

Notes for Modifying Instruction
Summer Course

EDUC 4290
Chris O'Brien, Ph.D.

UNC Charlotte Department of Special
Education and Child Development

Three Critical Elements
of this Course

What practical strategies can be implemented to support diverse populations of students?

What are the theories and philosophies of education that support diverse populations of children in American schools?
PEDAGOGY

Who are the diverse children...
that challenge the traditional notion of school?

Why Do We Label and Classify Exceptional Children?

- Possible benefits of labeling
 - Recognizing differences in learning and behavior is the first step to responding responsibly to those differences
 - May lead to more acceptance of atypical behavior by peers
 - Helps professionals communicate and disseminate research findings
 - Funding and resources are often based on categories
 - Helps advocacy groups promote more awareness
 - Makes special needs more visible (AUTISM)

Why Do We Label and Classify Exceptional Children?

- Possible disadvantages of labeling
 - Focuses on what students cannot do
 - May **stigmatize** the child and lead to peer rejection
 - May **negatively affect self-esteem**
 - May **cause others to have low expectations** for the student
 - **Disproportionate** number of culturally diverse groups are labeled
 - May **take the role of fictional explanatory constructs**
 - Takes away from the child's individuality
 - Suggest that there is something wrong with the child
 - Labels have **permanence**
 - Basis for keeping children out of the regular classroom
 - Requires great expenditure that might be better spent on **planning and delivering instruction**

1.5

Disability advocates examine concepts of:
Tolerance versus. Respect;
Pity versus Advocacy
Compassion versus Expectation

Use of Person first language

- No! "The learning-disabled child."
- Yes! "_____."

**THE RIGHT TO EDUCATION: SPECIAL
EDUCATION LITIGATION AND
LEGISLATION**

**EQUAL OPPORTUNITY
THE RIGHT TO EDUCATION**

- There is no constitutional guarantee to a free public education.
- The 14th Amendment of the United States Constitution mandates that no citizen shall be denied the right to life, liberty or property without due process.

**EQUAL OPPORTUNITY
THE RIGHT TO EDUCATION**

- History of oppression in the U.S. for children with disabilities
- Services based on pity and religious duty
- Institutionalization and the fixed nature of ability were prominent for many years

BROWN v. BOARD OF EDUCATION
IMPLICATIONS FOR SPECIAL EDUCATION

- In Brown, the Supreme Court of the U.S, determined that if a state undertakes the provision of free education for its citizenry, then a property right of an education is established.
- In Brown, the 1954 Court was addressing the rights of African American students. However, this decision would in a few years have far reaching implications for students with disabilities. Brown became the basis for almost all of the special education right to education litigation.

Civil Rights Legislation
IMPLICATIONS FOR SPECIAL EDUCATION

- _____
 - Banned discrimination in public accommodations, enforced previously guaranteed rights under the constitution

PARC V. PENNSYLVANIA

In 1971, the Pennsylvania Association for Retarded Children brought a class action suit against the Commonwealth of Pennsylvania for failure to provide students with mental retardation with a public supported education.

PARC v. Pennsylvania Issues

Attorneys for the plaintiffs argued:

- Education cannot be defined as only the provision of academic experiences for children.
- All students with mental retardation are capable of benefiting from program of education and training.
- Having undertaken a free public education for the children of Pennsylvania, the state could not deny children with mental retardation the same.
- The earlier students with mental retardation are provided an education, the greater the amount of learning that could be predicted.

PARC v. PENNSYLVANIA

- The Federal District Court ruled in favor of the Plaintiffs. All Children between ages 6 and 21 must be provided a free public education.
- Court indicated that it is most desirable to educate children with mental retardation in programs most like those provided for peers without disabilities.

MILLS v. BOARD OF EDUCATION

- Class-action suit was filed in the Federal District Court in the District of Columbia.
- Brought by parents of seven children on behalf of all 18,000 out of school children with disabilities in D.C. including those with behavior problems, hyperactivity, epilepsy, mental retardation, and physical impairments.

MILLS DECISION

- Court ruled in favor of the plaintiffs.
- Court mandated that the school district provide all children with disabilities a public supported education.
- Court ordered the district to provide due process safeguards.
- Court clearly outlined due process procedures for labeling, placement and exclusion .
- _____ include: right to appeal, right to access to records, written notice of all stages of the process.

LEGISLATION

- Much of the Federal and State right to education laws are based on the litigation in various states (e.g. PARC v. Commonwealth of PA, Mills v. Board of Education) giving educational rights to individuals with disabilities.
- The two earlier and most prominent pieces of legislation include: Section 504 of P. L. 93-112 and P. L. 94-142 (the Education for All Handicapped Children Act.

PUBLIC LAW 94-142

- _____
- P.L. 94-142 provides students age 3-21:
- A free and appropriate education for all children with disabilities.
 - Procedural safeguards to protect the rights of the students and their parents.
 - Education in the _____
 - Individualized educational programs.
 - Parental involvement in educational decisions related to their children with disabilities.

94-142 (Now IDEA)

- Zero Reject/Child Find
- Free and Appropriate Public Education (FAPE)
- LRE (Least Restrictive Environment)
- IEP (Individualized Education Plan)
- Nondiscriminatory Evaluation
- Due Process
- Parental Participation

Change from 94-142 to IDEA in 1990

- Changed the name
- Added TBI and Autism
- Mandated transition plans over the age 16 and possibly at age 14
- Services ages 0-21

Changes in IDEA in 1997

- Parent as a member of the team
- Regular educator must be a member of the team
- Parents must receive updates on IEP the same as general education students
- Three year re-evaluation is optional

- Students with disabilities must be involved in state testing
- Students with disabilities are to be taught the same curriculum as their peers
- 45 day suspensions could be given if
 - possession of a weapon
 - possession or sale of drugs
 - dangerous behavior (hearing)

- I.D.E.A.**
- Revised 2004
 - Aligned with NCLB
 - Highly qualified
 - Changes in IEP
 - Transition Services
 - Overrepresentation
 - Student Discipline
 - Due Process
 - Monitoring and Compliance
 - Funding

- Related Legislation**
- _____
 - Extends civil rights to people with disabilities
 - Americans with Disabilities Act
 - Extends civil rights protection to private sector employment, all public services, public accommodation, and transportation_

SECTION 504 OF P.L. 93-112

- Section 504 enacted as part of the Vocational Rehabilitation Act of 1973.
- Section 504 is a counterpart to the Civil Rights Act of 1964.
- Does for individuals with disabilities what the earlier legislation did for racial/ethnic minorities.
- A basic civil rights provision with respect to prohibiting discrimination against America's individuals with disabilities.

SECTION 504

Section 504 is brief in language, far-reaching in implications.
 "No otherwise qualified handicapped individual in the United States.... Shall, solely by reason of his (or her) handicap, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance."

Individualized Education Program (IEP)

- IDEA requires that an IEP be developed and implemented for every student with disabilities between the ages of 3 and 21
- Individualized family service plans (IFSP) are developed for infants and toddlers from birth to age 3.

The IEP team must include the following members:

- _____
- _____
- _____
- _____
- _____
- _____
- _____

IEP Components

- The IEP must include:
 - A statement of present levels of educational performance
 - A statement of annual goals
 - A statement of special education and related services
 - An explanation of the extent to which the student will not participate with nondisabled children
 - Individual modifications
 - The projected date for the beginning and duration of services
 - A statement of how the child will be assessed
 - Beginning at age 14, a statement of transition service needs must be included
 - Beginning at age 16, an individual transition plan must be developed

2.4

IEP Functions and Formats

- IEP formats vary widely across school districts
- Properly including all of the mandated components in an IEP is no guarantee that the document will guide the student's learning and the teachers' teaching
- The purpose is to create a document that goes beyond compliance with the law and actually functions as a meaningful guide

2.5

Least Restrictive Environment

- LRE is the setting that is closest to a regular school program that meets the child's special educational needs
- The IEP team must determine if the annual goals and short-term objectives can be achieved in the regular classroom
 - Removal from the regular classroom should take place when the severity of the disability is such that an appropriate education cannot be achieved
 - Placement must not be regarded as permanent

2.6

REI, Mainstreaming, Inclusion

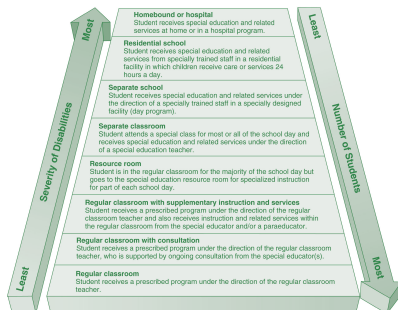
- Regular Education Initiative (REI)
- Mainstreaming
- Inclusion
 - A progression of approaches, subtle but significant differences.

Exclusion



Inclusion





Inclusive Education

- Inclusion means educating students with disabilities in regular classrooms
 - Studies have shown that well-planned, carefully conducted inclusion can be generally effective with students of all ages, types, and degrees of disability
- A few special educators believe that the LRE principle should give way to full inclusion, in which all students with disabilities are placed full time in regular classrooms

Arguments For and Against Full Inclusion

- Pro
 - LRE legitimates restrictive environments
 - Confuses segregation and integration with intensity of services
 - Is based on a "readiness model"
 - Supports the primacy of professional decision making
 - Sanctions infringements on people's rights
 - Implies that people must move as they develop and change
 - Directs attention to physical settings rather than to the services and supports people need
- Con
 - Placing a child in a general education setting is no guarantee he will learn or be accepted
 - General education teachers are often not sufficiently trained
 - System of supports often not available
 - No clear definition of what inclusion means

High-incidence Disabilities

- _____
- _____
- _____
- _____
- _____

Asperger's Syndrome

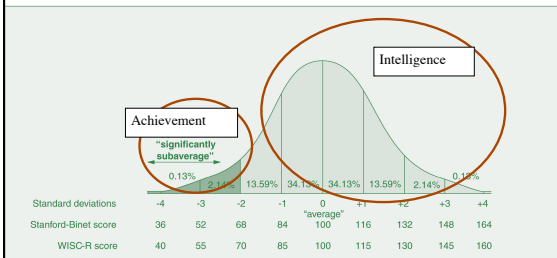
Students with Learning Disabilities

- Primarily struggle with:

- _____
- _____
- _____
- _____
- _____
- _____

...but what are they good at?

