



# **Opportunities Provided, Opportunities Taken: Providing Early Talent Development Opportunities is Critical for Diversifying Gifted Education**

Frank C. Worrell, Ph.D.

Distinguished Professor, Berkeley School of Education  
University of California, Berkeley

Professor, Faculty of Behavioural and Cultural Studies  
Heidelberg University

Invited Presentation

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# Overview

- What is giftedness?
  - From gifted education to talent development
- Educational Disparities Exist
  - K–12, Higher Education
- Society needs to provide opportunities for talent development
- Individuals need to be helped to take advantage of opportunities that they are offered.



IQ scores are definitive.



**Giftedness as Intelligence**

# Terman (1922)

At every step in the child's progress the school should take account of his vocational possibilities. Preliminary investigation indicate that an IQ below 70 rarely permits anything better than unskilled labor; that the range from 70 to 80 is preeminently that of semi-skilled labor, from 80 to 100 that of the skilled or ordinary clerical labor, from 100 to 110 or 115 that of semi-professional pursuits, and that above all these are the grades of intelligence which permits one to enter the professions or the larger fields of business. (Terman, 1922c, p. 27)

Biologically driven

Global

Fixed: once gifted, always gifted



# **Giftedness as Intelligence**



# General Ability

- Intelligence or *g*
- “the ability to reason, plan, solve problems, think abstractly, comprehend complex ideas, learn quickly, and learn from experience.”
  - Gottfredson (1997)
- The ability to learn quickly.
- The ability to learn from experience.
- The ability to make good decisions in the moment.
- The ability to adapt to unexpected circumstances.



# Correlates of IQ

General intelligence has a .50 correlation with school achievement.

General intelligence has a .55 correlation with years of education.

General intelligence has an average correlation of .54 with job performance.

This view is prevalent in many domains.



**Giftedness as Innate  
Ability is not limited to  
beyond Intelligence**





# Other Ability Models

- Sternberg's (1986) triarchic theory
  - Analytical
  - Creative
  - Practical
- Talent Search (Stanley, 1976)
  - Verbal ability
  - Mathematical ability

# Gardner's Eight Intelligences

Linguistic

Logical-  
Mathematical

Spatial

Bodily-  
Kinesthetic

Interpersonal

Intrapersonal

Musical

Naturalist

# Gardner's 8 Intelligence Domains

Linguistic	<b>Use</b> of words
Logical-mathematical	<b>Use</b> of numbers
Spatial	<b>Use</b> of spatial relationships
Bodily-Kinesthetic	<b>Use</b> of body
Interpersonal	<b>Use</b> of knowledge of others
Intrapersonal	<b>Use</b> of knowledge of self
Musical	<b>Use</b> of pitch and rhythms
Naturalist	<b>Use</b> of patterns in nature

Giftedness as Potential



# **MOVING BEYOND INTELLIGENCE**



# Giftedness as Potential Frameworks

- Giftedness is the potential for becoming an acclaimed performer or an exemplary producer of ideas.
  - Tannenbaum (1983, 1986)
- Giftedness as Practice
  - 10,000 hours
  - Practice is both necessary and sufficient
  - Ericsson (1993)



# Giftedness as Potential Frameworks

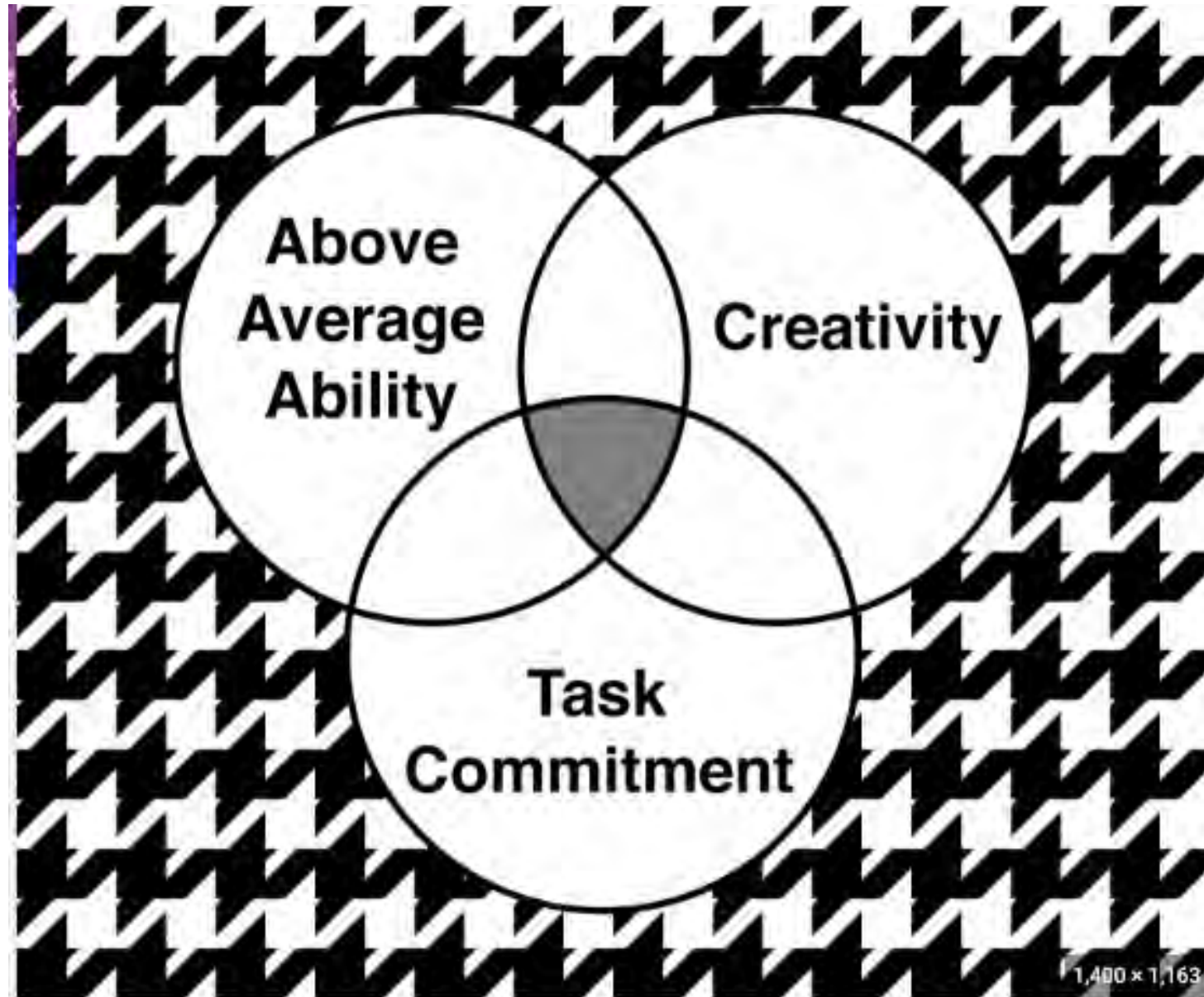
- Tannenbaum (1983, 1986)
  - Giftedness is the potential for becoming an acclaimed performer or an exemplary producer of ideas
- Ericsson (1993)
  - Practice is sufficient
  - 10,000 hours
- Gagné (2005)
  - Gifts are natural abilities; talents are acquired skills and knowledge. The goal is to transform gifts into talents.



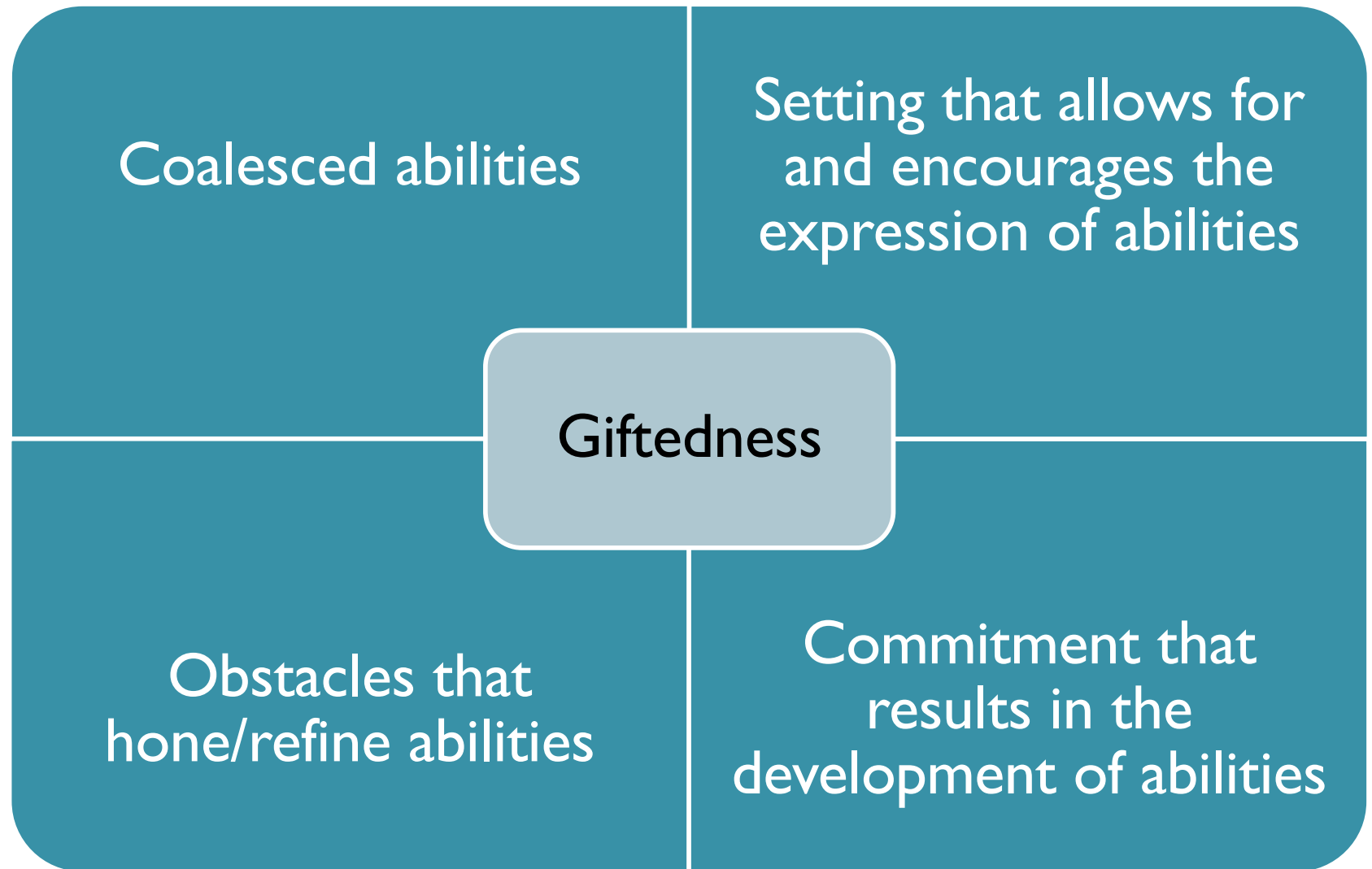
# **GIFTEDNESS AS INTERACTION**

# 3-Ring Definition of Giftedness

Renzulli (1986)



