

---

# Theories and Principles of Early Intervention

---

Silvia DeRuvo, MA  
CSUS, 2009

---

# Agenda

- What is Special Education
  - The Foundation for Early Intervention
  - IDEA 2004 Part C
  - Early Intervening Services
  - Early Childhood Disabilities
  - Parent Resources
-

---

# Your Reactions

- What is your definition of special education?
  - How is this definition the same or different from the others in your group?
-

---

# Alphabet Soup Scavenger Hunt

## Scavenger Hunt

- Use the sheet provided
  - Find colleagues that can decipher the acronyms on your worksheet  
(You can only do one yourself)
  - Once all the boxes are filled, you are done!
-

---

# Developing the Foundations For Later Learning

- Building block concept of development
    - Strength and integrity of early development is necessary for stability of higher levels of development
  - This idea led to the development of early intervention programs for children with exceptional needs
    - Early intervention has proven to be effective in maintaining and accelerating development
-

---

# Legislation that has created Early Childhood Special Ed.

- 1864-1960s
    - State and local programs provided services primarily for grants and to fund research and demonstration projects
  - 1970s-1990s
    - Federally mandated programs for children birth through 21 years
    - P.L. 94-142- provisions for special ed. children of all ages
    - P.L. 99-457 Part H- provisions for children who were “at risk” for later problems
    - IDEA- mandatory services for children 3 to 5
  - IDEA 2004
    - Services from birth to age 22
-

---

# IDEA 2004

- Go to IDEA Building the Legacy of IDEA 2004 website
- <http://idea.ed.gov>
- “*Check These Out*” box on bottom left side
  - Click on Statute- Title I

In assigned groups describe what programs are found under:

Part A

Part B

Part C

Part D

---

# IDEA 2004- Going Deeper

Click on Part C – Section 632 Definitions

1. What is the definition of “at risk infant or toddler”?  
632(1)
  2. What is the definition of “early intervening services”? 632(4)(c)
  3. What do early intervening services include?  
632(4)(E)
  4. Who provides early intervening services?  
632(4)(F)
  5. In what environment should these services be provided? 632(4)(G)
  6. Define an infant or toddler with a disability.  
632(5)(A)(I)(ii)
-

---

# Evidence for Early Childhood Intervention

Children affected by two factors:

Environmental Factors

Biological Factors

- When intervention occurs early:
  - Special education placement is less likely
  - Higher achievement on test scores
  - Less likely to show delinquent behaviors

**Children who receive early intervention are  
more productive!!!!**

---

---

# The case for early intervention:

- **Cost Effectiveness:**
    - Schools quickly recover the cost of early intervention in less special education services required and less grade retention
  - **Savings to Society**
    - Students who received early intervention are less likely to need public assistance or to end up in the penal system
    - More likely to have gainful employment and contribute to society
-

---

# Recognition and Response (Baby RtI)

- An emerging practice
    - Recognize children with learning difficulties prior to referral rather than focusing only on those already diagnosed
    - Helping teachers support academic as well as social emotional development in ECE programs
    - Incorporate essential elements of Response to Intervention
      - Linking early intervening services prior to kindergarten with existing school programs
-

Core Principles of RtI	Early Childhood R&R
Intervene early	Intervene early
Use a multi-tiered model of service delivery	Use an intervention hierarchy
Use a problem-solving method to make decisions with a multi-tiered model	Use a systematic, collaborative approach in partnership with families to address concerns about individual children
Use research based, validated intervention and instructional practices	Use early education practices based on evidence combined with the collective wisdom of the field
Monitor student progress to inform instruction	Determine whether students are making progress and use information to make practice decisions
Use data to make decisions	Use information from assessments to make practice decisions
Use assessment finding to monitor progress to determine intervention effectiveness	Gather information from multiple sources to evaluate teaching practices and student progress

---

# Recognition and Response

## ■ Features of R&R

- Teachers use assessment as part of an integrated instructional system in general education ECE programs
  - Use data to make improvements in the instruction
  - Develop interventions for individual students who need additional support
-

---

# Recognition and Response

## Involves:

- Aligning assessment and instruction to Early Learning Standards
  - Ensuring classroom assessment is tied to effective practices
  - Implementing frequent screening and progress monitoring to provide the teacher data to identify children who need additional instructional supports
  - Tracking both the level and rate of academic and behavioral growth in students
-