Normal Curve



Characteristics

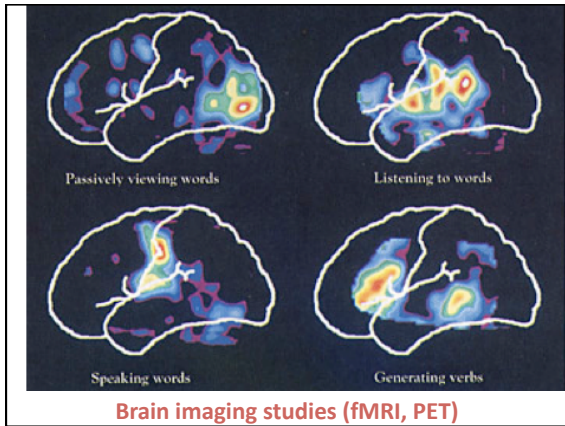
- Students with LD experience one or more of the following difficulties:

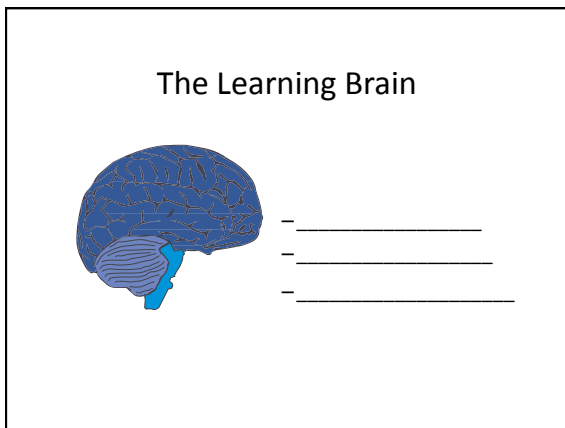
- _____
- Deficits in written language - Perform lower across most written expression tasks
- Underachievement in math - 50% have math IEP goals
- Poor social skills - 75% have social skills deficits
- Behavioral problems
- Defining Characteristic
 - Specific and significant achievement deficits in the presence of adequate overall intelligence

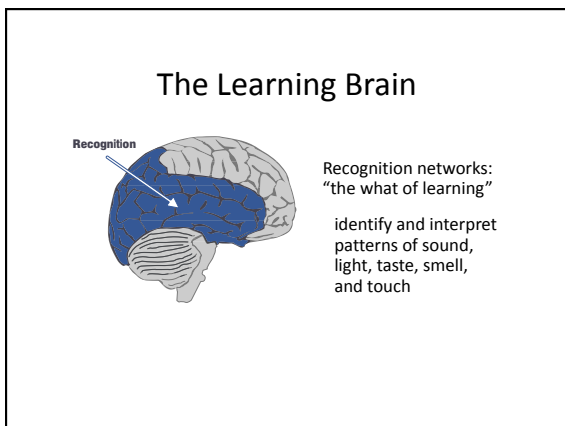
- _____
 - An “unexpected” difference between general ability and achievement
- Exclusion criterion
 - LD can occur with other disabilities but the learning problems must not be “primarily the result” of the other disability or other condition (e.g., low SES)

- Definition of Specific Learning Disability (continued)**
- A student is not regarded as having a specific learning disability if the discrepancy is primarily the result of:
 - **Visual, hearing or motor disability**
 - **Mental retardation**
 - **Emotional disturbance**
 - **Environmental, cultural, or economic disadvantage**

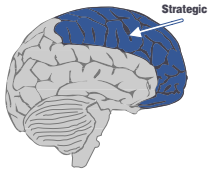
- Characteristics of Students with LD**
- Most students with LD seem more different than alike.
 - **Overriding characteristics:**
 - Unexpected difficulty or low performance in one or more academic areas
 - Ineffective or inefficient information processing or learning strategies in the area(s) of difficulty





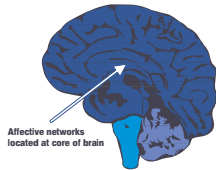


The Learning Brain



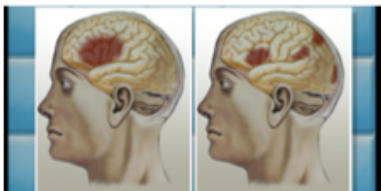
Strategic networks:
"the how of learning"
plan, execute, and
monitor actions and
skills

The Learning Brain



Affective networks:
"the why of learning"
evaluate and set
priorities

Neurological activity



Dyslexia Typical Profile

Prevalence

- _____
- 45-51% of all children with disabilities receive services under the LD category
- Up to 5 out of every 100 students in the U.S. is diagnosed with LD
- Males with LD outnumber females by 3-to-1
- The number of children identified is growing

Attention Deficit Hyperactivity Disorder

- Definition
 - Two types
 - _____
 - _____
- *DSM-IV* Classification
 - ADHD, Predominantly Inattentive Type
 - ADHD, Predominantly Hyperactive-Impulsive Type
 - ADHD, Combined Type

Inattention Refers To:

- **Consistent (over 6 months) and highly inappropriate levels of the following:**
 - Failing to pay close attention to details and making careless mistakes that are inconsistent with child's developmental level
 - Failing to sustain attention to tasks and/or play activities

Hyperactivity Refers To

- **Consistent (over 6 months) and highly inappropriate levels of the following:**
 - **Hyperactivity**
 - Fidgeting or squirming
 - Having a difficult time remaining and seated in class
 - Running or climbing excessively when it's not appropriate
 - Having difficulty playing quietly
 - Acting a though he/she is "driven by a motor"
 - Talking too much

Impulsivity Refers To

- **Consistent (over 6 months) and highly inappropriate levels of the following:**
 - Blurting out answers
 - Difficulty waiting for their turn
 - Interrupting others or butting into activities

Onset of inattention and/or hyperactivity should be present before age 7 and in two or more separate settings.

Core Characteristics of ADHD

Medication as Treatment

- Stimulant medication
 - Ritalin
 - Dexadrine
 - Adderall
 - Cylert
 - Concerta
- Medication is only one aspect of a treatment plan

Environmental Modification

Behavior Modification

Behavior Problems vs. Behavior Disorders

- From the module: connecting problem behavior with behavior disorder
- What's the difference?
- How does problem behavior become a disorder?
- A very subjective process...

Serious Emotional Disturbance

One or more of the following characteristics over a long period of time and to a marked degree that adversely affects educational performance

- Inability to learn not related to other factors
- Inability to build or maintain satisfactory peer or teacher relationships
- Inappropriate feelings or behavior under normal conditions
- Frequently unhappy or depressed
- Often fearful
- Definition does not apply to children who are "socially maladjusted"

Common Characteristics of Children with EBD

Two primary behavioral excesses

- _____
- _____ ****
- Temper tantrums
- Property destruction
- Threats of violence or violence toward peers and/or teachers
- _____
- Overly shy or immature
- Withdrawn
- Hypochondria
- Easily upset and difficult to calm

Problems with IDEA Definition

- Definition is vague and subjective
 - What are "satisfactory" peer and teacher relationships?
 - What does "inappropriate" behavior look like?
- The definition, as written, excludes children on the basis for which they are included
 - How does one differentiate between "socially maladjusted" and true "emotional disturbance"?
- Individual teacher expectations and tolerances make identification a difficult and subjective process

Common Characteristics (cont.)

Behavioral deficits

- Academic achievement
 - Low GPA
 - High absenteeism
 - At risk for school failure and early drop out
- Social skills
 - Less participation in extracurricular activities
 - Lower quality peer relationships
 - Juvenile delinquency

_____ in Special Education

Percentages of African American Students with Emotional Disturbance in General and Special Education

States Representing the Greatest Disparity	General School Population	Emotional Disturbance	Disparity
All 50 States and Outlying Areas	17.00	27.30	+10.30
New York	20.40	45.29	+24.89
North Carolina	31.20	52.16	+20.96
Louisiana	47.70	66.80	+19.10
Kentucky	10.40	27.64	+17.24
California	8.40	24.75	+16.50
Delaware	30.40	46.54	+16.14
Nebraska	6.50	21.28	+14.78
New Jersey	18.10	32.55	+14.45
Maryland	36.60	51.04	+14.44
Florida	25.41	39.40	+13.99
Illinois	21.40	34.44	+13.04
South Carolina	42.00	54.98	+12.98
Missouri	17.30	28.87	+11.57

Note. Data from U.S. Department of Education (2002).

Race, Poverty and Special Education

Percentages of African American Students with Emotional Disturbance in General and Special Education

States Representing the Greatest Disparity	General School Population	Emotional Disturbance	Disparity
All 50 States and Outlying Areas	17.00	27.30	+10.30
New York	20.40	45.29	+24.89
North Carolina	31.20	52.16	+20.96
Louisiana			
Kentucky			

Why is this?