# Haensly et al.'s (1986) Definition



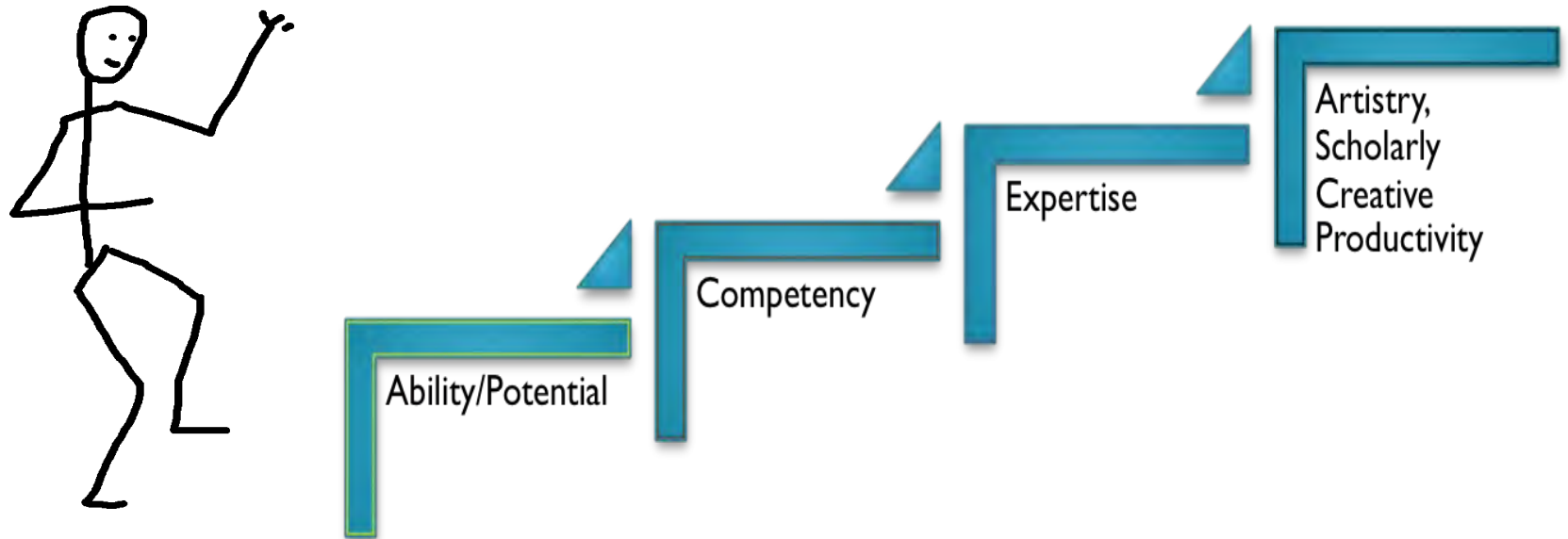




# **RETHINKING THE OTHER MODELS**



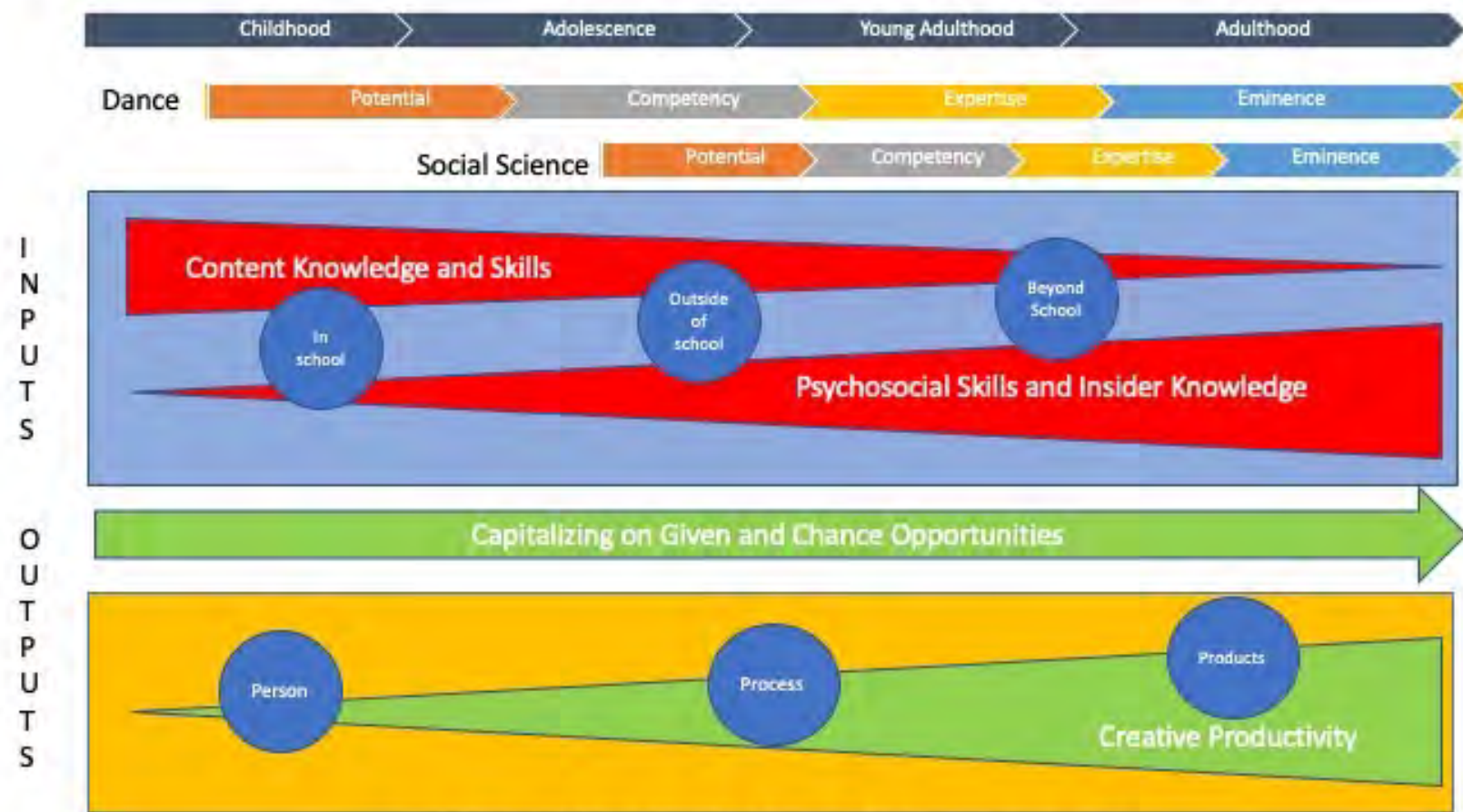
# The Capacity to Make “Gifted” Contributions in Adulthood is the Outcome of a Talent Development Journey



# Path to Gifted Performance

- ✓ Endowment/Biology/Ability
  - ✓ Person
- ✓ Appropriate Development
  - ✓ Match between Person and Environment
- ✓ Training/Teaching/Coaching
  - ✓ Environment
- ✓ Context/Opportunity
  - ✓ Environment and Person
- ✓ Psychosocial: Task Commitment/Mot/Effort
  - ✓ Person (in environment)