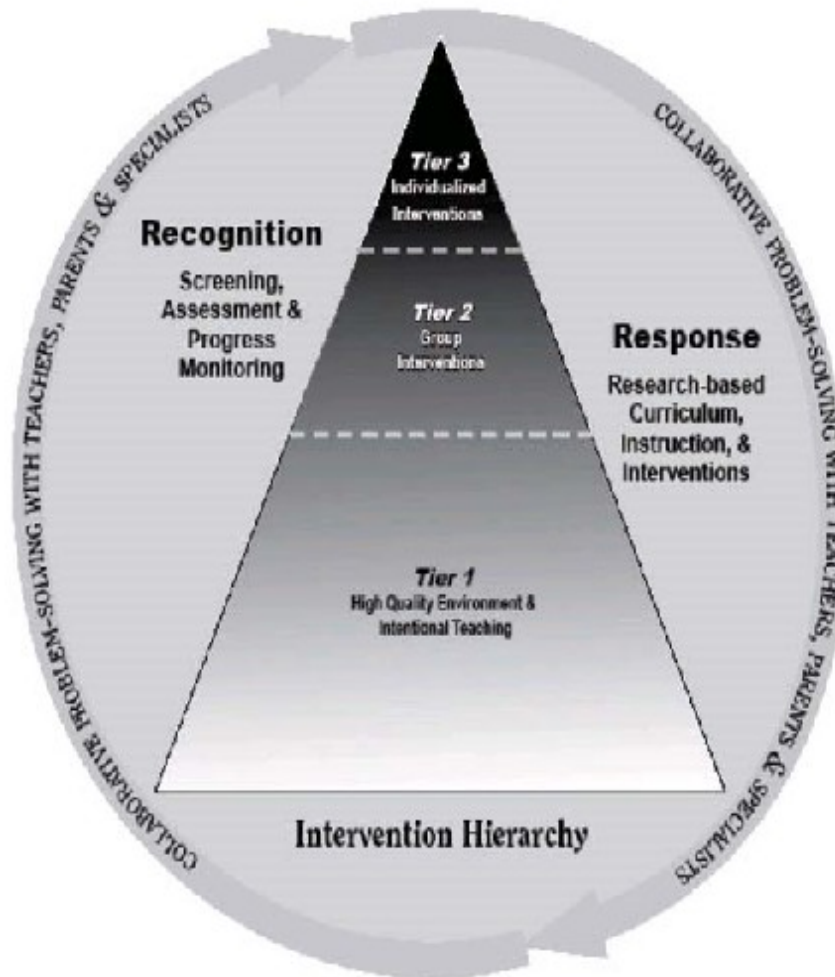
---

# Core Components of R&R

- An intervention hierarchy
  - Screening, assessment, and progress monitoring (recognition)
  - Research based curriculum, instruction and focuses instruction (response)
  - Collaborative problem solving process for decision making
-

## Essential Components of Recognition & Response: The Conceptual Framework

The figure below shows the four essential components of Recognition & Response: (1) an intervention hierarchy; (2) screening, assessment, and progress monitoring (recognition); (3) research-based curriculum, instruction, and focused interventions (response); and (4) a collaborative problem-solving process for decision-making.



Next: [Intervention hierarchy](#)

# Who are children in need of early special education intervention?

- IDEA defines children with disabilities as those who are:
  - Mentally retarded
  - Hearing impaired
  - Speech and language impaired
  - Visually impaired
  - Seriously emotionally disturbed
  - Orthopedically impaired
  - Autistic
  - Brain injured
  - Other health impaired
  - Learning disabled
  - Deaf-blind
  - Developmentally delayed

