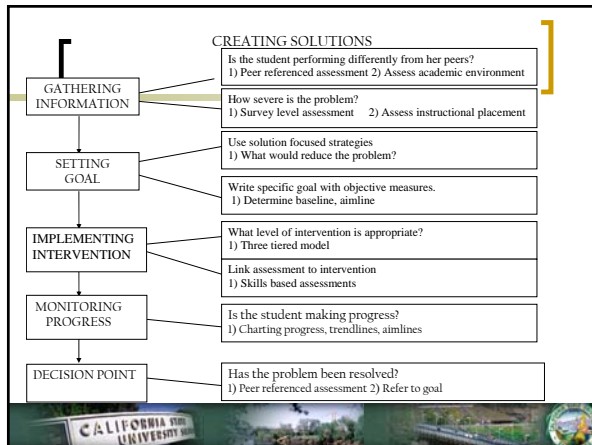
Differences Between Traditional and Problem Solving Approaches

II. Assessment	Traditional	Problem-Solving
1. Methods	Emphasis on norm-referenced psycho-educational and projective measures	Emphasis on direct methods such as observation of behaviors and academic skills in comparison to peers.
2. Purpose	To diagnose problem	To understand how the problem can be resolved and then to measure progress in order to adjust.
3. Scope	Global measures used to diagnose, show improvement	Specific measures of target behaviors in appropriate contexts.



Differences Between Traditional and Problem Solving Approaches


III. Use of data	Traditional	Problem-Solving
	To describe problem and assume etiology	To describe target behavior and maintaining conditions.
	To diagnose or label	To select the appropriate instruction or interventions
	To predict future probable performance	To evaluate and revise instruction or interventions



- ### Gathering Information
- Consulting with teacher
 - Consulting with parents
 - Consulting with relevant others
 - Reviewing work samples
 - Reviewing history
 - Additional assessment
 - Evaluating learning environment
 - Evaluating instructional level


Setting Goals

- Reducing discrepancy between student and peers (problem)
- Solution focused approach
- Choosing appropriate measure
- Use valid methods of setting goals




Types of Interventions

- Indirect
 - Process based
- Direct
 - Focus on skill that is lacking



Designing and Implementing Interventions

- Characteristics of effective interventions
 - Acceptability and face validity
 - Fidelity of implementation
 - Clear statement
- Research based interventions
 - Support schools in making decisions about interventions
 - CA approved reading intervention programs



Interventions

- *Interventions* = planned modification of the environment for the purpose of altering behavior in a specified way (Tilley & Flugum, 1995)
- *planful* = procedures to be applied are specified clearly and completely.
- *environmentally focused* = actions taken modify the environment.
- *goal directed* = intended to alter behaviors in a pre-specified way.



Monitoring Intervention

- Determining behavior to be monitored
- Monitor progress on a short term basis (formative vs. summative evaluation)
- Tools for monitoring progress
- Determining if intervention is working




Using Results for Making Decisions

- Moving to more intensive intervention
- Reducing level of intervention
- Individual and group decisions
- Same questions apply to general and special education




Special Considerations

- Interventions must be culturally sensitive
- Consider child's community (expectations, opportunities for mainstream experiences)
- Developmental issues



Case Study

It is the beginning of the school year and Jorge is well behind the rest of the class in reading. Jorge's parents are from Mexico and have been living in CA for 3 years. They plan to stay here permanently. Jorge has three older brothers and one younger sister. Jorge is struggling in school, particularly with reading. He is generally an attentive student in class but sometimes is more active than the teacher would like. He likes to have fun and often plays silly games with his friends. Jorge's older brothers are performing within the average range for their classroom but below what is considered basic on state proficiency tests in Language Arts and Mathematics. Jorge's younger sister just started first grade and is doing well. The school is 60% Hispanic and the Free and Reduced Lunch rate is 80%. The school has not improved its API scores in reading and is in danger of state intervention. They have made good improvements in math. Jorge's teacher is in her second year of teaching and is feeling somewhat overwhelmed but the needs of the children. She does not speak Spanish. She feels that it is important for the children to have their basic needs met prior to learning academics. Therefore, she spends a good deal of time on helping the children develop positive self images. She is using a state adopted curriculum in reading but is unsure what to do with children who are not able to work in the third grade curriculum



Discussion Questions

- As a consultant working with the teacher what are some important questions to answer that would be helpful in designing interventions?
- What information would be useful to gather to determine the severity of the problem?
- What information would be useful in designing an intervention?