# Subotnik et al. (2011, 2023) Olsewski-Kubilius et al. (2015, 2023) Worrell et al. (2019, 2021)



Mega Model of Talent Development



**TALENT DEVELOPMENT  
IS A SOCIETAL  
RESPONSIBILITY.**





# **EDUCATION IN AN UNEQUAL SOCIETY**

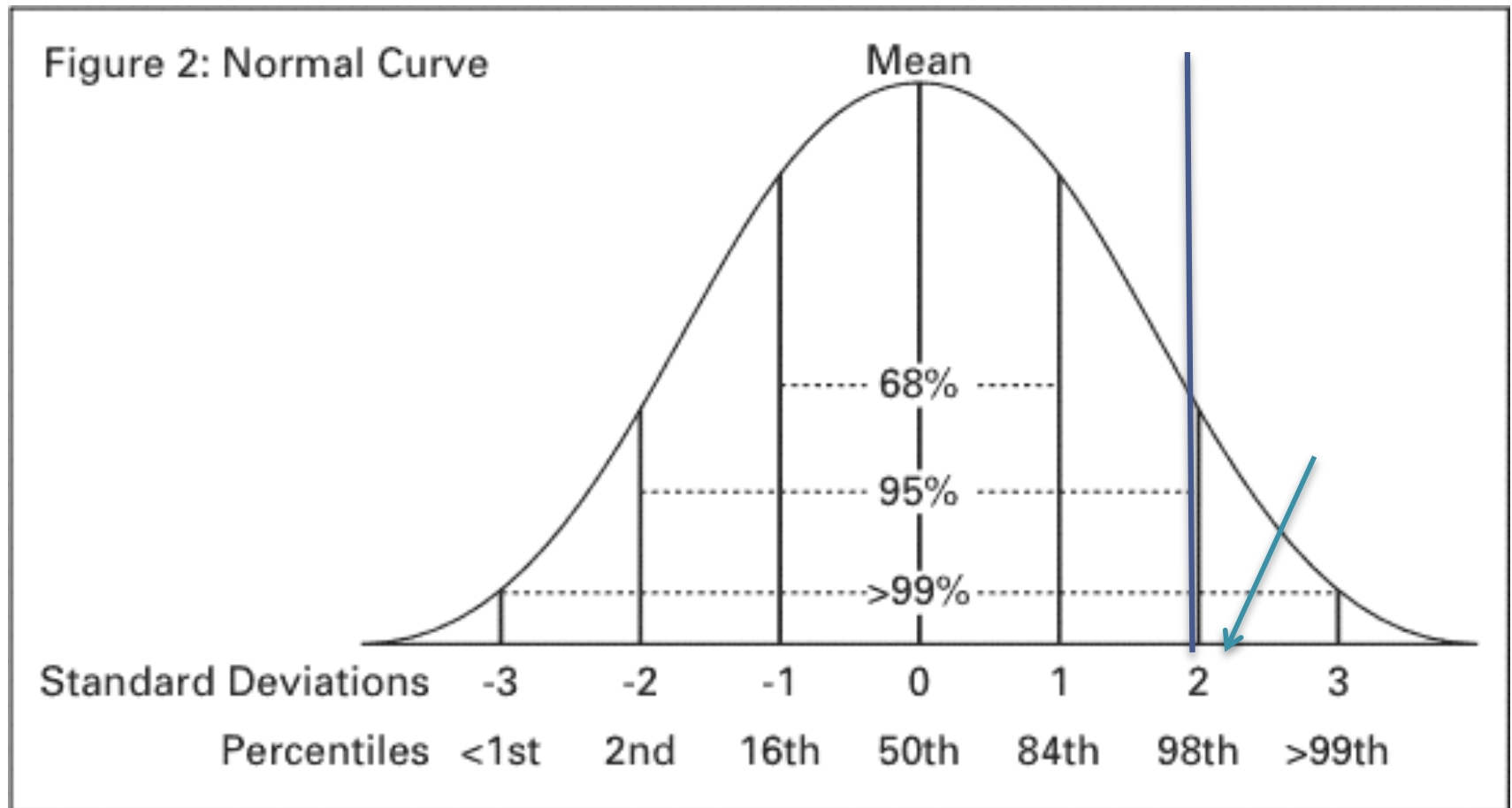


A simple definition of giftedness



**PERFORMANCE AT THE  
UPPER END OF A  
DISTRIBUTION**

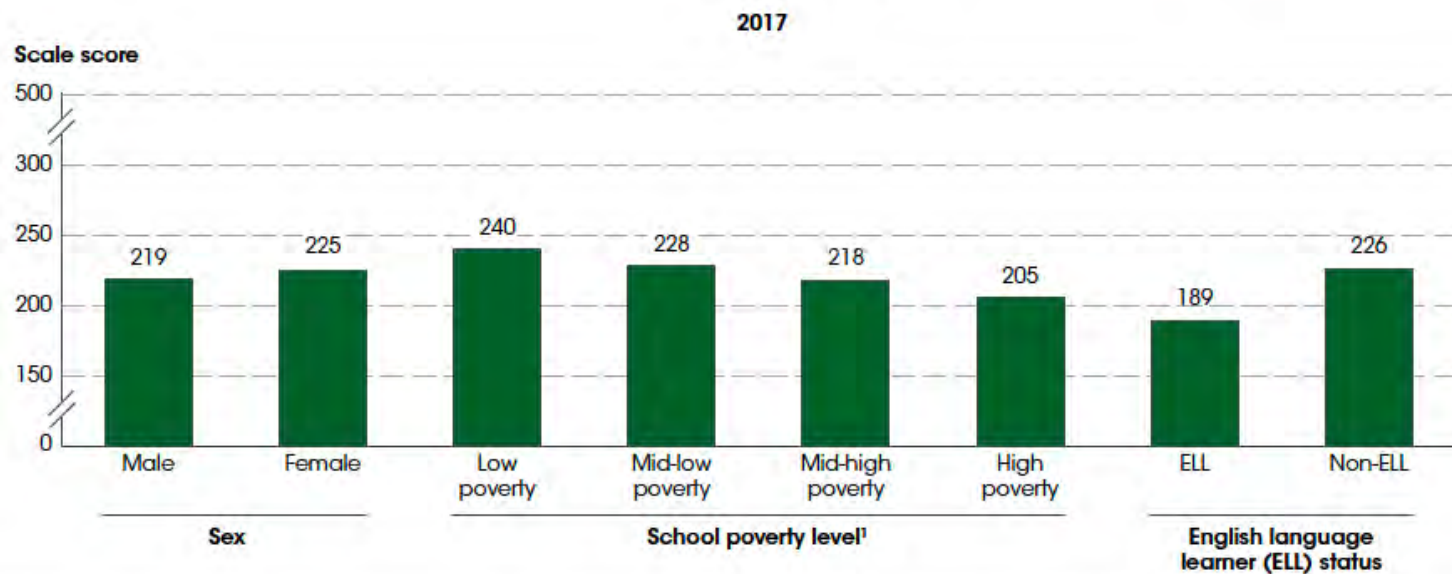
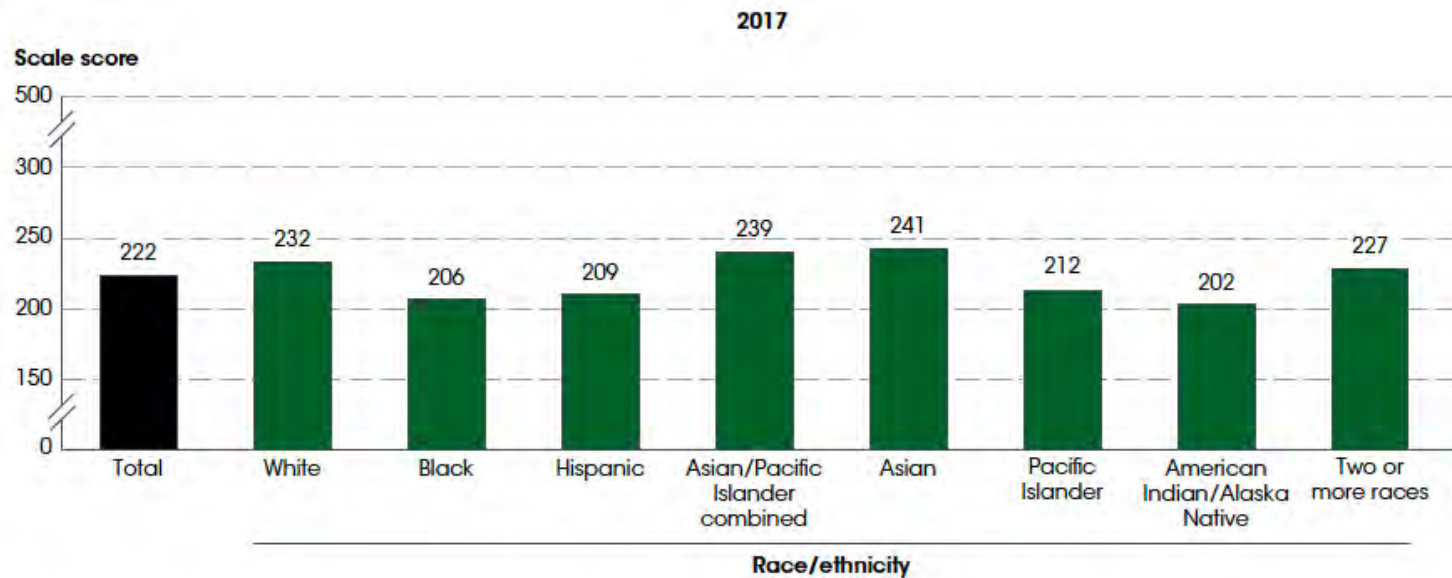
*Giftedness  $\geq 95^{\text{th}}$  percentile*