---

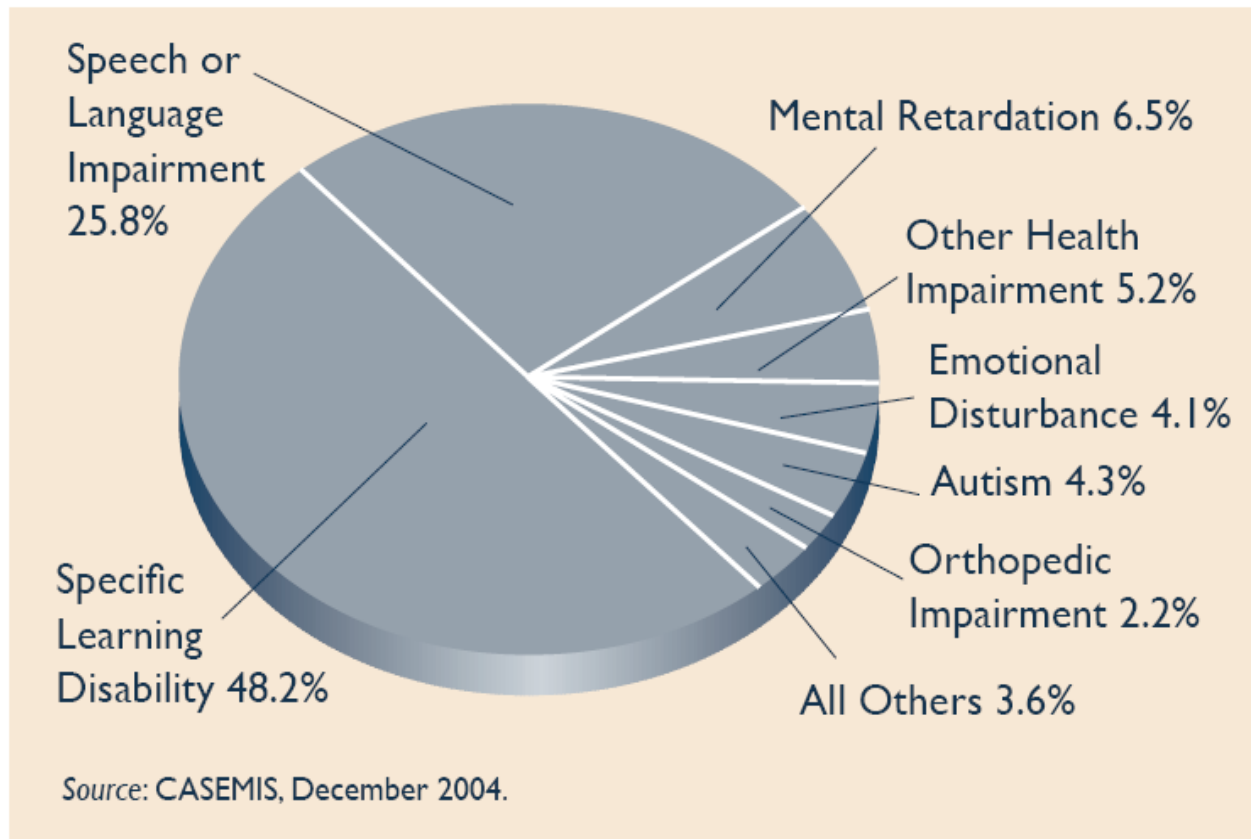
# Table Talk:

## Expectations Make a Difference

Come to a consensus within your group:

- How many of the 13 federal disability definitions have the terms “mental retardation” or “sub average intelligence” as a defining characteristic?
-

# California Special Education Enrollment by Disability



**Figure 4.** Enrollment, by Category of Disability, 2004-05

---

# How do these children differ from typical children?

## ■ Mental Retardation

- Significant sub average general cognitive functioning concurrent with deficits in adaptive behavior

- Measured in IQ:

- Mild mental retardation 55-69 IQ
  - Moderate mental retardation 40-54 IQ
  - Severe retardation 23-39 IQ
  - Profound retardation below 25 IQ
-

# Hearing Impairments:

- Hearing loss is characterized by degree and type of loss
  - Degree is measured in units of intensity and frequency
    - Normal hearing: 0-25 db, 40 –4000 hertz
    - Mild hearing impairment is 40 db loss
    - Profound impairment is a 90 db loss
  - Type of loss is either:
    - a conductive- interference of sound to auditory nerve
    - a sensorineural loss-defect in inner ear or auditory nerve
  - Deafness is:

A hearing impairment that is so severe that a child cannot process linguistic information without amplification and education performance is affected

---

---

# Speech and Language Disorders

- Obvious disorders:
    - Cleft palate, articulation, stutter, echolalia
  - Less obvious disorders:
    - Usually accompany
      - Hearing impairment, cerebral palsy, emotional disturbances, mental retardation, pervasive developmental disorders
    - Delayed ability to communicate functionally
      - Express needs and wants
      - Interact verbally and appropriately with others
-

