



**Riverside**  
**Insights**<sup>®</sup>

***CogAT***<sup>®</sup> in the  
**Classroom**

# What is ability data and why does it matter?

Thursday 7/13 | 9am PST • 11am CT • 12pm ET

## Learning Objectives

Understand the **difference between ability data and achievement data**.

Explore opportunities for using **ability data to elevate learners** to their fullest potential.

## Speakers

**Dr. Joni Lakin**, Professor at University of Alabama, Co-Author of Cognitive Abilities Test (Form 8)

**Anna Houseman**, Former District Assessment Director and Elementary School Teacher



## Dr. Joni Lakin

- Co-Author of *CogAT* (Form 8)
- Professor of Educational Research at the University of Alabama
- Research interests include:
  - Equitable use of test data and equitable talent identification processes
  - Test validity and fairness
  - Broadening participation in STEM careers and promoting STEM retention





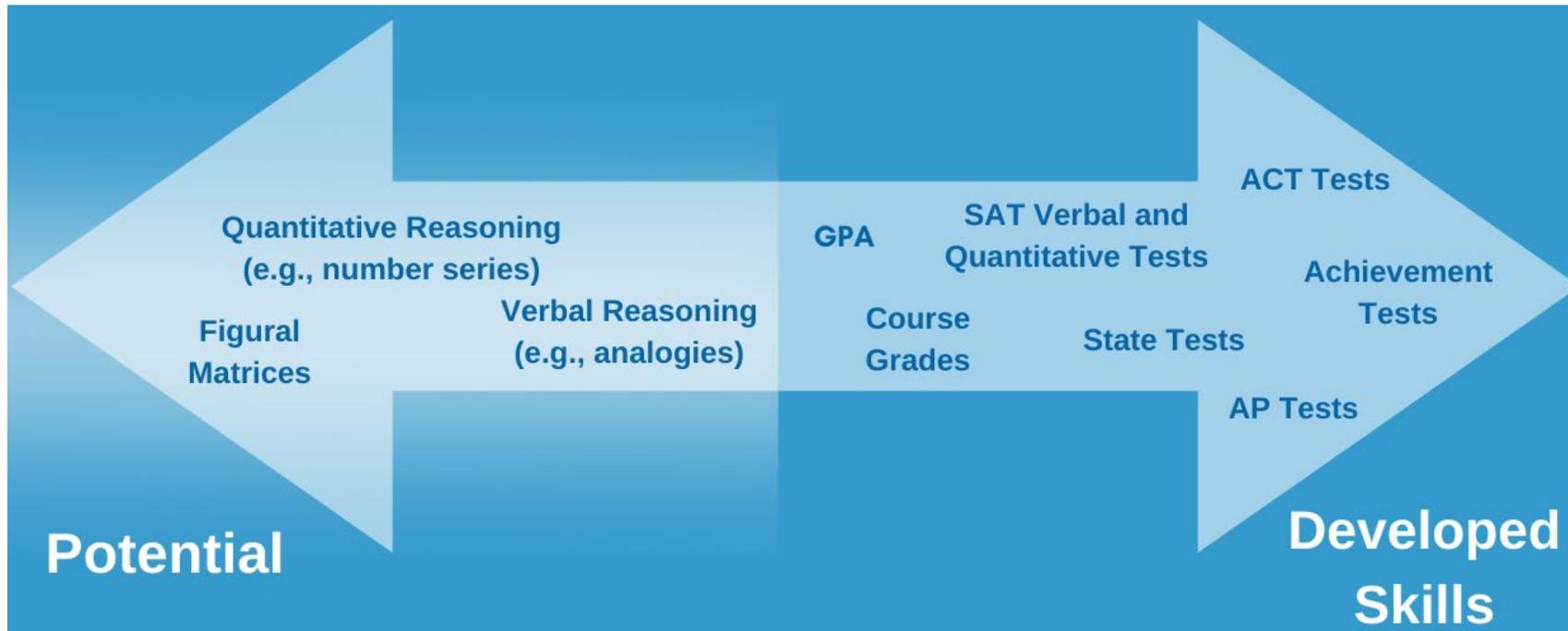
# Ability vs. Achievement

## Ability

- Influenced by *all* learning opportunities
- Requires novel problem solving and reasoning processes

## Achievement

- Influenced more by formal education
- Requires well-practiced skills and crystallized knowledge





Call it Aptitude, call it Ability...