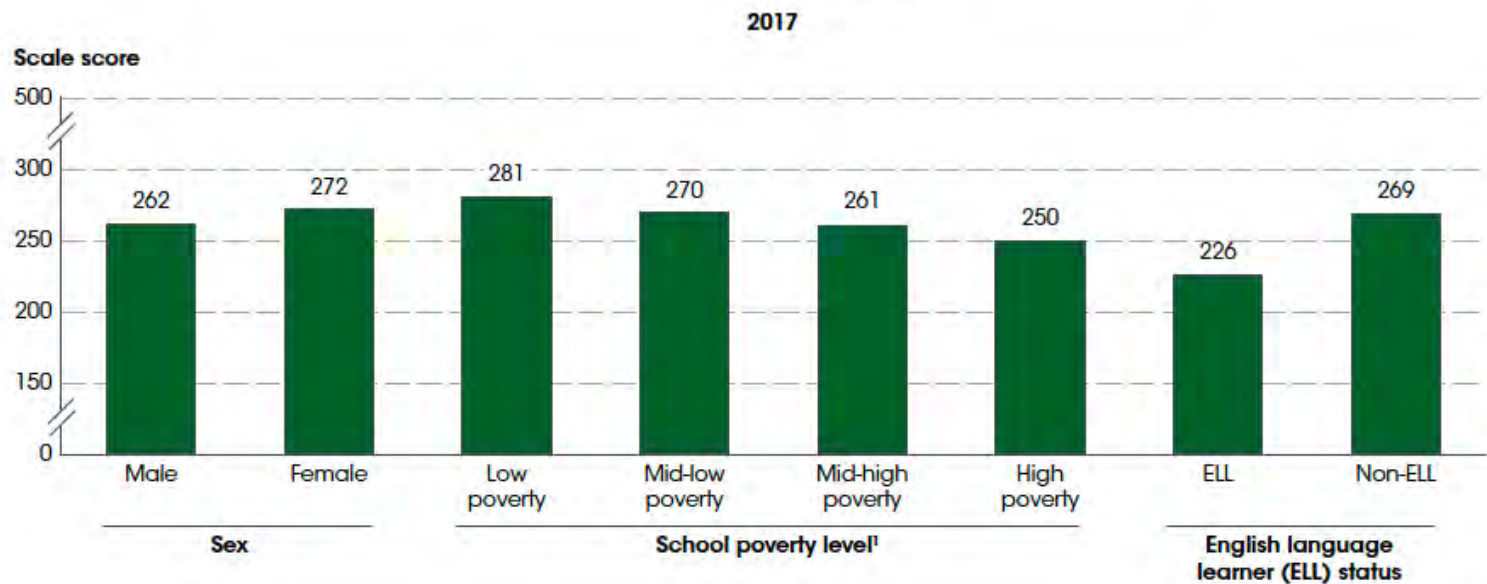
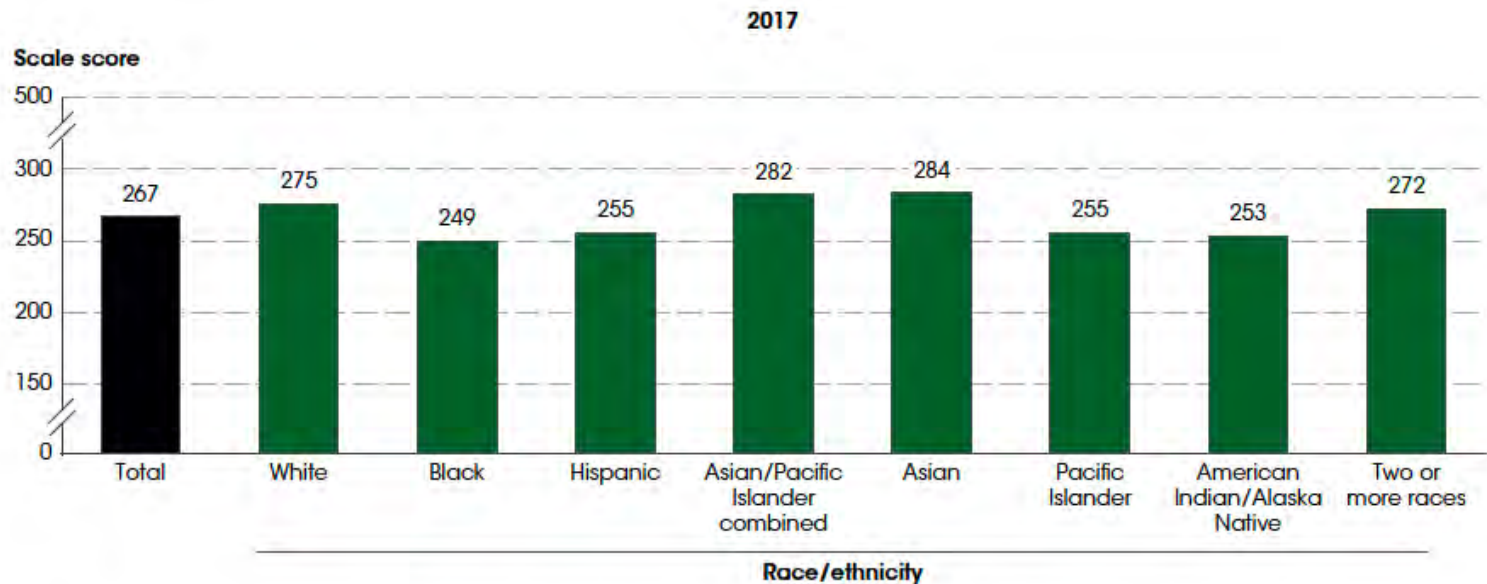
# **LEGACY OF AN UNEQUAL SOCIETY**

# Grade 4 Reading Performance by Demographic Characteristics





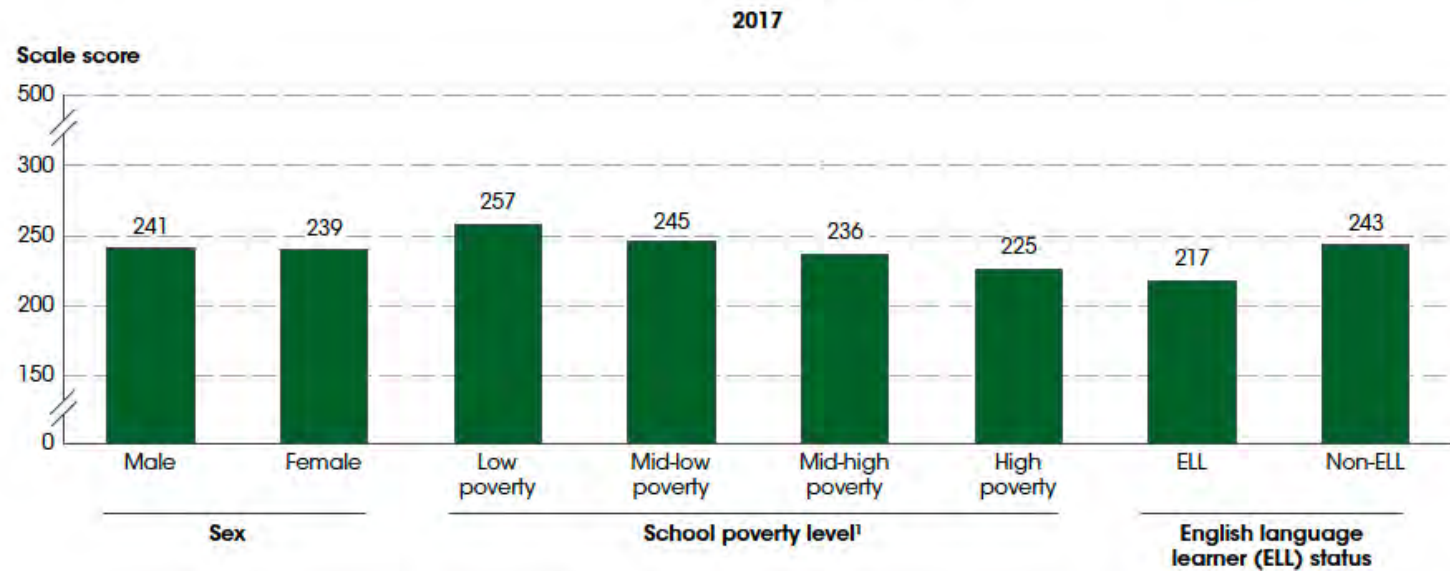
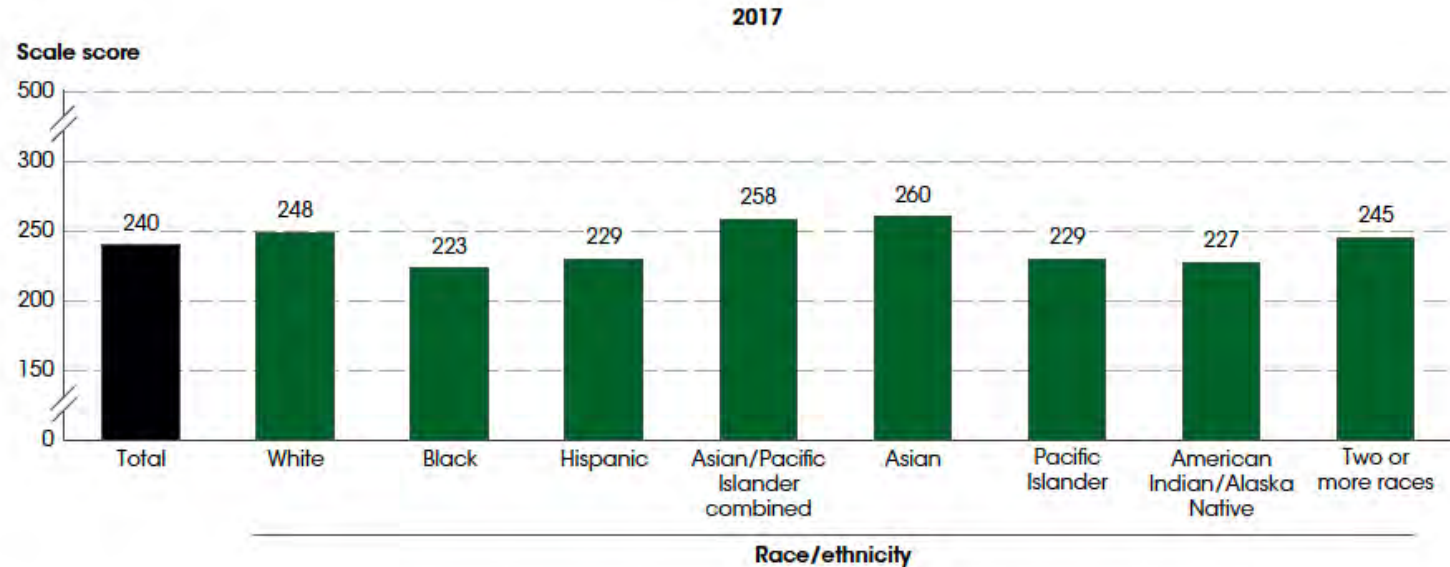
# Grade 8 Reading Performance by Demographic Characteristics





# Grade 4

## NAEP Mathematics Scores



Plucker and Peters (2016)