Overrepresentation

- *Greatest overrepresentation among African-American male students*
- *Primarily in the special education categories of Mild MR and Emotional, Behavioral Disorder*
- *Mild MR and EBD notable for subjective definitions and clinician discretion in formal placement*

Mental Retardation

- AAMR (common definition)
 - Subaverage intellectual functioning (IQ measure)
 - Deficits in adaptive behavior

Mild MR cases make up about 85% of all persons labeled as having MR

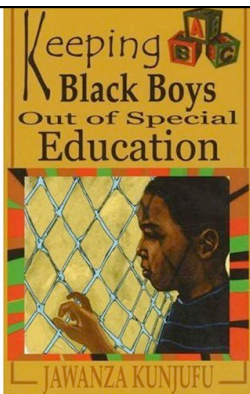
- Mild MR (IQ: 50-55 to around 70)
 - Usually not identified until school age
 - Most students master many academic skills
 - Most able to learn job skills well enough to support themselves independently or semi-independently

IDEA-Definition of Serious Emotional Disturbance (SED)

Consistent, serious, and of considerable duration:

- Externalizing behaviors (most common behavior pattern)
 - Noncompliance
 - Temper tantrums
 - Property destruction
 - Threats of violence or violence toward peers and/or teachers
- Definition does not apply to children who are " _____ "

(Howard, 2006)



In Oakland, CA, in 1996, **51% of the overall student enrollment was African-American.** However, African-American students accounted for **70% of the special education enrollment** and only **37% of programs for the gifted.**" (Staples, 1997)

Repeated as..

"70% of African-American kids are in special education."

33.16% of the students in classes for students with mental retardation are African American,

2.54% of African American students are in classes for individuals with mental retardation.

BIAS PROBLEMS

- **Bias in test instruments**
- **Examiner bias in test process**
- **Bias in interpreting test results**
- **Bias in placement process**

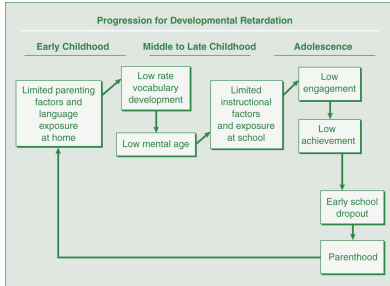
VARIABLES WHICH CONTRIBUTE TO PLACEMENT IN SPECIAL EDUCATION

- **Effects of Poverty**
 - Inadequate pre-natal, peri-natal, and post natal care

 - Environmental hazards such as lead poisoning, environmental health hazards

 - Childbirth among very young mothers

Environmental Causes



Race, Poverty, and Special Education

Just the facts...

- There are substantial differences by race and ethnicity in children's test scores as they begin kindergarten.
- Before even entering kindergarten, the average cognitive score of **children in the highest SES group are 60% above the scores of the lowest SES group.**
- Moreover, average math achievement is 21% lower for Black students than for Whites, and 19% lower for Hispanics.

Race, Poverty, and Special Education

- Race and ethnicity are associated with SES. For example, 34% of Black children and 29% of Hispanic children are in the lowest quintile of SES compared with only 9% of White children.
- Cognitive skills are much less closely related to race/ethnicity after accounting for SES.

Race, Poverty and Special Education

- Family structure and educational expectations have important associations with SES, race/ethnicity, and with young children's test scores, though their impacts on cognitive skills are much smaller than either race or SES.
- Although 15% of white children live with only one parent, **54% of Black and 27% of Hispanic children live in single-parent homes.**
- Similarly, 48% of families in the lowest SES quintile are headed by a single parent, compared to only 10% of families in the highest quintile.

Race, Poverty and Special Education

- Low-SES children begin school at kindergarten in systematically lower-quality elementary schools than their more advantaged counterparts.
- However school quality is defined-----in terms of
 - higher student achievement,
 - more school resources,
 - more qualified teachers,
 - more positive teacher attitudes,
 - better neighborhood or school conditions,
 - private vs. public schools-

the least advantaged U.S. children begin their formal schooling in consistently lower-quality schools.
- This reinforces the inequalities that develop even before children reach school age.

VARIABLES WHICH CONTRIBUTE TO PLACEMENT IN SPECIAL EDUCATION

- Over- or under-referrals due to
 - Differences in cognitive or learning style between teachers and students
 - *Incongruent values between teachers and students*
 - _____
 - overt racism has diminished but we still struggle with
 - unconscious beliefs and differential expectations.

Contributing Factors

- Civil Rights era lead to widespread desegregation of schools but a dramatic decline in African-American children being taught by African-American teachers
- 38,000 African-American teachers lost their jobs (Tyler et al, 2004)
- As desegregation lead to students of color attending traditionally White schools, many were assigned labels by their new White teachers such as
 - *mental retardation* or
 - _____

RACE & GENDER GAP IN EDUCATION

- 70% of the Nation's teachers are women.
- Nationwide, 40% of schools have no faculty of culturally and linguistically diverse backgrounds (Riley, 1998)
- Most referrals originate in the elementary grades; however, African American men constitute only 0.4% of elementary and 2.2% of secondary special education teachers (Nettles & Perna, 1997).

- Tobias et al. (1982) found that general education teachers were more likely to recommend students from ethnic groups other than their own for referral to special education (no matter what race).
- Majority of the nation's teachers are European American, lending some credence to the theory that teacher bias leads to overrepresentation in special education.

VARIABLES WHICH CONTRIBUTE TO PLACEMENT IN SPECIAL EDUCATION

- Over-referrals due to cultural incongruity

Several studies (e.g., Neal et al. 2003) indicate teachers believe African-American male students exhibiting distinct culture-related movement styles are

- lower in achievement
- higher in aggression
- more likely to need special education

Recent Research

- Cognitive Science
 - Rapid cognition manifests itself in unconscious beliefs and perceptions about members of non-dominant group (by all races)

(Greenwald, McGhee, & Schwartz, 1998)
Measuring Individual Differences in Implicit Cognition: The Implicit Association Test

- Urban Education
 - Diminished expectations and perceptions (Haberman, 2004; Kunjufu, 2007)

Need to examine the special education referral process.

Characteristics of Culture

It is often difficult to recognize your own culture.

MANIFESTATIONS OF CULTURE

- Values
- Non-verbal communication
- Language

Is there a mainstream American culture?

- **What are the characteristics of American culture?**
- **How do outsiders view us culturally?**

MACROCULTURE

The American macroculture is the universal or core culture with Western European roots, especially white Anglo Saxon Protestant. Today not limited to WASP influence, but heavily influenced by the middle class.

Some values inherent in the U. S. Macroculture:

- Status based on occupation, education, wealth.
- Achievement valued over inheritance.
- Work ethic.
- Cleanliness as an absolute value.

MICROCULTURE

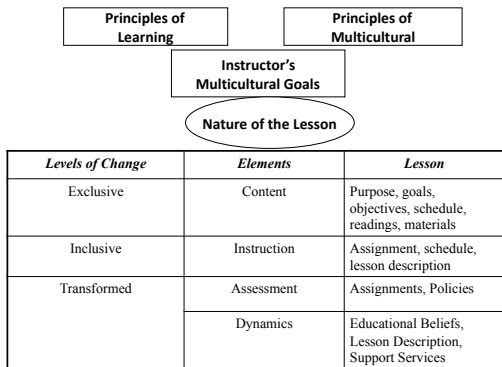
- Examples include cultures related to:
- “Microcultures are subsocieties or subcultures which exist within the context of the larger society sharing values, political and social institutions which may not be common to the macroculture.”

ethnicity, social class, gender, religion, language, age, and exceptionality.

Gollnick and Chinn (1998)

- **What are the characteristics of your own culture?**
- **In what way do you represent a microculture?**
- **This contributes to your cultural identity.**

MODEL FOR MULTICULTURAL CHANGE



The Exclusive Level

The Exclusive level teaches minor aspects of diversity at the lowest level.

- Diversity is restricted to one part of the lesson.
- _____
- _____
- Content encompasses traditional mainstream experiences and stereotypes.

The Exclusive Level

- Reading materials focus on authors who perpetuate and confirm myths.
- Instructional strategies are mainly basic question and answer, and other basic didactic methods.
- Instruction is teacher-centered.
- Exams are objective & assignments focus on content only.

The Inclusive Level

The Inclusive level adds diversity content but retains the traditional, original structure.

- Diversity is discussed throughout the lesson and compared to the dominant norm.
- Reading materials include authors with varying & diverse viewpoints.

The Inclusive Level

- A wide array of assessment methods and various speakers add flavor to the content.
- Instruction remains teacher-centered.
- A variety of methods are used to relate new knowledge.
- Students are encouraged to construct their own knowledge and use critical thinking skills in conjunction with peer learning.

The Transformed Course

The Transformed lesson and curriculum challenges traditional views and encourages reconceptualization and new ways of thinking.

- Instructors engage in critical pedagogy .
- Instruction is student-centered and students self-evaluate through projects & related assignments that contribute to real-life change.

The Transformed Course

- Students learn from each other and concepts and personal experiences are analyzed.
- Transformed courses represent a paradigm shift that present content from a diverse perspective.
- Self-assessment and reflection techniques are employed that encourage sharing, diverse perspectives and equity in participation and critical problem solving.
- Instruction centers on content related vignettes that require application and examination of values.



A Model of Effective Inclusion

Includes:

- a philosophy or spirit of inclusiveness
- and the practical strategies to support that philosophy

Successful Inclusion builds upon a foundation of community.

- Students develop a sense of membership, teachers establish a positive, inclusive learning environment

Effective Inclusive Practices

What they are not ...

- Practices that assume that “being there is enough”
- Practices that fail to use co-teaching and paraprofessional support in an effective and meaningful way

When does inclusion work?