---

# Visual Impairments

- Blind is defined as:
    - Visual acuity that is poorer than 20/200 in the better eye after correction or the field of vision is limited to an angle of less than 20 degrees
  - Partial sight is defined as:
    - Visual acuity that is less than 20/70 but greater than 20/200 in the better eye after correction
  - Educational implications:
    - Early determination if child will benefit from large print material or Braille instruction
-

---

# Emotionally Disturbed

- Child exhibits one or more of the characteristics over a long period of time and adversely affects educational performance
    - Inability to learn not explained by IQ, sensory or health factors
    - Inability to maintain satisfactory relationships with peers or instructors
    - Inappropriate types of behavior or feelings under normal circumstances
    - A general pervasive mood of unhappiness or depression
    - Tendency to develop physical symptoms or focus associated with personal or school problems
-

---

# Orthopedic Impairment

- Any condition that interferes with the health or normal functioning of bones, joints or muscles
    - Spina bifida, club feet, cerebral palsy, amputations
    - Caused by heredity factors, infection or toxic substances, birth injuries, disease or accidents
  - Educational Support
    - Educational support can be very limited with appropriate adaptive equipment.
    - Special education staff help child and staff adapt to equipment and environment.
-

---

# Other Disabilities

- Other Health Impaired:
    - Children with limited strength, vitality, or alertness as a result of chronic or acute health problems
  - Autism:
    - Developmental disability that significantly affects verbal and nonverbal communication and social interaction
      - Engage in repetitive activities and stereotypical movements, resistive to change, unusual response to sensory experiences
  - Traumatic Brain Injury:
    - An acquired injury to the brain caused by external physical force resulting in total or partial functioning disability or psychosocial impairment affecting a child's education
-

---

# How atypical development affects families:

- ❑ Must mourn their idealized expectation
  - ❑ Stress depends on severity of disability
- ❑ Isolation from normal community activities

Must become their child's biggest ADVOCATE if they are prepared or not!

The role of the early childhood special educator is to help the parent with this all important step!!

---

---

# Developing the Foundations For Later Learning

- Building block concept of development
    - Strength and integrity of early development is necessary for stability of higher levels of development
  - This idea led to the development of early intervention programs for children with exceptional needs
    - Early intervention has proven to be effective in maintaining and accelerating development
-

---

# Legislation that has created Early Childhood Special Ed.

- 1864-1960s
    - State and local programs provided services primarily for grants and to fund research and demonstration projects
  - 1970s-1990s
    - Federally mandated programs for children birth through 21 years
    - P.L. 94-142- provisions for special ed. children of all ages
    - P.L. 99-457 Part H- provisions for children who were “at risk” for later problems
    - IDEA- mandatory services for children 3 to 5
  - IDEA 2004
    - Services from birth to age 22
-

---

# IDEA 2004

- Go to IDEA Building the Legacy of IDEA 2004 website
- <http://idea.ed.gov>
- “*Check These Out*” box on bottom left side
  - Click on Statute- Title I

In assigned groups describe what programs are found under:

Part A

Part B

Part C

Part D

---

# IDEA 2004- Going Deeper

Click on Part C – Section 632 Definitions

1. What is the definition of “at risk infant or toddler”?  
632(1)
  2. What is the definition of “early intervening services”? 632(4)(c)
  3. What do early intervening services include?  
632(4)(E)
  4. Who provides early intervening services?  
632(4)(F)
  5. In what environment should these services be provided? 632(4)(G)
  6. Define an infant or toddler with a disability.  
632(5)(A)(I)(ii)
-

---

# Evidence for Early Childhood Intervention

Children affected by two factors:

Environmental Factors

Biological Factors

- When intervention occurs early:
  - Special education placement is less likely
  - Higher achievement on test scores
  - Less likely to show delinquent behaviors

**Children who receive early intervention are  
more productive!!!!**

---

---

# The case for early intervention:

- **Cost Effectiveness:**
    - Schools quickly recover the cost of early intervention in less special education services required and less grade retention
  - **Savings to Society**
    - Students who received early intervention are less likely to need public assistance or to end up in the penal system
    - More likely to have gainful employment and contribute to society
-