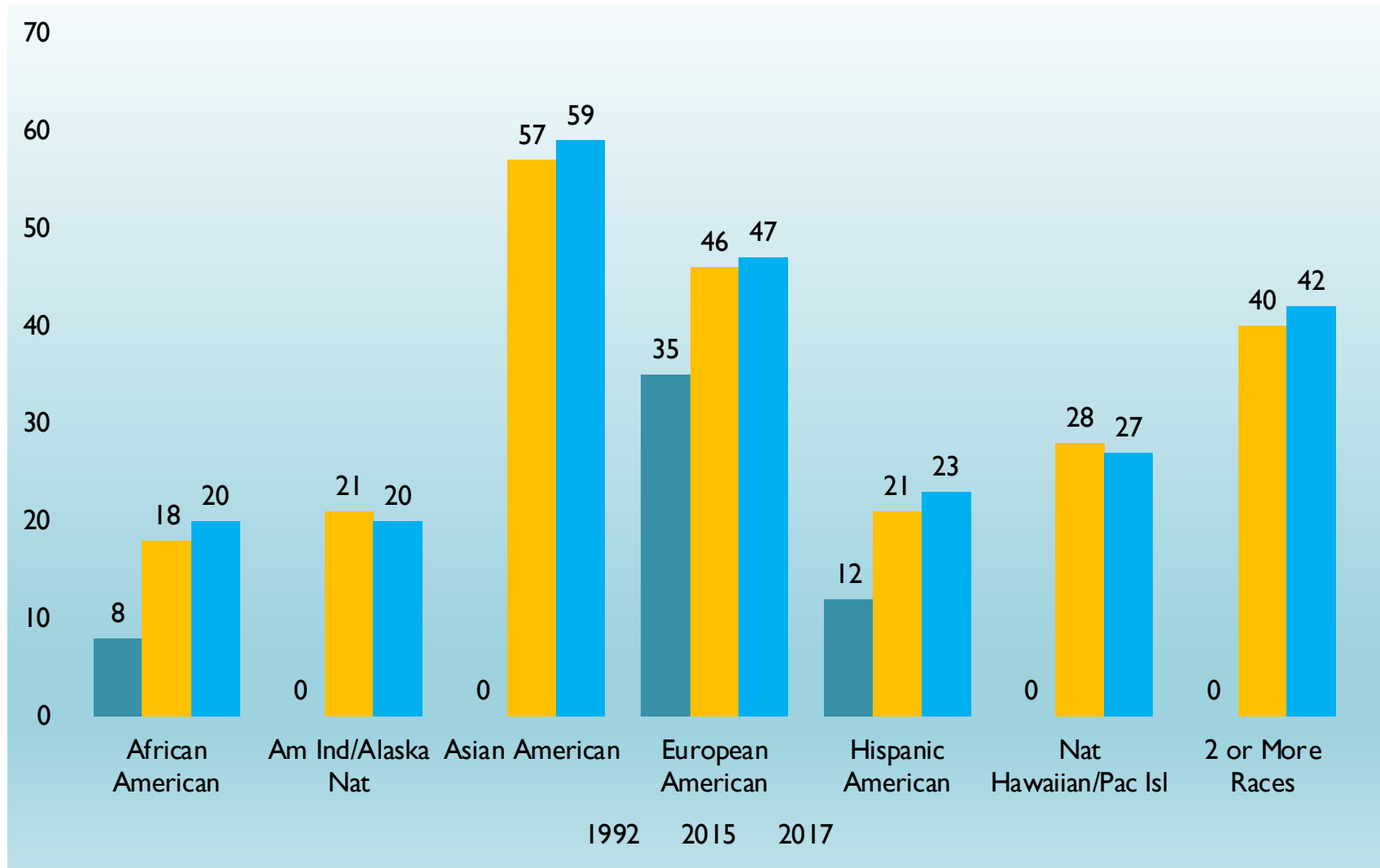
**THESE DISPARITIES  
ARE PRESENT AT THE  
HIGHEST LEVELS IN K-  
12 EDUCATION:  
EXCELLENCE GAPS**



# Proficiency Levels

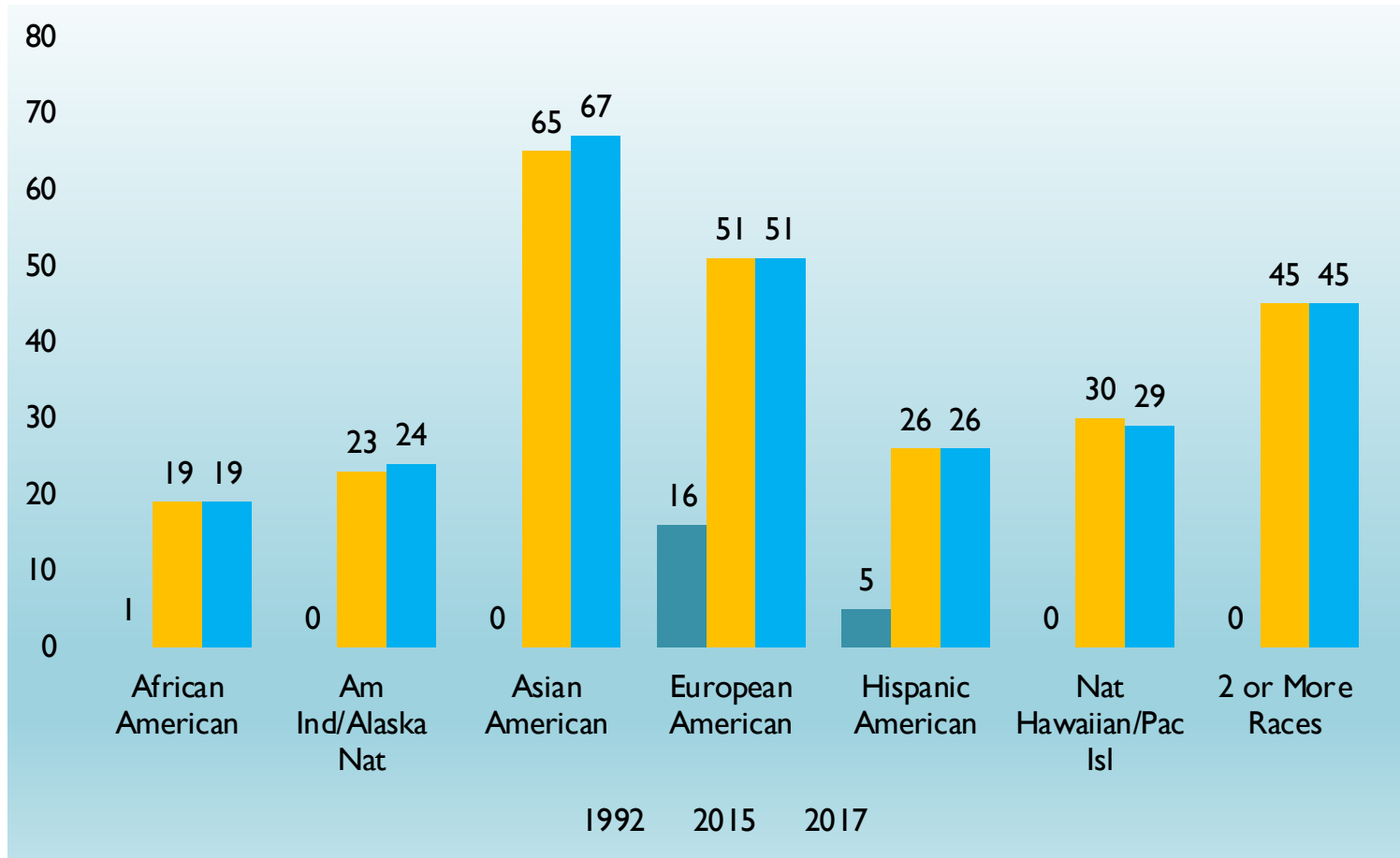
- Far Below Basic
- Below Basic
- Basic
- Proficient
- Advanced

# % Proficient or Above in Reading





# % Proficient or Above in Mathematics



Ashkenas et al. (2017): *New York Times*



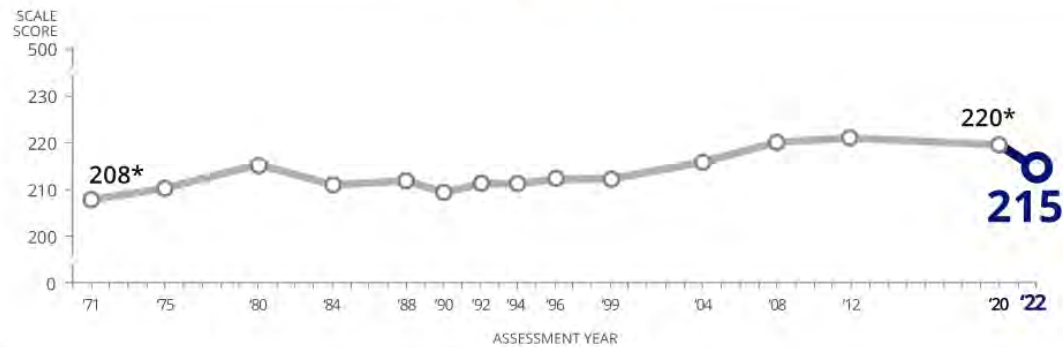
# **IMPLICATIONS FOR DEVELOPING EXPERTISE AS AN ADULT**