School 1
Exclusive Model

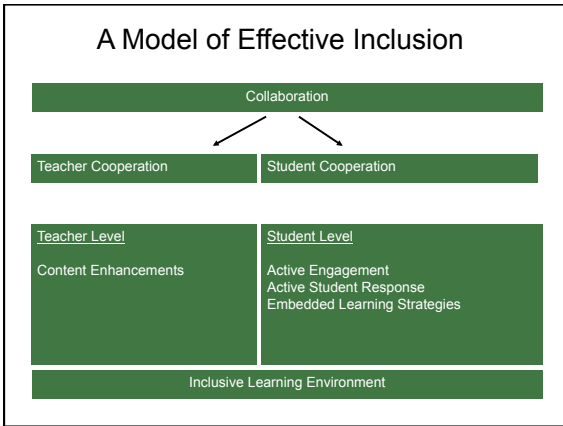
School 2
Integrated/Exclusive Model

School 3
Inclusive Model

Includes:

- a philosophy or spirit of inclusiveness
- and the practical strategies to support that philosophy

Fitch (2001)





UD Origin and Definitions

Drawbacks of Retrofitting

- Each retrofit solves only one local problem
- Retrofitting can be costly
- Many retrofits are UGLY!

<http://www.cast.org> CAST© 2003

UD Origin and Definitions

“Consider the needs of the broadest possible range of users from the beginning”
Architect, Ron Mace

<http://www.cast.org> CAST@
2003

Universal Design

- Not one size fits all – but alternatives.
- Designed from the beginning, not added on later.
- Increases access opportunities for everyone

<http://www.cast.org> CAST@
2003

Universal Design

- Ramps
- Curb Cuts
- Electric Doors
- Captions on Television
- Easy Grip Tools

<http://www.cast.org> CAST@
2003

UD Solutions



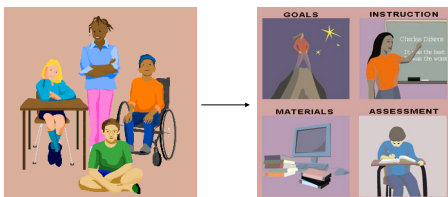
Origins of Universal Design for Learning (UDL)

CAST believes that “barriers to learning are not, in fact, inherent in the capacities of learners, but instead arise in learners’ interactions with inflexible educational goals, materials, methods, and assessments.”

Teaching Every Student in the Digital Age, p. vi

<http://www.cast.org> CAST © 2003

Origins of Universal Design for Learning (UDL)



<http://www.cast.org> CAST © 2003

Origins of Universal Design for Learning (UDL)



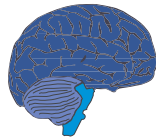
Universal design (n) 1. The design of a product or environment to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design. 2. The design of a product or environment to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design. 3. The design of a product or environment to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design. 4. The design of a product or environment to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design. 5. The design of a product or environment to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design. 6. The design of a product or environment to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design. 7. The design of a product or environment to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design. 8. The design of a product or environment to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design. 9. The design of a product or environment to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design. 10. The design of a product or environment to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design.

<http://www.cast.org>
CAST © 2003

Definition:

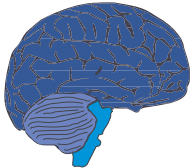
UDL is an educational approach to teaching, learning, and assessment, drawing on new brain research and new media technologies to respond to individual learner differences.

UDL and the Learning Brain



<http://www.cast.org> CAST © 2003

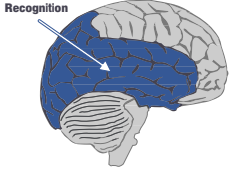
UDL and the Learning Brain



- Recognition network
- Strategic network
- Affective network

<http://www.cast.org>
CAST © 2003

UDL and the Learning Brain

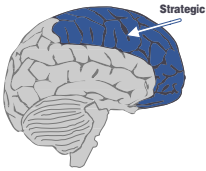


Recognition networks:
"the what of learning"

identify and interpret
patterns of sound,
light, taste, smell, and
touch

<http://www.cast.org>
CAST© 2003

UDL and the Learning Brain



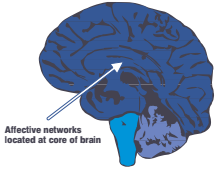
Strategic networks:
"the how of learning"

plan, execute, and
monitor actions and
skills

Executive Function

<http://www.cast.org>
CAST© 2003

UDL and the Learning Brain



Affective networks:
"the why of learning"

evaluate and set
priorities

Affective networks
located at core of brain

<http://www.cast.org>
CAST© 2003

UDL and the Learning Brain

One must recognize information, ideas, and concepts

One must be able to apply strategies to process the information

One must be engaged

Vygotsky

<http://www.cast.org> CAST © 2003

UDL and the Learning Brain



Task is too difficult for learner



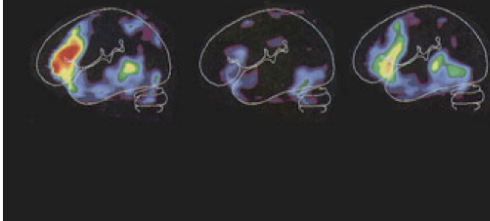
ZONE OF PROXIMAL DEVELOPMENT



Task is too easy for learner

<http://www.cast.org> CAST © 2003

NAIVE PRACTICED NOVEL



<http://www.cast.org> CAST © 2003

UDL and the Learning Brain



<http://www.cast.org> CAST© 2003

UDL and the Learning Brain

<http://www.cast.org> CAST© 2003

Recognition networks enable us to identify and understand information, ideas, and concepts.

Strategic networks enable us to plan, execute, and monitor actions and skills.

Affective networks enable us to engage with tasks and learning and with the world around us.

<http://www.cast.org> CAST© 2003

Principles of UDL

- _____
- _____
- _____

<http://www.cast.org> CAST©
2003

New Assumptions: UDL

<http://www.cast.org> CAST©
2003

Questions

- Which *methods* of teaching are most effective with the ways that each brain network functions?
- What kinds of flexibility must instructional *materials* have to address the uniqueness of each learner?

<http://www.cast.org> CAST©
2003

Supporting Recognition Learning

Provide alternative formats for presenting information

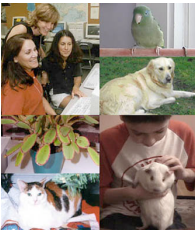
- Provide multiple examples
- Highlight critical features
- Provide multiple media and formats
- Support background context

<http://www.cast.org> CAST© 2003

Recognition: Provide multiple examples

K-2 Goal: Recognize that animals (including humans) and plants are living things that grow, reproduce, and need food, air, and water.

Examples of living things



Examples of non-living things

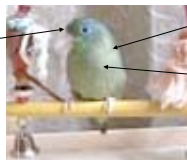


<http://www.cast.org> CAST© 2003

Recognition: Highlight Critical Features

Highlight critical features to identify a bird

Birds have beaks.



Birds have wings.

Birds have feathers.

Is this a bird?



<http://www.cast.org> CAST© 2003

Recognition: Multiple Media & Formats

Provide a range of formats and media to ensure access for all



<http://www.cast.org>
CAST© 2003

Supporting Strategic Learning

Provide alternative means for action and expression

- Provide flexible models of skilled performance
- Provide opportunities to practice with supports
- Provide ongoing, relevant feedback
- Offer flexible opportunities for demonstrating skill

<http://www.cast.org> CAST© 2003

Strategic: Flexible models of performance

Provide expert models of skilled performance and counter examples of incorrect execution

Think and share!

Think about examples and counter examples of performance, e.g. think about good tennis techniques and poor execution of serving.

Models of successful ways to healthy eating and incorrect ways to healthy eating

And more...

<http://www.cast.org>
CAST© 2003

Strategic: Flexible models of performance

Metacognitive Apprenticeship

Explicit teaching of learning strategies.

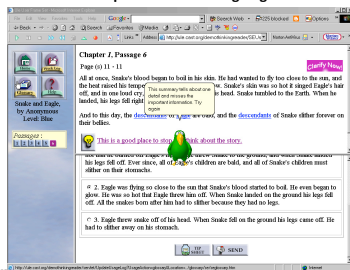
- Vocabulary memorization strategies.
- Test-taking strategies.
- Mnemonics.
- Sentence and paragraph-writing strategies
- Classroom participation strategies
- Reading comprehension strategies

<http://www.ku-crl.org>

<http://www.cast.org>
CAST © 2003

Strategic: Ongoing relevant feedback

Feedback is provided in an on-going fashion.



<http://www.c...>
CAST © 2003

Supporting Affective Learning

Provide alternative means for engagement

- Offer choices of content and tools
- Offer adjustable levels of challenge
- Offer choices of rewards
- Offer choices of learning context

<http://www.cast.org> CAST © 2003

The UDL Approach

- Diversity is the norm in today's classrooms
- Applying the UDL principles in education is enabled by:
 - Appropriate goals
 - Flexible and supportive digital materials
 - Flexible and diverse methods, and
 - Accessible and flexible assessments

<http://www.cast.org> CAST©
2003

Barriers



<http://www.cast.org> CAST©
2003

UDL and Digital Media



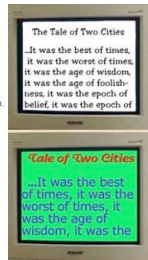
<http://www.cast.org> CAST©
2003

UDL and Digital Media



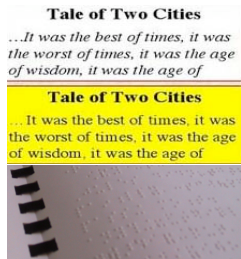
<http://www.cast.org> CAST©
2003

UDL and Digital Media



<http://www.cast.org> CAST©
2003

UDL and Digital Media



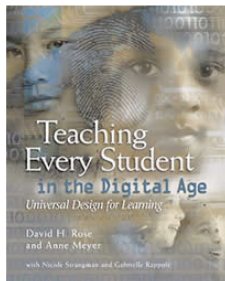
<http://www.cast.org> CAST©
2003

UDL and Digital Media

- Digitized texts
- More than audiobooks
- Infusion of multimedia
 - NIMAS/NIMAC
 - Recordings for the Blind and Dyslexic
- Thinking Reader (as an example)

<http://www.cast.org> CAST © 2003

Teaching Every Student in the Digital Age



www.cast.org

Welcome to the NIMAC!

