

## ***The Relationship Between STEM/Gifted and Talented (GT) in Colorado***

### **Overlap Between STEM and GT is Extensive**

- Estimated 85,000 GT students in CO K-12 (approximately 10% of population)
- GT students account for about half of TCAP/Advanced Math and Science:

#### **2013 Grade 10 TCAP Scores for Colorado**

	<b>Science</b>	<b>Math</b>
Total Students Scoring Advance	4824	3725
Number of NonGT Students Scoring Advanced	2353	1563
Percent of NonGT Students Scoring Advanced	5%	3%
Number of GT Students Scoring Advanced	2471	2162
Percent of GT Students Scoring Advanced	36%	31%
GT Students as a Percent of All Advanced	51%	58%

#### ***More Granular Detail 2013 TCAP Math: Percent Scoring Advanced***

	<b>Not GT</b>	<b>GT</b>
Female/Free and Reduced Eligible	0.5%	7.8%
Female/Not Free and Reduced Eligible	3.3%	29.7%
Gap Multiple (NFR/FR)	6.6x	3.8x
Male/Free and Reduced Eligible	0.9%	13.9%
Male/Not Free and Reduced Eligible	5.6%	41.5%
Gap Multiple (NFR/FR)	6.2x	3.0x

### **Background GT in Colorado**

- GT and SPED students are covered under CO Exceptional Children Education Act
- Colorado law requires mandatory GT testing of ALL students in grades two and five
- Our key challenge is to ensure that GT students are adequately challenged, so that they can make the full use of their cognitive capabilities, and in the process develop the grit and resilience that are critical to long term success in life

### **Improved Programming for GT Students Will Also Benefits STEM:**

- Increased use of Accelerated Learning options
- Greater provision of challenging courses (AP, IB, etc.)
- More access to on-line learning opportunities (district provided, university MOOCs)
- Level Playing Field for all Dual/Concurrent Enrollment Options (e.g., CU Succeeds)
- More programming to assess and address affective needs/provide timely supports
- Better integration with business community (mentorships, speakers, etc.)
- Use GT/STEM to pilot accelerated transition from “seat-time” to competency-based K12 education system