# **IMPACT OF THE PANDEMIC**

# Learning Loss I

## READING

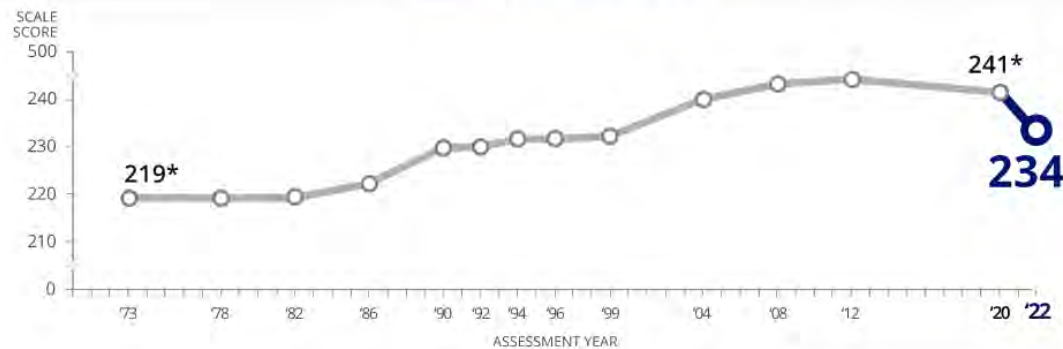


Score change between  
2020 and 2022



Largest score drop  
in reading  
since 1990

## MATHEMATICS



Score change between  
2020 and 2022



First ever  
score drop in  
mathematics

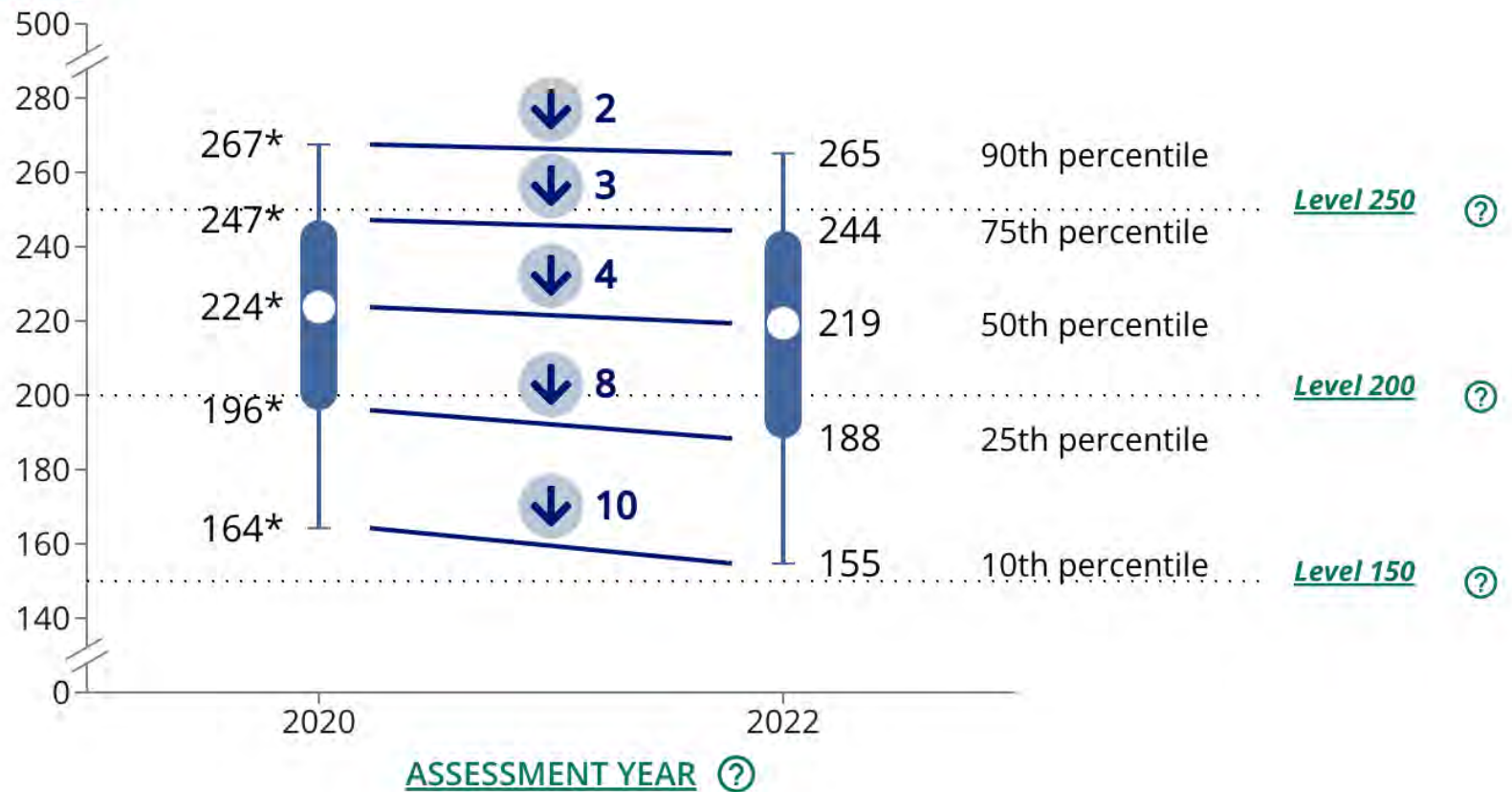
\* Significantly different ( $p < .05$ ) from 2022.



# Learning Loss 2

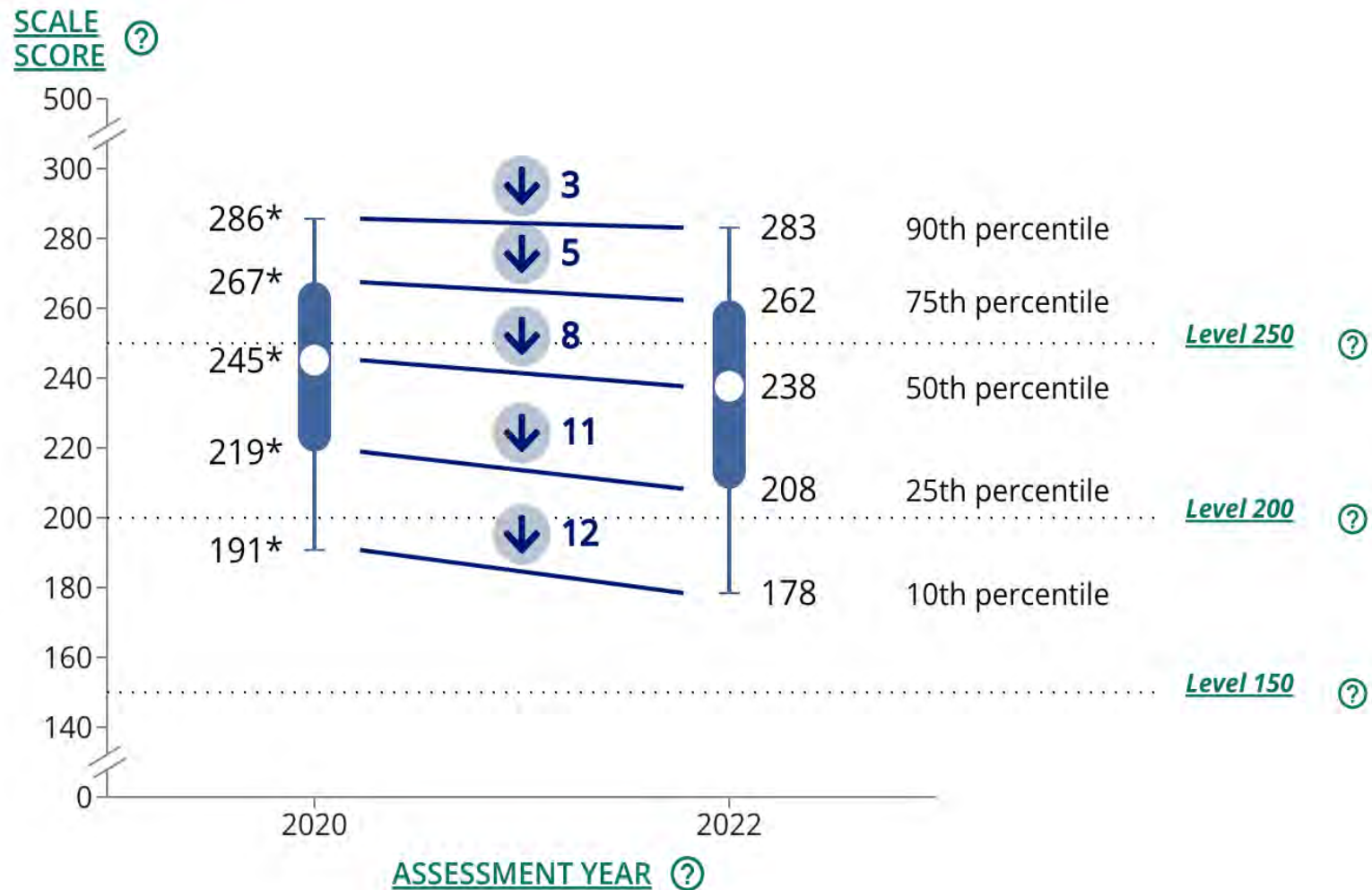
## READING

SCALE SCORE ?



# Learning Loss 3

## MATHEMATICS





# **FREE APPROPRIATE PUBLIC EDUCATION**



- If talent development is a societal responsibility, it is incumbent on society to provide....



**OPPORTUNITIES FOR  
ALL WITH POTENTIAL**





# Opportunities Provided

- Academic Talent Development Program
- Center for Gifted Studies
- Center for Talent Development
- Center for Talented Youth
- Davidson Institute
- Gifted Education Research and Resource Institute
- Mahoney Center
- Talent Identification Program
- Vanderbilt Programs for Talented Youth
- School-based Gifted Education Programs

- 
- I. Does not apply to gifted students.