Background to the NIMAC:
National Instructional Materials Access Center

President George W. Bush signed into law the new Individuals with Disabilities Education Improvement Act (IDEA) at the end of 2004. Several changes will be implemented through this reauthorized legislation that will have a positive impact on how and when blind and other print disabled students throughout the country receive their textbooks in the accessible formats they need, including braille and large print.

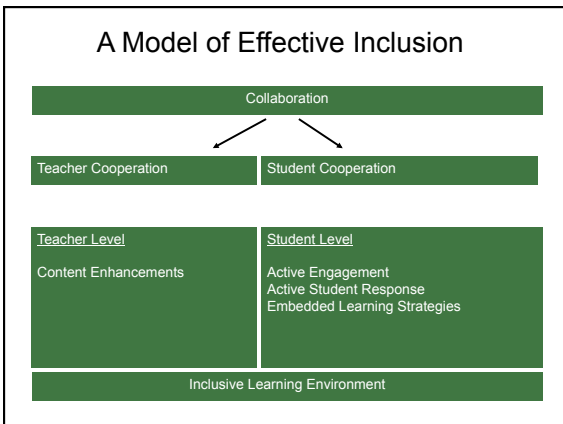
Of particular significance, a National Instructional Materials Access Center (NIMAC) will be established in Louisville, Kentucky. The NIMAC will receive and catalog publishers' electronic files of print instructional materials in a standard format: the National Instructional Materials Accessibility Standard (NIMAS). The NIMAS was recently developed by experts across the country for this specific purpose. The center will provide these standardized files to those who have been authorized to obtain the files to produce textbooks and other core print instructional materials for blind, visually impaired and print disabled students across the country. The combination of a standard format and a central repository should

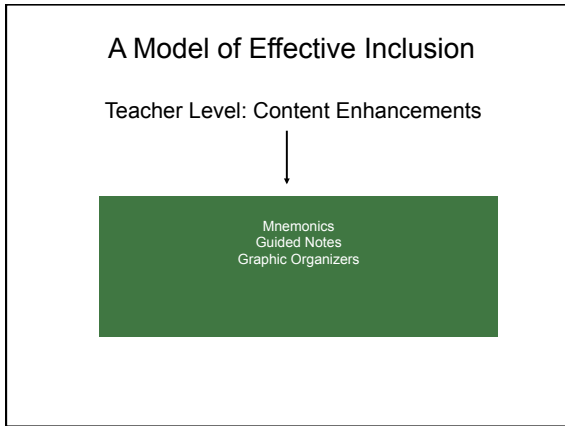
NEW!

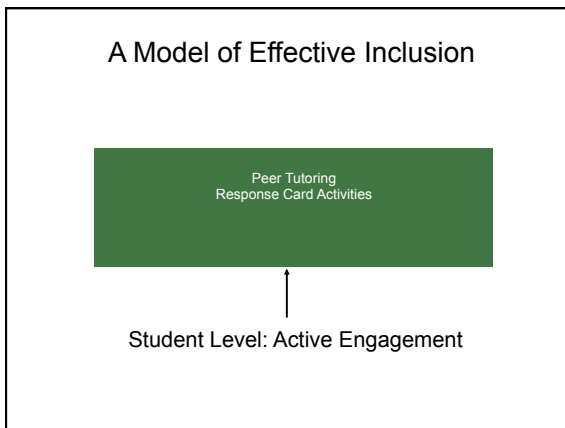
- Authorized User Registration Process
- State Coordinator Registration Process
- Presentation: Coordinating with NIMAC and Designating Authorized Users
 - Coordination Agreement
 - Limitation of Use Agreement

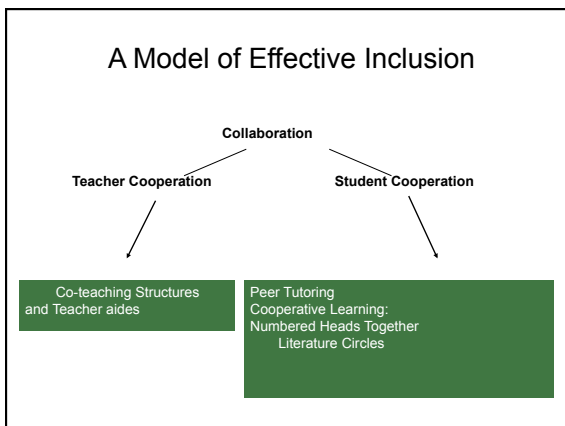
Text-to-Speech

<http://www.naturalreaders.com>









Active Student Response

- Active Student Response (ASR) - an observable, measurable, curriculum-related response to teacher-posed questions or instructions.
- Extensive research base demonstrates the relationship between increased ASR and student achievement
- _____

Heward (1994)

Why use Guided Notes?

Some disadvantages of class lectures

- Content is often disorganized and unevenly presented. Students may have difficulty figuring out what is important
- Students are often passive observers rather than active participants
- Many students with special needs lack effective note taking skills (Hughes & Suritsky, 1994)
 - Discriminating between important and unimportant information
 - Listening/language deficits
 - Motor skill deficits

Guided Notes

Guided notes (GN) - a handout that "guides" students through a lecture, presentation, or demonstration with background information and cues for writing key points.

NAME _____ DATE _____

AZTEC CULTURE

A. THE AZTEC PEOPLE
 Headworking farmers _____ who were the strength of the empire.

Average size of the people

- Women averaged _____ feet, 5 inches
- Men averaged _____ feet, 3 inches

B. SOCIETY
 There were sharp divisions between their social classes. Their rules covered many aspects of social life.

Example of a rule - what people of different classes could wear

- The common people would wear a material made from the agave plant
- The higher class could wear _____

Tlax _____

The haircloth that did men wear

- A long strip of cloth that was strapped around the waist, passed between the legs and tied in the front
- They also wore a tilmaul - a white cloak
- Women wore an ankle-length skirt called a _____

Common people - everyday clothes were white

Social hierarchy

- Divided as the common people did
- However, the material they wore was made from cotton and their clothes had designs
- The king wore a _____, an ornament in his name

C. HOUSING
 The common people only had one room

- Partitioned the sleeping area from the cooking area
- Walls were built from _____ and mud
- Roofs were made from reeds and grass

Response Cards

- Response cards are cards, signs, or items which each student holds up to display his or her answer for the teacher.
- _____ are cards on which students mark or write their own responses for each trial.
- _____ are a card, or set of cards on which all possible answers are printed.

Heward, Gardner, Cavanaugh, et al (1996)

Response Cards

- Active Student Response
- Avoids small group of students dominating discussion
- Students with learning and behavior problems benefit from active learning experiences

Examples of Pre-printed Response Cards



Heward, Gardner, Cavanaugh, et al (1996)

Advantages of Pre-printed Response Cards

- Provide the highest rates of Active Student Response
- Can build students' repertoires with few errors by beginning with 2 cards and adding more
- Easy for the teacher to see
- Students can learn by watching others

Heward, Gardner, Cavanaugh, et al (1996)

Research on Response Cards

Nearly 20 years of empirical research has shown functional relationships between response cards and increased student achievement ...

Elements of Effective Inclusion

- Alternative (diversified) Assignments
- Alternative (diversified) Assessments
- Portfolio Assessment
- Exhibition Assessment
- Ability Grouping and Interest Grouping within Classrooms
- Station Teaching
- Parallel Teaching
- Big Idea Teaching and Unit Planning

Differentiation: Instruction and Assessment

Elements of Effective Inclusion

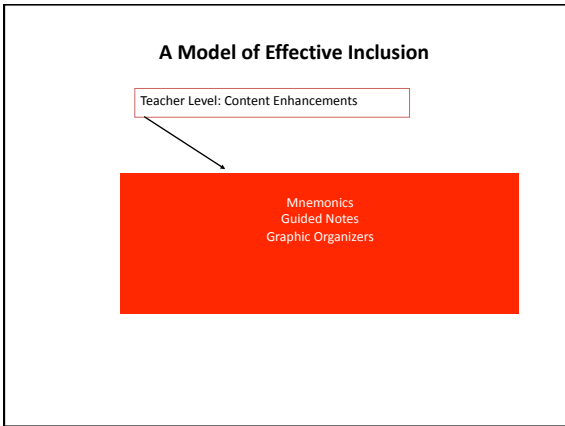
- Positive Behavior Support
 - Schoolwide PBS
 - Classroom-based PBS

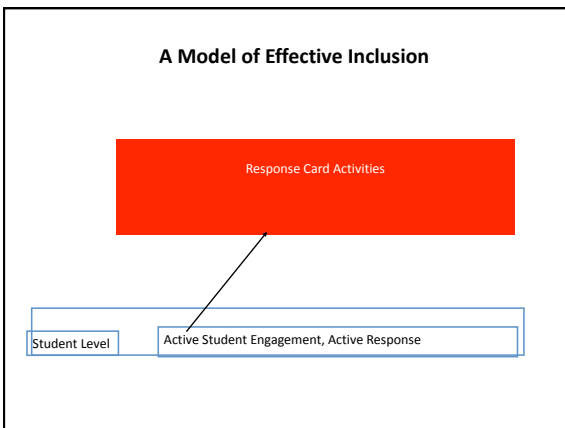
Proactive Behavior Management

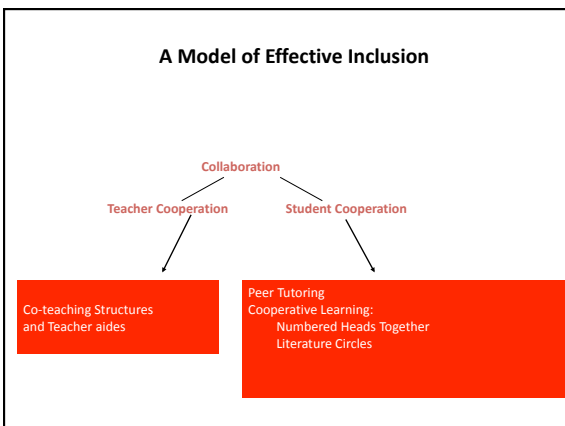
Elements of Effective Inclusion

- SLANT Self-monitoring Strategy
- LINCS Vocabulary Strategy
- PENS Writing Strategy
- RAP Reading Strategy
- Word ID Strategy

Embedded Learning Strategies (Kansas Strategies)







Cooperative Learning

ELEMENTS OF COOPERATIVE LEARNING

It is only under certain conditions that cooperative efforts may be expected to be more productive than competitive and individualistic efforts.