---

# Recognition and Response (Baby RtI)

- An emerging practice
    - Recognize children with learning difficulties prior to referral rather than focusing only on those already diagnosed
    - Helping teachers support academic as well as social emotional development in ECE programs
    - Incorporate essential elements of Response to Intervention
      - Linking early intervening services prior to kindergarten with existing school programs
-

Core Principles of RtI	Early Childhood R&R
Intervene early	Intervene early
Use a multi-tiered model of service delivery	Use an intervention hierarchy
Use a problem-solving method to make decisions with a multi-tiered model	Use a systematic, collaborative approach in partnership with families to address concerns about individual children
Use research based, validated intervention and instructional practices	Use early education practices based on evidence combined with the collective wisdom of the field
Monitor student progress to inform instruction	Determine whether students are making progress and use information to make practice decisions
Use data to make decisions	Use information from assessments to make practice decisions
Use assessment finding to monitor progress to determine intervention effectiveness	Gather information from multiple sources to evaluate teaching practices and student progress

---

# Recognition and Response

## ■ Features of R&R

- Teachers use assessment as part of an integrated instructional system in general education ECE programs
  - Use data to make improvements in the instruction
  - Develop interventions for individual students who need additional support
-

---

# Recognition and Response

## Involves:

- Aligning assessment and instruction to Early Learning Standards
  - Ensuring classroom assessment is tied to effective practices
  - Implementing frequent screening and progress monitoring to provide the teacher data to identify children who need additional instructional supports
  - Tracking both the level and rate of academic and behavioral growth in students
-

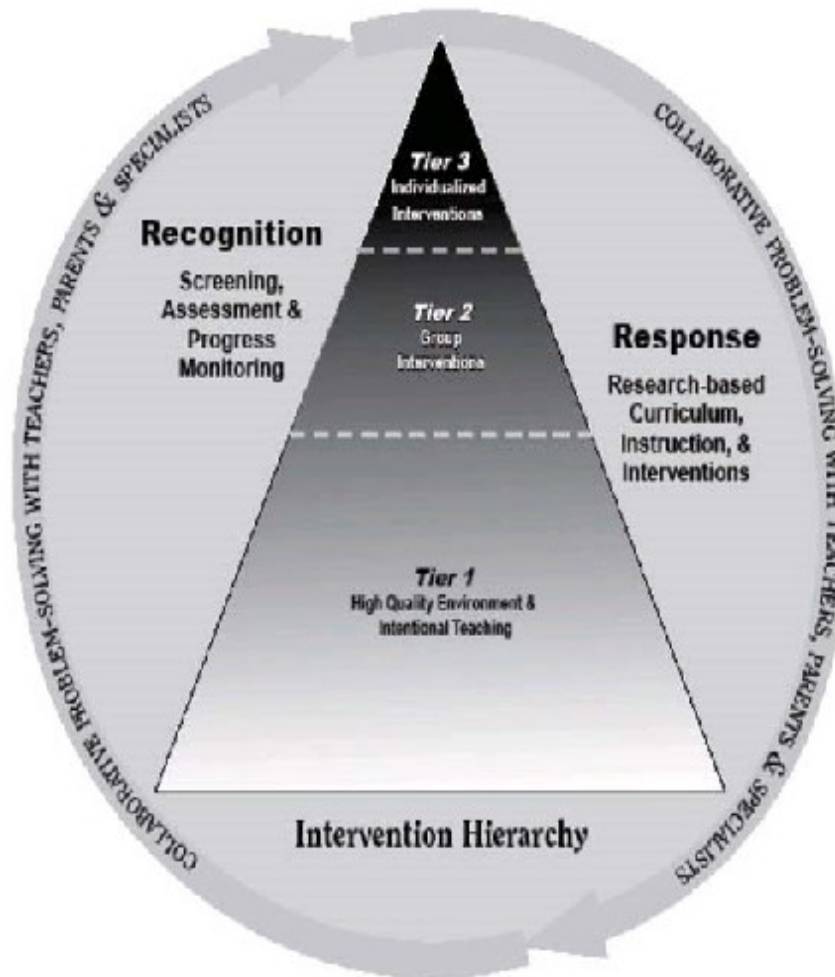
---

# Core Components of R&R

- An intervention hierarchy
  - Screening, assessment, and progress monitoring (recognition)
  - Research based curriculum, instruction and focuses instruction (response)
  - Collaborative problem solving process for decision making
-

## Essential Components of Recognition & Response: The Conceptual Framework

The figure below shows the four essential components of Recognition & Response: (1) an intervention hierarchy; (2) screening, assessment, and progress monitoring (recognition); (3) research-based curriculum, instruction, and focused interventions (response); and (4) a collaborative problem-solving process for decision-making.