## **A FREE APPROPRIATE PUBLIC EDUCATION**

1. Does not apply to gifted students.
2. Does not stop at the 95<sup>th</sup> %tile.



## **A FREE APPROPRIATE PUBLIC EDUCATION**



	High Motivation	Low Motivation
High opportunity	Current Students in our Gifted Programs	Students who need to be engaged.
Low Opportunity	Students who should be in our Gifted Programs	Students who may benefit from both opportunity and engagement

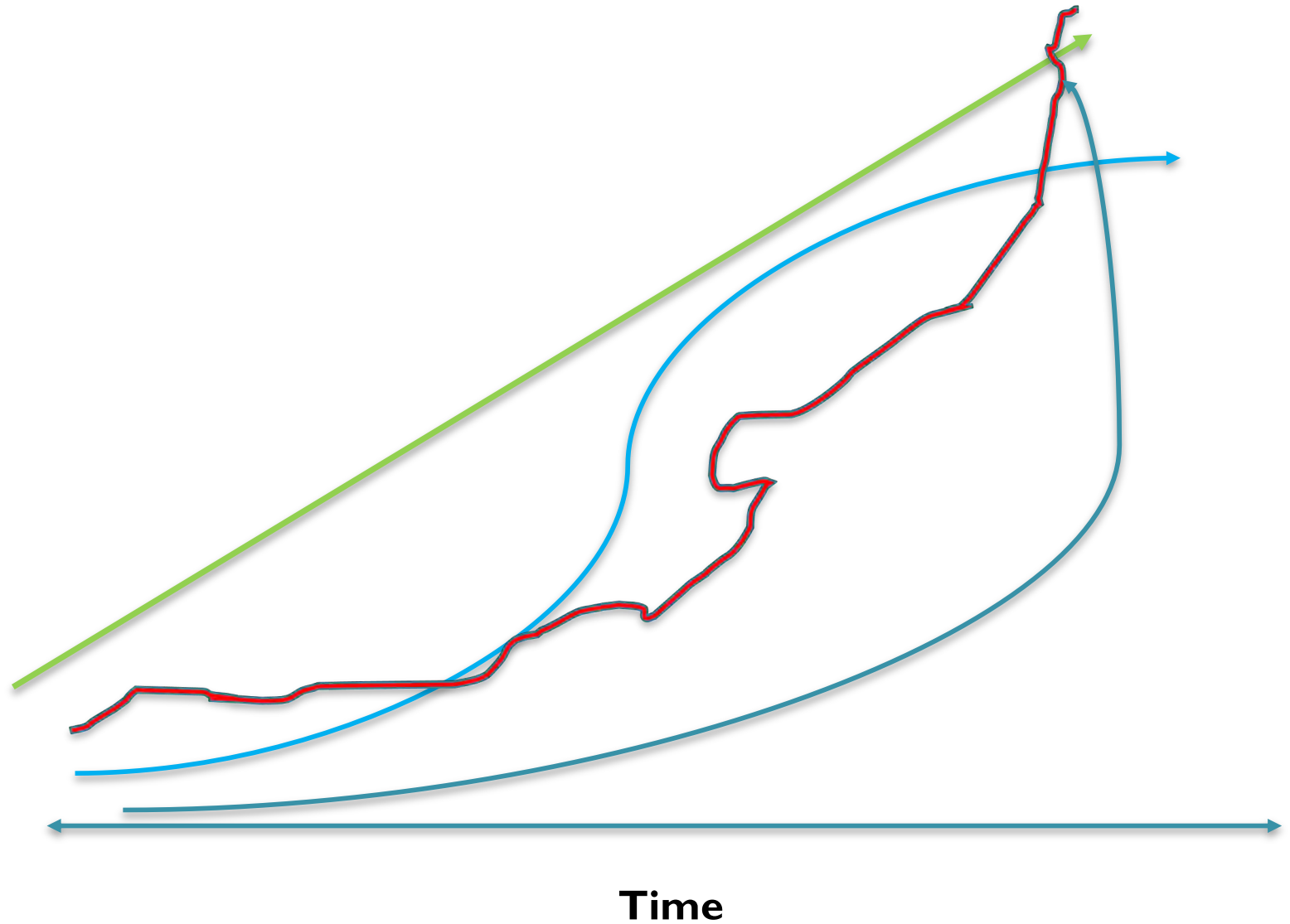


- We do not have good measures of what potential individuals have in some domains.
- We have limited information on students who fall just below our cut scores.



## **DEVELOPMENT IS NOT LINEAR**

# Trajectories 2



# Should Millions of Students Take a Gap Year? Large Numbers of Students Start the School Year Above Grade Level

**Scott J. Peters<sup>1</sup>, Karen Rambo-Hernandez<sup>2</sup>, Matthew C. Makel<sup>3</sup>, Micheal S. Matthews<sup>4</sup>, and Jonathan A. Plucker<sup>5</sup>**

## Abstract

Few topics have garnered more attention in preservice teacher training and educational reform than student diversity and its influence on learning. However, the actual degree of cognitive diversity has yet to be considered regarding instructional implications for advanced learners. We used four data sets (three state-level and one national) from diverse contexts to evaluate how many students perform above grade level in English Language Arts and mathematics. Results revealed that among American elementary and middle school students, 20% to 49% in English Language Arts and 14% to 37% in mathematics scored 1 year or more above grade level. We address what these findings imply for K-12 schools, grouping decisions, and educational policies that strive to foster advanced abilities.

Gifted Child Quarterly

1–10

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# Subotnik et al. (2011, p. 21)

- In 2004, 60 Minutes ran a piece on low-income adolescents of color from Harlem, four of whom were representing the United States at the Olympics in fencing that year. How did students from low-income backgrounds living in an inner-city neighborhood get involved in such an esoteric sport? As chance would have it, a former Black fencing champion had retired to Harlem and began giving lessons 15 years earlier. His work provided the opportunity for many youngsters who may never have held a sword in their hands to discover that they had a talent for the sport. Along with their newly discovered talent, these youngsters also exhibited the interest, passion, and commitment to pursue the gift; and of course, they had a teacher to help them hone the gift appropriately.



# 60 Minutes: May 5 2024

60 MINUTES OVERTIME

## How two high school students solved a 2,000-year-old math puzzle



By Bill Whitaker, Aliza Chasan, Sara Kuzmarov, Mariah Campbell  
May 5, 2024 / 7:00 PM EDT / CBS News



60  
MINUTES



### More from CB News

The young SS "helpers" at Auschwitz concentration camp

Pope Francis discusses same-sex couples, surrogacy during rare...



**OPPORTUNITIES ALSO  
MATTER FOR THOSE WHO  
HAVE NOT HAD THE  
CHANCE TO DEVELOP  
POTENTIAL EARLY**

# Tailwinds and Headwinds

Stevens (2020)

Some Students:



Other Students:







**OPPORTUNITIES  
MATTER MORE FOR  
STUDENTS WITH LESS  
SOCIAL, ECONOMIC,  
AND SOCIAL CAPITAL.**



1. Domains matter
2. Talent development produces outcomes.



**SMPY**

# Providing Opportunities

- Provide enrichment **opportunities** for all students in the early grades unrelated to gifted classification
  - Schoolwide enrichment
- Use universal screening, local norms, ongoing screening
- Recruit students in pairs or groups.
- Provide appropriate academic and psychosocial supports
  - Culturally relevant pedagogy
- Partner with programs outside of school (e.g., universities, museums, neighborhood entities)



**OPPORTUNITIES  
WHEN OFFERED, MUST  
BE TAKEN UP**



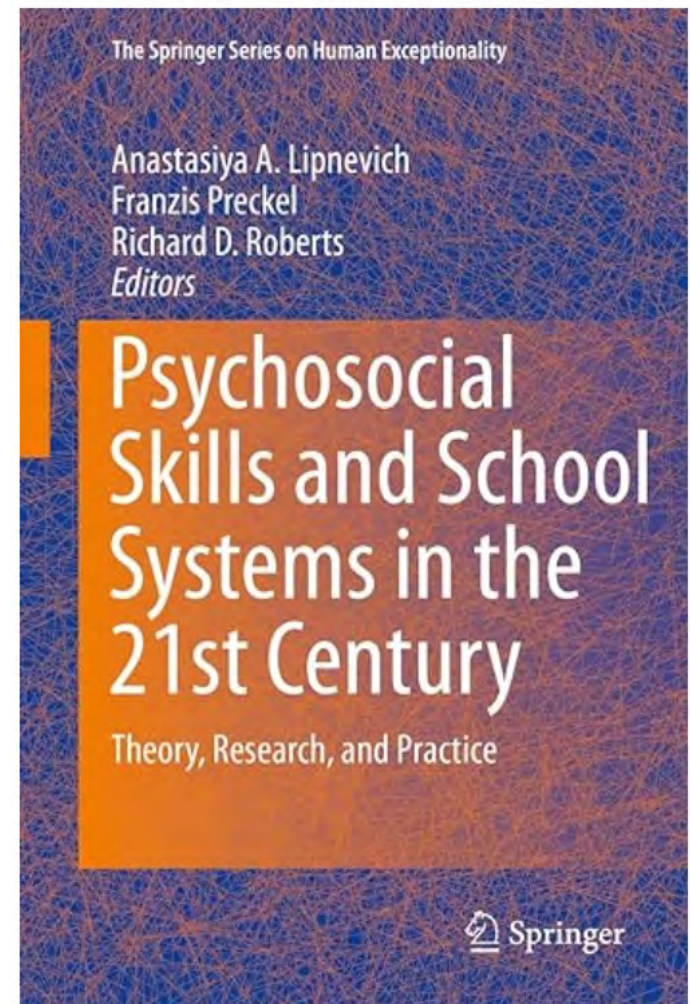
# Psychosocial Skills Matter

- Awareness of one's strengths & weaknesses
- Adaptability
- Conscientiousness
- Curiosity
- Hope
- Motivation
- Openness to experience
- Passion
- Persistence
- Risk-taking
- Self-efficacy
- Self-reflection
- Self-regulation
- Social skills
- Teachability
- Tolerance for ambiguity
- Willingness to learn from mistakes