1. Clearly perceived _____
2. Considerable promotive (face-to-face) interaction
3. Clearly perceived _____
4. Frequent use of the relevant interpersonal and small-group skills
5. Frequent and regular group processing of current functioning to improve the group's future effectiveness

Cooperative Learning

- Supporting struggling learners with peer support
- Criticisms of cooperative learning
- **Common cooperative learning strategies:**
 - _____
 - _____
 - _____
 - _____
 - _____

Cooperative Learning

_____,

- The teacher poses a challenging or open-ended question and gives students a half to one minute to think about the question. (This is important because it gives students a chance to start to formulate answers by retrieving information from long-term memory.)
- Students then pair with a collaborative group member or neighbor sitting nearby and discuss their ideas about the question for several minutes. The think-pair-share structure gives all students the opportunity to discuss their ideas.

Cooperative Learning

_____:

- The teacher divides an assignment or topic into four parts with all students from each LEARNING TEAM volunteering to become "experts" on one of the parts.
- EXPERT TEAMS then work together to master their fourth of the material and also to discover the best way to help others learn it. All experts then reassemble in their home LEARNING TEAMS where they teach the other group members.

Cooperative Learning

- Need for individual accountability
- Group reward and interdependence
- Students should perform roles that will make them successful

Group Roles for Collaborative Exam

- You will only turn in one exam for your group

Please pick a role:

- Recorder (offers possible answers and writes the answers for your group)
- Director (promotes discussion and coordinates activities of your members)
- Researchers (2 members seek confirming information while others discuss)

Literature Circles

Traditionally....

- Like book clubs.
- They give students a chance to help each other with reading.
- They give students a chance to talk with other kids in class about what they read.



What are Literature Circles?

Traditionally....

Like book clubs.

They give students a chance to help each other with reading.

They give students a chance to talk with other kids in class about what they read.



Literature Circles

Fiction Texts

-
-
-
-
-



What are the roles for content-area classes?

Nonfiction texts:

- -
- -
- -
- -
- -



Questioner

The *Questioner* writes down a few questions that came up during the reading.

- What were you wondering about while you were reading?
- Did you have questions about what was being described?
- ...what the whole thing meant?



Passage Master

The *Passage Master* picks a few special sections of the reading to share.

- The idea is to help people notice the most interesting, funny, puzzling, weird or important sections of the text.



Vocabulary Enricher

The **Vocabulary Enricher** looks out for a few especially important words in the reading.

- If you find words that are tough, confusing, or unfamiliar, mark them while you are reading and then later write down their definition, either from a dictionary or from your discussion.



Connector

The **Connector** tries to make connections between what the group is reading and the world outside.

There are no right or wrong answers. Whatever the reading connects you with is worth sharing!

What does this make you think about?



Illustrator

The **Illustrator** draws a picture related to the reading.

- a sketch, cartoon, diagram, flow chart, or stick figure scene.
- something that the reading reminded you of
- a picture that shows any idea or feeling you got from the reading.



THE RELATIONSHIP AMONG TIME SPENT READING, READING ACHIEVEMENT, AND VOCABULARY ACQUISITION OF FIFTH GRADERS

Percentile Rank on Standardized Reading Test	Minutes of Independent Reading Outside of School Per Day	Estimated Exposure to the Number of Words Per Year
98	80.7	4,733,000
90	40.4	2,357,000
70	21.7	1,168,000
50	12.9	601,000
20	3.1	134,000
10	1.6	51,000

Research Base and Rationale

▪ Key reading comprehension strategies for middle/secondary:

activation of prior knowledge	Connector
deciding what's important in a text, synthesizing information, paraphrasing main idea	Passage Master
self-monitoring comprehension, repair faulty comprehension, ask yourself questions	Questioner
analyze text for unknown vocabulary, use context clues	Vocabulary Enricher
visualize textual information, use graphics to represent thinking	Illustrator

Robb (2000)

Different Kinds of Literature Circles

- Teacher-directed Literature Circles
 - Interactive reading groups
 - Whole group reading
 - Peer reading
- Student-directed Literature Circles
- Nonfiction Reading Circles
- Collaborative Reading Groups

Making reading more active and engaging while supporting comprehension.

Peer Tutoring

Cross-age peer tutoring
Classwide Peer Tutoring

- Numbered Heads Together is a cooperative learning activity that requires participation from all group members

Steps in Numbered Heads Together

1. Students form groups of 3 or 4
2. Each student selects or is assigned a number
3. Teacher asks a question/presents a problem
4. Students discuss, write, solve problem
5. Teacher rolls a die or draws a number
6. Teacher calls on selected students to state their answers

Kagan, (1994)

Cooperative Learning Strategies can easily be turned into a whole class competition.

- What's valuable to your students?
- What would they work for...
- Your approval, extra credit, homework "night off"

“If it weren’t for students impeding our progress in our race to the end of the term, we could certainly be sure of covering the material. The question, however, is not whether we as teachers can get to the end of the text or the end of the term, but whether students are with us on that journey.”

Pat Cross
Director of the Classroom Research Project
University of California, Berkeley

Learning Strategies

- Rationale for strategy instruction:
 - Coping skills for _____
 - Assistance with remediation of skills
 - Success in the general curriculum
- Improved _____
- Teacher _____

Metacognition

- the general knowledge (_____) and control (_____) that an individual has over his or her thinking and learning
- “thinking about your thinking”

Metacognition

- Rationale
- Description
- Implementation

- Classroom participation
 - SLANT
 - PREP
 - RELATE
 - WISE

SLANT

- S _____

- L _____

- A _____

- N _____

- T _____

Strategic Instruction Model

- Strategic Instruction:
 - Using _____ organizers
 - Communicating _____
 - Communicating _____
 - Reviewing and checking for _____
 - Facilitating _____
 - Providing instructional monitoring
 - Providing _____
 - Requiring _____

Learning Strategies Curriculum

- Acquisition
 - _____
 - _____

Learning Strategies Curriculum

- Storage
 - First-Letter Mnemonic strategy
 - _____
 - Listening and Notetaking strategy

Learning Strategies Curriculum

- Expression and Demonstration of Competence:
 - _____ strategy
 - Paragraph writing strategy
 - Error monitoring strategy
 - Theme writing strategy
 - Assignment completion strategy
 - _____ strategy

Learning Strategies Curriculum

- Implementation of Learning strategies:
 - Pretest and Make Commitments
 - Describe the strategy
 - Model the strategy
 - Conduct verbal elaboration and rehearsal
 - Provide controlled practice and feedback
 - Provide advanced practice and feedback
 - Posttest and elicit commitments to generalize
 - Promote generalizations

PENS Sentence-writing Strategy

- P

- E

- N

- S

Test-taking Strategy

- P _____
- I _____
- R _____
- A _____
- T _____
- E _____
- S _____

Test-taking Strategy

- Prepare to succeed

P: Put your name and PIRATES on the test,
A: Allot time and order to the sections of the test,
S: Say your affirmations and
S: Start within two minutes

Test-taking Strategy

- Inspect the instructions

R: Read the instructions,
U: Underline what to do and where to do it,
N: Note any special requirements.

Test-taking Strategy

- Read, Remember, Reduce

READ the whole question,
REMEMBER what you've studied, and
REDUCE your choices, marking out the
choices that you know aren't applicable

Test-taking Strategy

- Estimate

A

C

E

LINCS Strategy

- List the parts
- Imagine a picture
- Note a reminding word
- Construct a LINCing story
- Self-test


LINCS Strategy

- L _____
- I _____
- N _____
- C _____
- S _____

LINCS Strategy

- List the parts
- Invent a sentence
- Note a LINCing story
- Create a LINCing picture
- Self-test

Figure 1. Example of a LINC note card using the modified approach to the vocabulary learning strategy.

conflict	
The two kids had a conflict.	
a fight, disagreement, or clash	
The two boys got into a big fight over a girl.	

What is *differentiated instruction*?

Differentiating Instruction for Diverse Learners


What is Differentiated Instruction?

Personal Relevance???

Fundamentally, this is a response to teaching a highly diverse group of students who need different things, like different things, and approach learning tasks differently.

Spencer J. Salend
Creative Inclusive Classrooms: Effective and Reflective Practices for All Students, 2e

Differentiating Instruction Factors

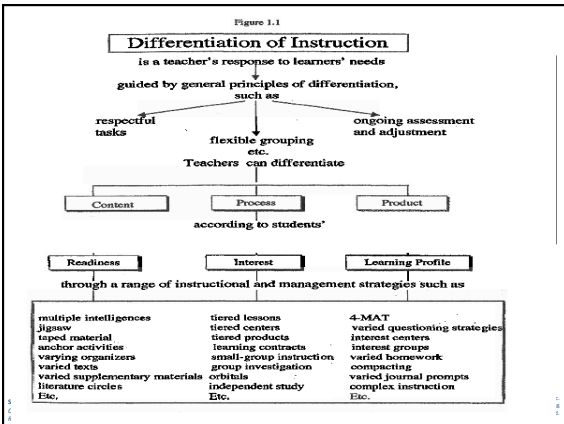


Learning Environment (How the classroom is designed and students are grouped)

(Tomlinson & Eidson, 2003)

Spencer J. Salend
Creative Inclusive Classrooms: Effective and Reflective Practices for All Students, 2e

Copyright ©2005 by Pearson Education, Inc.
Upper Saddle River, New Jersey 07075
All rights reserved.



