The Power of Knowledge
Region 4 ESC
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Session Objectives

• Identify the national federal poverty level
• Discuss how many students fall at or below the federal poverty level
• Identify how poverty affect students
• Discuss what we can do to address the challenges faced by students who are economically disadvantaged

Contents

1. How many students are in poverty?
2. What does poverty mean?
3. What types of poverty exist?
4. What effect does poverty have on students?
5. What can I do to help students in poverty?
Who are the students in poverty, nationally?

- "More than 16 million children in the United States – 22% of all children – live in families with incomes below the federal poverty level – $23,550 a year for a family of four".

- "Research shows that, on average, families need an income of about twice that level to cover basic expenses. Using this standard, 45% of children live in low-income families".

Economically Disadvantaged Students

Texas defines economically disadvantaged students as those students who are eligible for free or reduced lunch or those eligible for public assistance.

Children in Low-Income Families in Texas, by Race, 2012

- White: 26%
- Black: 60%
- Hispanic: 66%
- Asian: 29%
- American Indian: 45%
Types of Poverty

- Situational Poverty
- Generational Poverty
- Absolute Poverty
- Relative Poverty
- Urban Poverty
- Rural Poverty

(Jensen, 2009)

Situational Poverty

- Caused by a sudden crisis or loss
- Often temporary

Examples: environmental disasters, divorce, or severe health problems

(Jensen, 2009)

Generational Poverty

- Occurs in families where at least two generations have been born in poverty
- Families are not equipped with the tools to move out of their situations

(Jensen, 2009)
Absolute Poverty

- Rare in the U.S.
- Scarcity of necessities: running water and food
- Families who live in absolute poverty focus on day-to-day survival

Relative Poverty

- Refers to the economic status of a family whose income is insufficient to meet its society’s average standard of living

Urban Poverty

- Occurs in metropolitan areas where populations are at least 50,000
- Deal with several chronic and acute stressors (crowding, violence, noise)
- Dependent on inadequate large-city services

(Jensen, 2009)
Rural Poverty

- Occurs in non-metropolitan areas where populations are below 50,000
- More single guardian households
- Less access to services
- Fewer job opportunities

(Jensen, 2009)

Poverty: Effects on School Children

- **E** - Emotional and social challenges
- **A** - Acute and chronic stressors
- **C** - Cognitive lags
- **H** - Health and safety issues

(Jensen, 2009)

Poverty Effect on School Children

- Poverty associated with delayed language development and other cognitive skills
- Lower literacy rates and poor numeracy skills
- Higher rates of behavioral and emotional disorders
- Higher percentage of students in Special Education and/or needing support services
Illiteracy and Learning Disabilities

- Low levels of literacy are powerful predictors of welfare dependency and incarceration
- More than ½ of the adult prison system has a literacy level below those required by the labor market
- Nearly 40% of adjudicated juvenile delinquents have treatable learning disabilities that were overlooked and undiagnosed in school

Barr & Parrett (2001)

Reading and Poverty

- 61% of low-income families have no books in their homes.
- 43% of adults with the lowest level of literacy proficiency live in poverty.
- 55% of children have an increased interest in reading when given books at an early age.

Reading and Poverty

- Children with a greater variety of reading material in the home are more creative, imaginative and proficient in reading. They are also on a better path toward educational growth and development.
- There is only one age-appropriate book for every 300 children in low-income neighborhoods, compared to 13 book per child in middle-income neighborhoods.
Early Literacy Experiences

Compare this:
Some parents spend 30 to 45 minutes a day reading to their children. This translates to 180 to 270 hours per year. Over six years, this amounts to well over 1000 hours spent reading aloud (Adams, 1990).

Other parents spend less than 20 minutes per month, which translates to less than four hours per year. Over six years, this amounts to less than 25 hours reading (Teale, 1986).

Early Language Experiences

Hart and Risley (1995) conducted a longitudinal study of children and families from three groups:

- Professional families
- Working-class families
- Families on welfare
Hart & Risley compared the mean number of interactions initiated per hour in each of the three groups.

Perhaps most striking were the differences in quality of interaction, when the affirmations vs. prohibitions per hour were compared.

Cumulative Language Experiences

Cumulative Words Per Hour

- Welfare
- Working
- Professional
What are your initial thoughts about the issues facing students in poverty?

What can we do?
EMBRACING THE MIND OF CHANGE

“The reason things stay the same is because we’ve been the same. For things to change, we must change!”