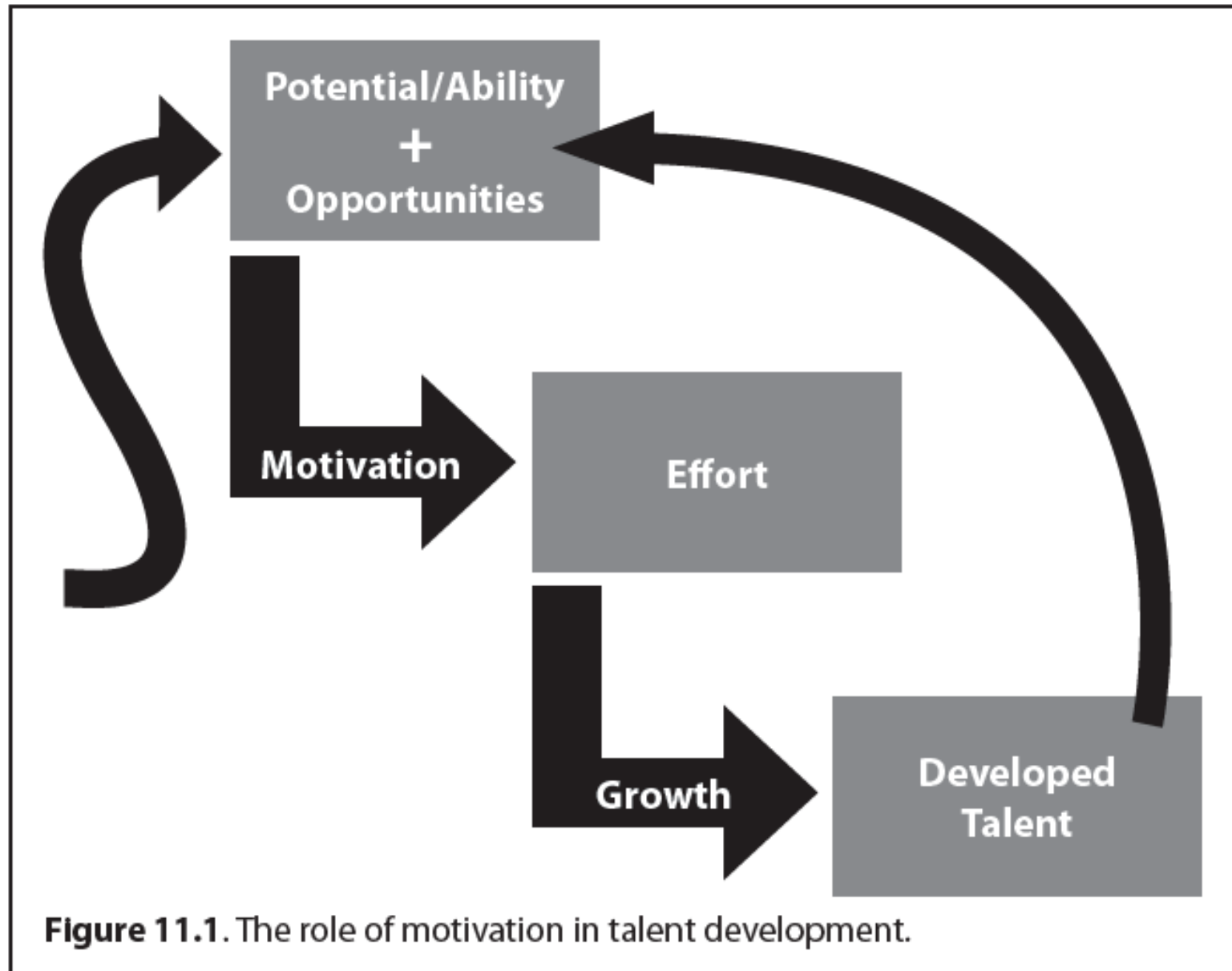
# Psychosocial skills can be taught

- *Psychosocial Skills and School Systems in the 20<sup>th</sup> Century*
  - Lipnevich, Preckel, & Roberts (Eds.)



# The Motivation/Potential Loop

Worrell (2018)





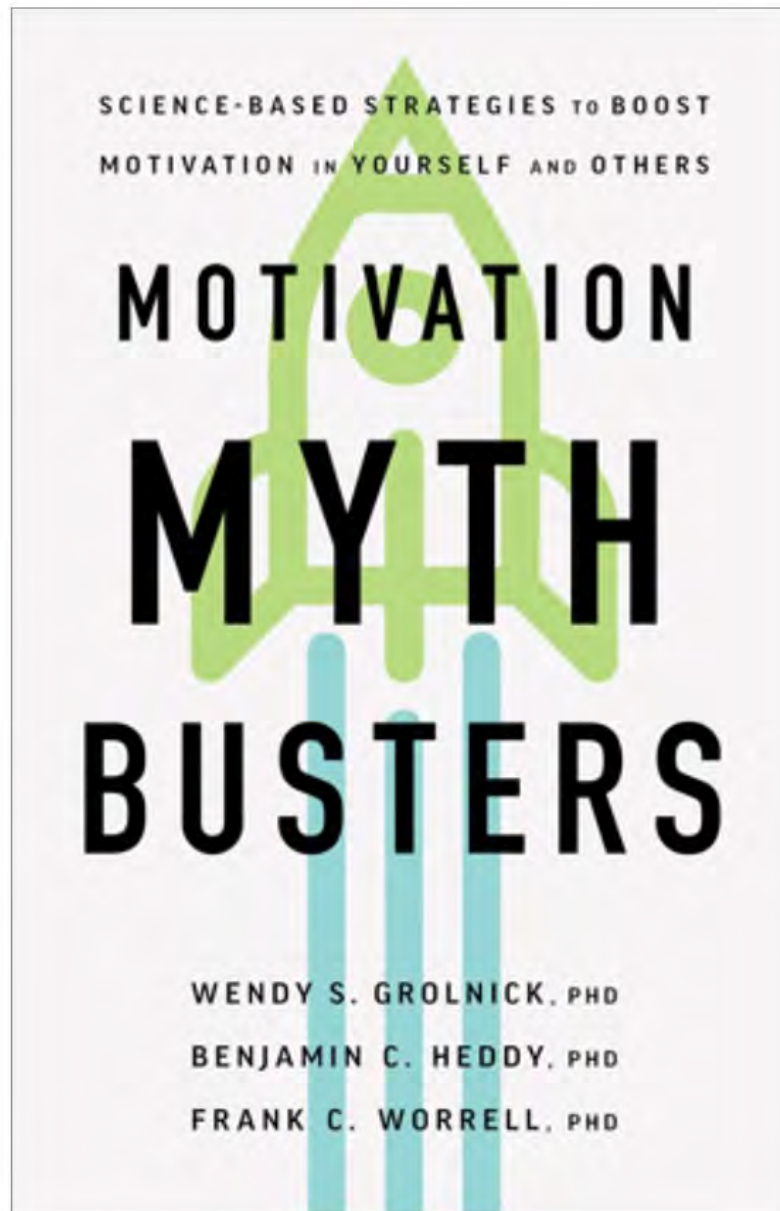
Some individuals are motivated and others are not.



**MYTH**

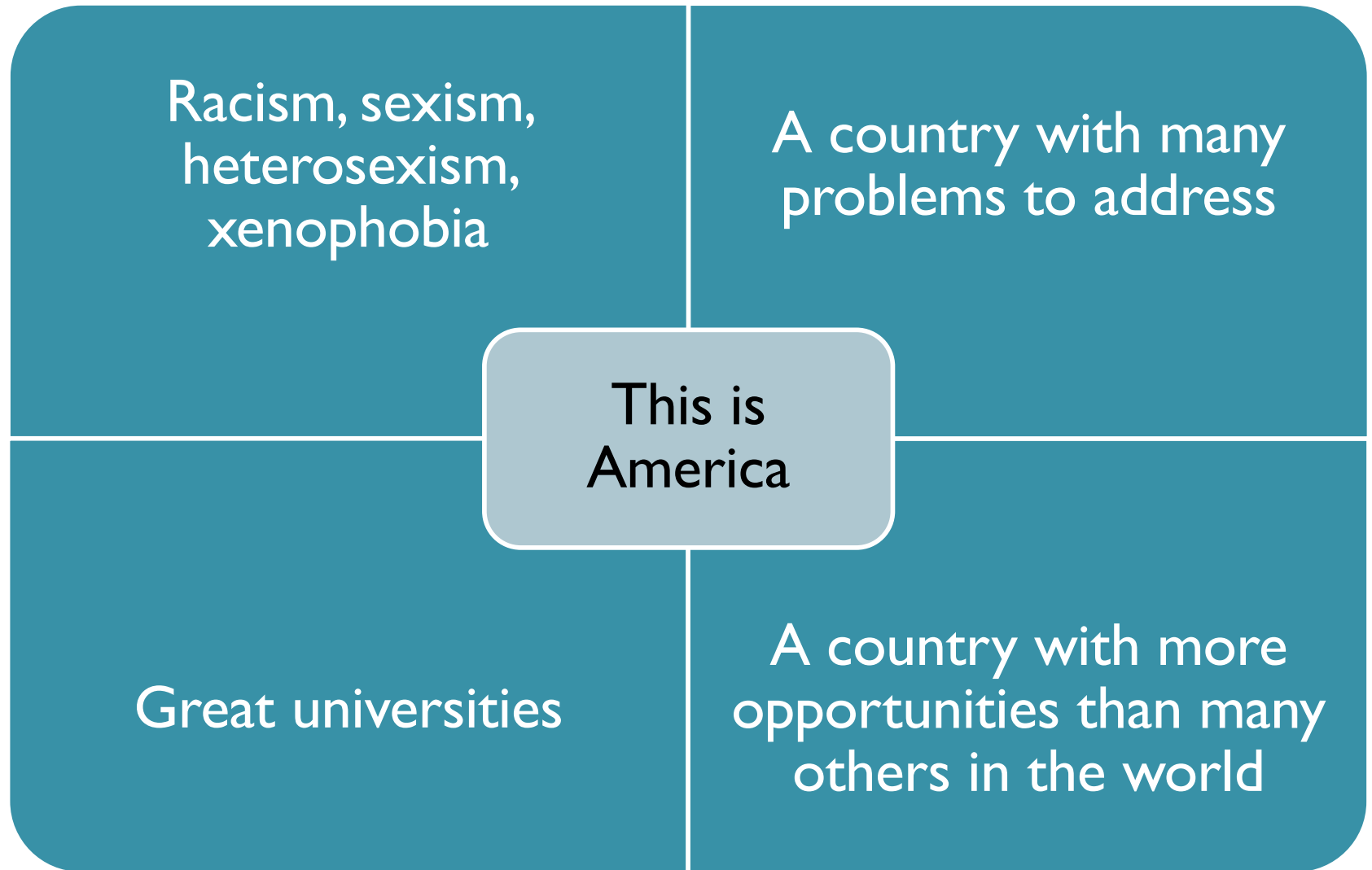


**Truth:**  
Everyone is motivated.





# The Peril and the Promise



# EVERY CHILD'S RIGHT



**Academic Talent Development  
by Choice, Not Chance**

**LAUREN A. SOSNIAK  
NINA HERSCH GABELKO**

vs.

America never  
was America to  
me

—Langston Hughes

Thanks for your attention.



**QUESTIONS?**