**Ability**, also called *aptitude* or student *potential for learning*, provides insight into students' readiness to **demonstrate creative problem-solving skills** and learn in **different situations and learning environments**.



# Why Measure Ability?

**Achievement**

**Reading fluency/comprehension**

**Knowledge & Skills**

**Executive functions-Planning**

**Motivation**

**Short term/long term memory**

**Sequential Reasoning**

**Fluid reasoning**

**Deductive Reasoning**

**Working memory**

**Attention**

**Inductive Reasoning**



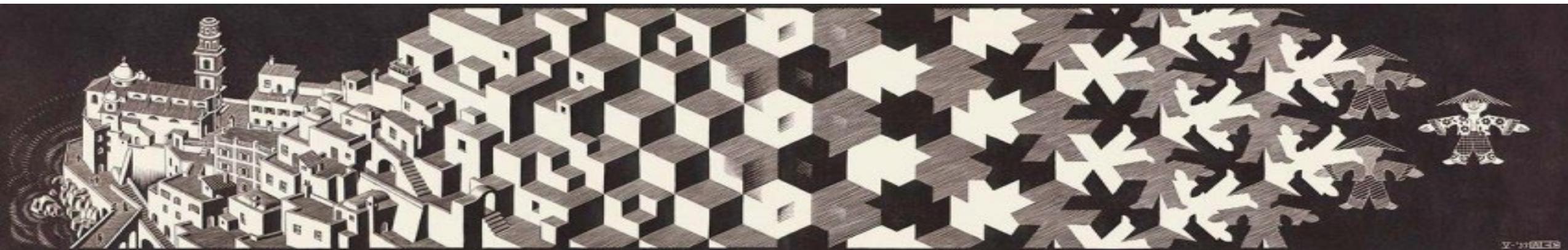


# CogAT Measures Key Reasoning Skills

*CogAT*®

*CogAT* measures a cluster of general and abstract reasoning abilities tied to successful learning and problem solving

- Comprehending problem situations
- Detecting similarities and differences
- Making inferences
- Making deductions
- Classifying and categorizing objects, events, and other stimuli
- Creating and adapting problem-solving strategies
- Using familiar concepts and skills in new contexts



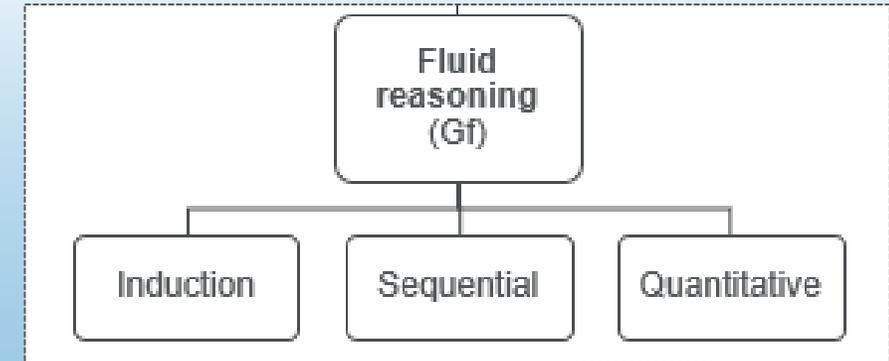


## Value of multidimensional test

Better measure of general reasoning  
(composite)

Can compare and contrast scores to  
gain more information through *Ability  
Profile Scores*

*CogAT*<sup>®</sup>



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## How can we use data from Ability assessments?

Guide efforts to **adapt instruction (goals, methods, and materials)** to the needs and abilities of students.



Provide a measure of cognitive development for **program placement**.



Identify students whose predicted level of achievement are **markedly discrepant** from their observed levels of achievement.