Characteristics of a Differentiated Classroom

- Students highly engaged
- _____
- Flexible groupings
- Work alike/Work different
- Respectful work
- Everyone's task looks equally appealing
- Sharing common skills
- Teachers are hunters and gatherers of information about kids' skills and abilities

- ✓ Give students choices about what, where, and how they learn
- ✓ Collaborate with students to create learning contracts
- ✓ Alter the pace of instruction
- ✓ Focus on fewer objectives
- ✓ Enhance the multicultural aspects of the content
- ✓ Design alternative projects to assess mastery
- ✓ Modify requirements and assessments
- ✓ Use multilevel teaching
- ✓ Use tiered assignments



Spencer J. Salend
Creative Inclusive Classrooms: Effective and
Instructive Practices for All Students, 2e

Copyright ©2005 by Pearson Education, Inc.
Upper Saddle River, New Jersey 07075
All rights reserved.

Thinking about differentiation

- Extensive, strategic planning to make differentiated instruction work
 - Using organizers and SMARTER planning
- Focusing on “big ideas”
 - Makes co-teaching easier
 - Avoids emphasis on trivia
 - Depth over coverage

Differentiation

- Content
- Process
- Product

Differentiation

- **Process**
 - This term applies to almost everything we've talked about so far...
 - See list of strategies

Differentiation

- **Process**
 - How will you move away from the typical lesson in which you talk, students listen, and there is no action, conversation, or critical thinking?
 - Will students complete a webquest, a reading assignment, in which students read different texts in cooperative groups...
 - Will students create a chronological PowerPoint instead of writing an essay in class?
 - Will students read novels on the Thinking Reader program instead of hard copy texts?

Remember this:

We tend to learn:

Tiered Lesson Plans

- What will you need to tier?
- Edgar Allen Poe example (English Literature)

Product Differentiation

The classic book report project.

How can we differentiate content or process for this assignment?

Choice: Fiction vs. nonfiction, fact books, scary stories, gross-out books...
Process: Independent reading, Literature Circles, etc.

How can we differentiate the product for this assignment?

How do we typically assess completion of this project?

1) 5-paragraph essay format

Product Differentiation

The classic book report project.

How can we differentiate the product for this assignment?

- 1) 5-paragraph essay format
- 2) 5-minute presentation on the book
 - Theatrical if appropriate--a performance of a favorite scene that represents a critical part of the story
- 3) Artistic representation-abstract or concrete
 - graphic novel or comic strip approach with captions
- 4) Book review (instead of report) in which student critiques the work similar to a newspaper review and provides suggestions for future and related readings.

Differentiation in the social studies curriculum (as an example)

Inquiry-based lesson: You begin with one guiding question that connects to your guiding curriculum standard.

Standard: U.S. foreign policy--trends of Isolationism and Expansionism (empire-building)

Big Idea Question:
What is America's role as a member of a global community of nation-states? How does our history of isolationism and expansionism affect our modern views of foreign policy?

Differentiation in the social studies curriculum (as an example)

Big Idea Question:
What is America's role as a member of a global community of nation-states? How does our history of isolationism and expansionism affect our modern views of foreign policy?

Guiding Question: Find a current event article. Consider:
Does U.S. foreign policy (global involvement) currently reflect an isolationist or expansionist ideology? Support your answer.

Differentiate by Interest (Choice) and Readiness.

Figure 6.1

Begin Slowly - Just Begin!

Lo-Prep Differentiation	Hi-Prep Differentiation
<ul style="list-style-type: none"> Choices of books Homework options Use of reading buddies Varied journal prompts Orbitals Varied pacing w/makeor options Student-teacher goal setting Work alone/together Whole to part and part to whole explanations Flexible seating Varied computer programs Design-A-Day Varied supplementary materials Options for varied modes of expression Varied scaffolding on same organizer Let's Make a Deal projects Computer mentors Think-Fair-Share by readiness, interest, learning profile Use of collaboration, independence, and cooperation Open-ended activities Mini workshops to re-teach or extend skills Jigsaw Negotiated Criteria Explorations by interest Games to practice mastery of information and skill Multiple levels of questions 	<ul style="list-style-type: none"> Tiered activities/labs Tiered products Independent studies Multiple texts Alternative assessments Learning contracts 4-MAT Multiple Intelligence options Compacting Spelling by readiness Entry Points Varying organizers Lectures coupled with graphic organizers Community mentorships Interest groups Tiered centers Interest centers Personal agendas Literature Circles Stations Complex Instruction Group Investigation Tape recorded materials Teams, Games and Tournaments Choice Boards Think-Tac-Toe Simulations Problem Based Learning Graduated rubrics

Some people are **reading teachers**, but every teacher teaches reading.

- We read all through the academic day (math too)
- Reading is more than decoding and fluency
- Reading comprehension is one of the biggest challenges for children in the K-12 curriculum
- Reading scores tend to decline in schools that serve adolescents as the emphasis shifts from fluency and factual understanding to...
 - High-level skills like reading comprehension requiring inferential thinking.
 - Statistically speaking, adolescent reading comprehension is tied to intellectual capacity (IQ).

THE RELATIONSHIP AMONG TIME SPENT READING, READING ACHIEVEMENT, AND VOCABULARY ACQUISITION OF FIFTH GRADERS

Percentile Rank on Standardized Reading Test	Minutes of Independent Reading Outside of School Per Day	Estimated Exposure to the Number of Words Per Year
98	90.7	4,733,000
Think about high-interest texts... and InfoKids		
20	3.1	134,000
10	1.6	51,000

What should we all know about reading comprehension?

- Factors within the reader, within the material, and within the context all influence the reader’s level of understanding or comprehension of a text.
- Prior knowledge about a topic affects comprehension.
- Individual motivation and purpose, influence comprehension,
- Text characteristics (page layout, density of ideas, vocabulary level, and language style) shape understanding.

What should we all know about reading comprehension?

- Teachers need to provide explicit purposeful instruction in effective reading strategies.
- Instruction builds on what is known from studies in cognition, vocabulary, and language development.

Guided or Strategic Reading Support

Effective Teachers:

- Model Strategies and guide students through behaviors used by expert readers.
- Assist students in applying strategies to different text types, including narration and exposition.
- Guide students to become independent learners who are
 - able to assess the requirements of the learning situation,
 - choose the appropriate strategy for the setting and purpose, and
 - monitor their success in processing the information and accomplishing their goals.

- Among the comprehension processes that need to be explicitly taught and modeled in all classrooms are the following:

- Thinking aloud
- Predicting
- Attending to text structure
- Constructing visual representations of ideas
- Making text-to-self, text-to-text, and text-to-world connections
- Generating questions
- Making inferences
- Determining importance or significance
- Synthesizing and summarizing

- Among the comprehension processes that need to be explicitly taught and modeled in all classrooms are the following:

- Thinking aloud
- Predicting
- Attending to text structure
- Constructing visual representations of ideas
- Making text-to-self, text-to-text, and text-to-world connections
- Generating questions
- Making inferences
- Determining importance or significance
- Synthesizing and summarizing

Consider:
 -Pre-reading
 -During Reading
 and
 -Post-reading strategies.

What do these terms mean and how do they relate to reading comprehension?

What are the roles for content-area classes?

Nonfiction texts:

- Questioner
- Passage Master
- Vocabulary Enricher
- Connector
- Illustrator




Literature Circles

Fiction Texts

En Español:
 Interrogador
 Investigator
 Artista
 Conector
 Sabelotodo de las palabras

For younger students:
 Question Asker
 Connector/Predictor
 Passage Picker
 Artful Artist
 Word Wizard



Why do students need to be proficient at understanding textbooks?

All students must be able to read and comprehend textbooks in order to be successful in school.

A large percentage of their semester grade in each class depends on them answering questions about information in the textbook.

The PREP Strategy Steps

Step 1 **P**review the reading

Step 2 **R**ead key paragraphs

The Paragraphing Strategy Steps within PREP

Read a paragraph
 Ask yourself "What is the main idea & important details"
 Put the main idea and details into your own words

Step 3 **E**xpress ideas in writing

Step 4 **P**repare study cards

From "The PREP Strategy" by M. Hock, D. Deshler, & J. Schumaker, 2000. Lawrence, KS: Edge Enterprises, Inc.

Cooperative Teaching and Learning

Co-teaching



The illustration shows two male teachers in white lab coats. One teacher on the left is pointing at a green chalkboard. The other teacher on the right is pointing at a green chalkboard with a diagram of a circle divided into segments. In front of them, two students, a boy and a girl, are sitting at a desk, looking towards the teachers.

Cooperative Teaching

Co-Teaching is an educational approach in which two teachers work in a coactive and coordinated fashion to jointly teach academically and behaviorally heterogeneous groups of students in an integrated setting

(Bauwens, Hourcade, & Friend, 1989)

Benefits of Co-Teaching

- Improved teacher-student ratio
- Increases job satisfaction
- Reduces stress and burnout
- Decreases problems with generalization across settings
- Provides the expertise of two professionals in planning and problem-solving
- Provides students with a model of collaboration
- Allows students to work with teachers with different styles
- Increases the potential for students who are having difficulty to receive assistance

Barriers to Effective Co-Teaching

Conceptual

Historical separation between general and special education

Isolation of teachers within the present education system

Differences in training and levels of expertise concerning:

- *instructional methodologies

- *strategies

- *legal procedures and processes

- *experimental and clinical knowledge

Faulty assumptions, feeling of intimidation, and issues of credibility.