– Eric Jensen

We must change the ENVIRONMENT where our students are spending the most time.
Brains can change

- **Neuroplasticity** - the quality that allows region-specific changes to occur in the brain as a result of experience.
  - Universal Design for Learning
  - Brain structures
  - Intelligence
  - Growth mindset
  - School practices

**UNIVERSAL DESIGN FOR LEARNING**

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What is Universal Design for Learning

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Activities schools can use to help students improve their academic operating systems

- **Physical activity**
  (increases the production of new brain cells...and is highly correlated with learning, mood, and memory)

- **Playing chess**
  (increases students’ capabilities in reading and math by increasing attention, motivation, processing, and sequencing skills)

- **The arts**
  (improves attention, sequencing, processing, and cognitive skills)

- **Completing tasks administered by computer-aided instructional programs**
  (improves memory and attention skills)

- **Music**
  (improves listening skills, improves memory, aides in transitions, motivates)

  *Jensen, 2009*
Arts

Students taking theater and drama scored higher on the SAT than those with no arts instruction.

High arts participation makes a more significant difference to low-income students than to high-income students.

Art builds students’ academic operating systems as well as, or better than, anything else your school offers.

Jensen, 2009

Athletics

In a study of 353,000 5th graders, 322,000 7th graders, and 279,000 9th graders, higher fitness levels were associated with higher academic achievement.

Athletics improves self-concept and reduces stress and aggression.

Jensen, 2009

Advanced Placement

As a contributing factor of college success, participation in AP courses outrank grade point average, class rank, and SAT scores.

A focus on college preparation in the context of a rigorous high school curriculum demystifies the college-going experience.

Poor and minority students need educators and counselors who will provide support and encouragement for enrollment in rigorous classes.

Jensen, 2009
Intelligence (IQ) can change

• Gottfredson (2004) suggests that many economically disadvantaged students begin school with a lower-than-average IQ.
  – However….

  - Home environment
  - Early childhood experiences
  - Amount and duration of schooling
  - Quality of instruction

GROWTH MINDSET
Growth mindset

A study on praise and mindsets

To view a school that is working towards developing growth mindset, visit...

SCHOOL PRACTICES

Seven Engagement Factors

Factors correlated with student engagement that are strongly tied to socioeconomic status:

1. Health and Nutrition
2. Vocabulary
3. Effort and energy
4. Mind-Set
5. Cognitive capacity
6. Relationships
7. Stress level

Jensen, 2013
Engagement Strategies

Use engagement strategies to:

• Create a positive climate
• Build cognitive capacity
• Increase motivation and effort
• Develop deep understanding
• Energize and focus

Jensen, 2013

Positive Climate
Affects...

1. Health and Nutrition
2. Vocabulary
3. Effort and energy
4. Mind-Set
5. Cognitive capacity
6. Relationships
7. Stress level

• Speaking in a way where students feel safe to take risk (model)
• Promoting "academic optimism"
• Reducing lecture time
• Avoid “fight, flight, or freeze”
• Teach positive social and emotional responses

Jensen, 2013

Consider how creating a positive environment in your school would impact economically disadvantaged students?

What is one thing you will change/begin when you return to campus?
Building Capacity Affects…
1. Health and Nutrition
2. Vocabulary
3. Effort and energy
4. Mind-Set
5. Cognitive capacity
6. Relationships
7. Stress level
- Build attention skills
- Teach problem solving and critical thinking skills
- Foster self control (calendar response delay)

Consider how building capacity in your school would impact economically disadvantaged students?

What is one thing you will change/begin when you return to campus?

Motivation & Effort Affects…
1. Health and Nutrition
2. Vocabulary
3. Effort and energy
4. Mind-Set
5. Cognitive capacity
6. Relationships
7. Stress level
- Make it their idea
- Manage risks
- Build learner’s mindset
- Provide feedback
- “Trail size effort” (ease into learning)
Consider how
Motivating students and
praising students’ effort
would impact economically
disadvantage students?

What is one thing you will
change/begin when you
return to campus?

 Developing Deeper Understanding
Affects…

• Use labels
• Help with discovery
• Use real visuals
• Make learning vivid

Jensen, 2013

Consider how
developing deep understanding
would impact economically
disadvantage students?

What is one thing you will
change/begin when you return
to campus?
Energizing and Enhancing Focus Affects...

- Get students moving
- Lower energy to increase focus
- Influence energy level with music

1. Health and Nutrition
2. Vocabulary
3. Effort and energy
4. Mind-Set
5. Cognitive capacity
6. Relationships
7. Stress level

Jensen, 2013

Consider how **energizing students and enhancing their focus** would impact economically disadvantaged students?

What is one thing you will change/begin when you return to campus?

Questions?
Thank you!

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References and Resources