Next: [Intervention hierarchy](#)

# Who are children in need of early special education intervention?

- IDEA defines children with disabilities as those who are:
  - Mentally retarded
  - Hearing impaired
  - Speech and language impaired
  - Visually impaired
  - Seriously emotionally disturbed
  - Orthopedically impaired
  - Autistic
  - Brain injured
  - Other health impaired
  - Learning disabled
  - Deaf-blind
  - Developmentally delayed

---

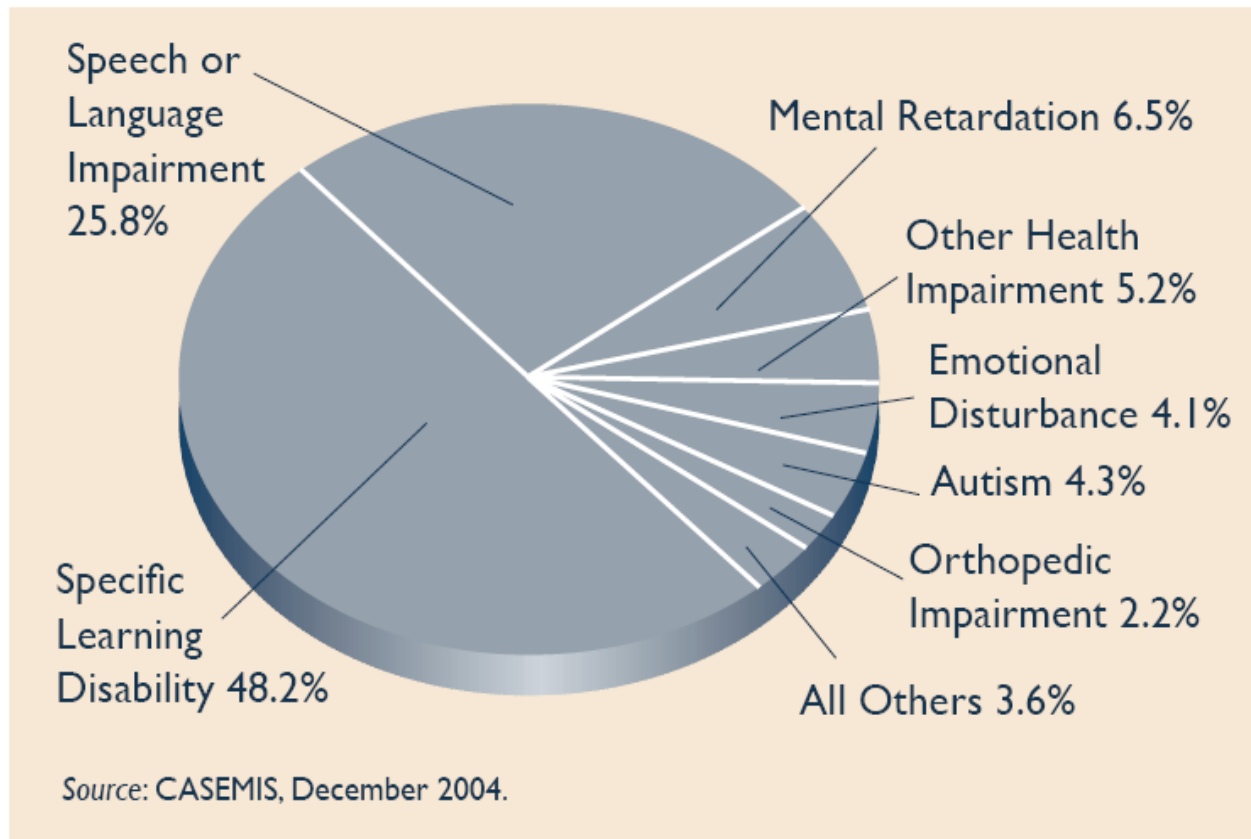
# Table Talk:

## Expectations Make a Difference

Come to a consensus within your group:

- How many of the 13 federal disability definitions have the terms “mental retardation” or “sub average intelligence” as a defining characteristic?
-

# California Special Education Enrollment by Disability



**Figure 4.** Enrollment, by Category of Disability, 2004-05

---

# How do these children differ from typical children?

## ■ Mental Retardation

- Significant sub average general cognitive functioning concurrent with deficits in adaptive behavior
  - Measured in IQ:
    - Mild mental retardation                      55-69 IQ
    - Moderate mental retardation                40-54 IQ
    - Severe retardation                            23-39 IQ
    - Profound retardation                        below 25 IQ
-

# Hearing Impairments:

- Hearing loss is characterized by degree and type of loss
  - Degree is measured in units of intensity and frequency
    - Normal hearing: 0-25 db, 40 –4000 hertz
    - Mild hearing impairment is 40 db loss
    - Profound impairment is a 90 db loss
  - Type of loss is either:
    - a conductive- interference of sound to auditory nerve
    - a sensorineural loss-defect in inner ear or auditory nerve
  - Deafness is:

A hearing impairment that is so severe that a child cannot process linguistic information without amplification and education performance is affected

---

---

# Speech and Language Disorders

- Obvious disorders:
    - Cleft palate, articulation, stutter, echolalia
  - Less obvious disorders:
    - Usually accompany
      - Hearing impairment, cerebral palsy, emotional disturbances, mental retardation, pervasive developmental disorders
    - Delayed ability to communicate functionally
      - Express needs and wants
      - Interact verbally and appropriately with others
-

---

# Visual Impairments

- Blind is defined as:
    - Visual acuity that is poorer than 20/200 in the better eye after correction or the field of vision is limited to an angle of less than 20 degrees
  - Partial sight is defined as:
    - Visual acuity that is less than 20/70 but greater than 20/200 in the better eye after correction
  - Educational implications:
    - Early determination if child will benefit from large print material or Braille instruction
-

---

# Emotionally Disturbed

- Child exhibits one or more of the characteristics over a long period of time and adversely affects educational performance
    - Inability to learn not explained by IQ, sensory or health factors
    - Inability to maintain satisfactory relationships with peers or instructors
    - Inappropriate types of behavior or feelings under normal circumstances
    - A general pervasive mood of unhappiness or depression
    - Tendency to develop physical symptoms or focus associated with personal or school problems
-

---

# Orthopedic Impairment

- Any condition that interferes with the health or normal functioning of bones, joints or muscles
    - Spina bifida, club feet, cerebral palsy, amputations
    - Caused by heredity factors, infection or toxic substances, birth injuries, disease or accidents
  - Educational Support
    - Educational support can be very limited with appropriate adaptive equipment.
    - Special education staff help child and staff adapt to equipment and environment.
-

---

# Other Disabilities

- Other Health Impaired:
    - Children with limited strength, vitality, or alertness as a result of chronic or acute health problems
  - Autism:
    - Developmental disability that significantly affects verbal and nonverbal communication and social interaction
      - Engage in repetitive activities and stereotypical movements, resistive to change, unusual response to sensory experiences
  - Traumatic Brain Injury:
    - An acquired injury to the brain caused by external physical force resulting in total or partial functioning disability or psychosocial impairment affecting a child's education
-

---

# How atypical development affects families:

- ❑ Must mourn their idealized expectation
  - ❑ Stress depends on severity of disability
- ❑ Isolation from normal community activities

Must become their child's biggest ADVOCATE if they are prepared or not!

The role of the early childhood special educator is to help the parent with this all important step!!

---

---

# Resources to Support Families

- Work in your groups
  - Identify at least one website that might help parents learn more about their child's disability
  - Write URL on board
  - Be ready to share with the class what type of information you found at the site
-

---

# More Resources

- <http://www.recognitionandresponse.org>
  - <http://www.crtiec.org>
    - Center for Response to Intervention in Early Childhood
  - <http://www.rti4success.org>
  - <http://www.interventioncentral.org>
  - <http://www.nectac.org>
    - National early childhood technical assistance center
-