Pragmatic Barriers

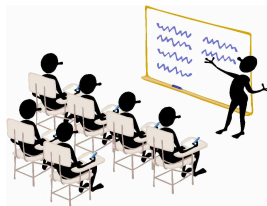
- Insufficient time and flexibility within the school environment

- Lack of leadership and support at the state, local, and building levels

- Distinctions in language and turf

- Participant reluctance to participate or follow-through

One Teacher Lead, One Support



Cook & Friend, 1993

Station Teaching

-

- 3 teachers
- Use of a paraprofessional, teaching aid or volunteer
- Smaller groups

Parallel Teaching

-

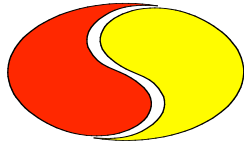
- Looks similar to station teaching
- More preparation time is needed
- Keep students backs to each other
- Teachers should face each other

Alternative Teaching

-

- Addresses a wide range of learners
- Can combine with other types
- Use for enrichment, remediation or pre-teaching

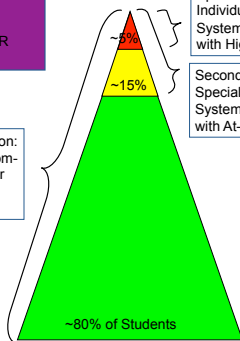
Team Teaching



- Schedule special education students first
- Use cooperative learning
- Assign students' roles for success
- Mutual trust
- Equal knowledge of the content
- *Planning time is needed*

CONTINUUM OF SCHOOL-WIDE INSTRUCTIONAL & POSITIVE BEHAVIOR SUPPORT

Primary Prevention: School-/Classroom-Wide Systems for All Students, Staff, & Settings



Tertiary Prevention: Specialized Individualized Systems for Students with High-Risk Behavior

Secondary Prevention: Specialized Group Systems for Students with At-Risk Behavior

School-wide Systems

1. Common **purpose** & approach to discipline
2. Clear set of **positive expectations & behaviors**
3. Procedures for **teaching** expected behavior
4. Continuum of procedures for **encouraging** expected behavior
5. Continuum of procedures for **discouraging** inappropriate behavior
6. Procedures for on-going **monitoring** & evaluation

Classroom Setting Systems

- Classroom-wide **positive expectations** taught & encouraged
- Teaching classroom **routines & cues** taught & encouraged
- Ratio of **6-8 positive to 1 negative** adult-student interaction
- **Active supervision--proximity control**
- **Redirections for minor**, infrequent behavior errors
- **Frequent precorrections** for chronic errors
- **Effective academic instruction & curriculum**

Positive phrasing lets children know the positive results for using appropriate behaviors.

Positive phrasing: "If you finish your reading by recess, we can all go outside together and play a game."

Negative phrasing: "If you do not finish your reading by recess, you will have to stay inside until it's done."

Positive phrasing helps children learn that positive behaviors lead to positive outcomes. This, in turn, can help them gain control of their behaviors.

Nonclassroom
Setting Systems

- **Positive** expectations & routines taught & encouraged
- **Active supervision by all staff**
 - Scan, move, interact
- **Precorrections** & reminders
- **Positive reinforcement**

Individual Student
Systems

- **Behavioral competence at school & district levels**
- **Function-based** behavior support planning
- **Team- & data-based** decision making
- Comprehensive **person-centered** planning & wraparound processes
- Targeted **social skills** & self-management instruction
- Individualized **instructional & curricular** accommodations

Guiding Principles

- Remember that **good teaching** is one of our best behavior management tools
 - Active engagement
 - Response cards, NHT, CRG, CWPT

Touch control,
It is used to direct a student toward positive behavior.. Touch control should *never* be used with children who react angrily or when school policy does not permit its use.

Humor,
directed either at the teacher or the situation,*never* at the child...can defuse tensions as well as redirect children. Humor must *never* be used to demean a child or be used in a manner that might encourage others in the class to ridicule the child.

1. _____

- Maintain at least **4 to 1**
- Interact positively once every 5 minutes
- Follow correction for rule violation with positive reinforcer for rule following

2. _____ at all times

- Move continuously
- Scan continuously & overtly
- Interact frequently & positively
- Positively reinforce rule following behaviors

3. Positively **interact with most** students during lesson

- Vary type of contact
 - Physical, verbal, visual contact
- Vary by individual & group
- Mix instructional & social interactions

6. Conduct **smooth & efficient transitions** between activities

- Teach routine
- Limit to time required for student to be ready
- Engage students immediately

7. Be **prepared** for activity

- Have filler activities
- Know desired outcome
- Have materials
- Shift phases of learning
 - Acquisition, fluency, maintenance, generalization
- Practice presentation fluency

8. Begin with **clear explanations** of **outcome/objective**

- Provide advance organizer
- Create focus or point of reference for assessment

9. Allocate **most time** to **instruction**

- Fill day with instructional activities
- Maximize teacher-led engagement

10. Engage students in **active responding**

- Establish & expect behavioral indicator
 - Write, verbalize, manipulate materials
- Enable immediate assessment of learning & instructional impact

11. Give each student **multiple ways** to actively respond

- Vary response type
 - Individual v. choral responses
 - Written v. gestures
- Use peer-based assistance

12. **Regularly check** for student understanding

- Vary assessment type
 - Immediate v. delayed
 - Individual v. group
- Review previously mastered content
- Check for existing knowledge

13. End activity with **specific feedback**

- Review performance on expected outcomes
 - Scheduled activities
 - Academic v. social
 - Individual v. group

14. Provide specific information about **what happens next**

- Describe follow-up activities
 - Homework, review, new activity, choices
 - Immediate v. delayed
 - Following lesson
- Describe features of next lesson

Develop Hypothesis

Develop hypothesis statement regarding the likely functions of the problem behavior and the context (social and environmental conditions) in which it is most likely to occur.

Hypothesis

- When this occurs....
- The student does....
- To get/avoid...

Teach Alternative Behavior

- Function = Get
 - Social skills that access attention appropriately
 - Social skills that delay access to desired objects or events
- Function = Escape
 - Social skills that access assistance with difficult tasks
 - Social skills to avoid negative adult & peer interactions

Modify Environment

Attention

- Withhold attention for problem behavior
- Provide high rates of reinforcement for replacement behavior

Modify Environment

Escape

- Do not allow student to “escape” tasks unless they use pro-social alternative behavior
- Modify tasks to promote high rates of engaged time

Worry #1
“Teaching” by Getting Tough

Runyon: “I hate this f_____ing school, & you’re a dumbf_____.”

Teacher: “That is disrespectful language. I’m sending you to the office so you’ll learn never to say those words again....starting now!”

Immediate & seductive solution....“Get Tough!”

- **Clamp down** & increase monitoring
- **Re-re-re**-review rules
- Extend continuum & consistency of **consequences**
- Establish **“bottom line”**

...Predictable individual response

Reactive responses are predictable....

When we experience **aversive** situation, we select interventions that produce **immediate relief**

- Remove **student**
- Remove **ourselves**
- Modify **physical environment**
- Assign **responsibility** for change to student &/ or others

When behavior doesn't improve,
we "*Get Tougher!*"

- Zero tolerance policies
- Increased surveillance
- Increased suspension & expulsion
- In-service training by expert
- Alternative programming

.....*Predictable systems response!*

Erroneous assumption that student...

- Is *inherently* "bad"
- Will learn more appropriate behavior through *increased* use of "*aversives*"
- Will be *better tomorrow*.....

But....false sense of safety/security!

- Fosters environments of *control*
- Triggers & reinforces *antisocial* behavior
- Shifts accountability *away* from school
- *Devalues* child-adult relationship
- *Weakens* relationship between academic & social behavior programming

Science of behavior has taught us that students....

- Are **NOT** born with “bad behaviors”
- Do **NOT** learn when presented contingent aversive consequences

.....*Do learn better ways of behaving by being taught directly & receiving positive feedback....consider function*

Non-examples of Function-Based approach

“Function” = outcome, result, purpose, consequence

- *“Santana, you skipped 2 school days, so we’re going to suspend you for 2 more.”*
- *“John, I’m taking your book away because you obviously aren’t ready to learn.”*
- *“You want my attention?! I’ll show you attention, ...let’s take a walk down to the office & have a little chat with the Principal.”*

Behavioral Techniques

Shaping Reinforcement

Are “Rewards” Dangerous?

“...our research team has conducted a series of reviews and analysis of (the reward) literature; our conclusion is that there is no inherent negative property of reward. Our analyses indicate that the argument against the use of rewards is an overgeneralization based on a narrow set of circumstances.”

- Cameron, 2002
- Cameron & Pierce, 1994, 2002
- Cameron, Banko & Pierce, 2001

Character Education

- Easy to change moral knowledge..... ..difficult to change moral conduct
- To change moral conduct...
 - Adults must model moral behavior
 - Students must experience academic success
 - Students must be taught social skills for success

- Apply **three tiered prevention logic** to classroom setting
 - Primary for all
 - Secondary for some
 - Tertiary for a few

- Link **classroom to school-wide**
 - School-wide expectations
 - Classroom v. office managed rule violations

- ❖ Use humor
- ❖ Give the student a choice between good behavior and a minor punishment
- ❖ Use choice statements:
 - ❖ When-then (When you ____, then you can ____)
 - ❖ If-then (If you ____, then I will/you can will ____)
 - ❖ Either-or (Either you ____, or you will ____)
 - ❖ Here are your choices (We need to ____, here are your choices:)

(Duckworth et al., 2001; Herschell et al., 2002)

Classroom Design and Related Variables

- Seating arrangements
- Proximity to other students
- Proximity to teacher
- Proximity to distracters (e.g., windows)
- Noise levels
- Class composition
- Class rules and expectations
- Class routines
- Events outside the classroom
