## Student Achievement in Jeffco

Data for SPAC/DAC
October 2014 Meeting

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#### **Contents**

- Introduction
- Venn Diagram of Jeffco's At-Risk Population
- Nine Years of CSAP/TCAP Proficiency Data by Grade for Different Students
  - Free and Reduced Eligible, Not ALP, Not IEP students
    - E.g., this category included 1,541 students in tenth grade who took the 2014 math TCAP, or 24% all students
  - Minority, Not FRL, Not ALP, Not IEP students
    - E.g., this category included 833 students in tenth grade who took the 2014 math TCAP, or 13% all students
  - Not Minority, Not FRL, Not ALP, Not IEP students
    - E.g., this category included 2,599 students in tenth grade who took the 2014 math TCAP, or 41% all students
  - ALP students students
    - E.g., this category included 831 students in tenth grade who took the 2014 math TCAP, or 13% all students
  - Students with IEPs were not included in this analysis, because the highest level category (All Students with IEPs) contains a very broad mix of underlying disability categories, each of which contains a relatively small number of students
- Contrasting Views About the Validity of TCAP Results
- The Grade 11 ACT Assessment
- ACT Results

### Introduction

- Over the years, Jeffco Boards of Education have repeatedly affirmed two primary student achievement goals: Every student will meet Colorado state grade level standards, and graduate college and career ready
- Curriculum, instruction, people, and technology decisions all contribute to the achievement of these goals
- Over the past nine years, Colorado has used CSAP/TCAP tests to assess the extent to which students in grades 3 through 10 have met state academic standards in key content areas
- Colorado is also one of 13 states (18 in 2015) that require all 11<sup>th</sup> grade students to take the national ACT test to assess their college and career readiness, and the overall performance of their school systems

## Percent Proficient and Advanced By Grade Free and Reduced Eligible, Not ALP, Not IEP

Percent Pro	ficent and Ad	vanced Fl	RL Eligible, N	lot ALP, Not	IEP				
	P Data from C								
Reading	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
Grade 3	60%	64%	63%	68%	64%	68%	69%	69%	64%
Grade 4	61%	53%	55%	55%	63%	59%	61%	62%	61%
Grade 5	58%	55%	62%	60%	62%	65%	64%	65%	68%
Grade 6	62%	66%	69%	68%	71%	72%	76%	75%	73%
Grade 7	54%	53%	53%	54%	58%	58%	61%	61%	61%
Grade 8	54%	49%	57%	48%	56%	53%	58%	59%	57%
Grade 9	51%	54%	54%	55%	57%	54%	55%	56%	52%
Grade 10	49%	53%	53%	56%	50%	55%	54%	59%	58%
Writing	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
Grade 3	42%	46%	41%	44%	37%	41%	40%	37%	38%
Grade 4	40%	36%	37%	38%	38%	47%	36%	39%	38%
Grade 5	48%	41%	43%	41%	42%	50%	47%	44%	46%
Grade 6	53%	50%	51%	52%	48%	58%	50%	53%	50%
Grade 7	44%	49%	41%	45%	45%	45%	49%	51%	48%
Grade 8	36%	34%	35%	34%	37%	36%	38%	39%	42%
Grade 9	31%	33%	32%	34%	34%	35%	33%	38%	37%
Grade 10	30%	31%	32%	32%	28%	31%	29%	32%	33%
Math	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
Grade 3	60%	57%	56%	62%	60%	61%	61%	60%	61%
Grade 4	58%	58%	53%	57%	61%	63%	63%	64%	61%
Grade 5	52%	47%	51%	48%	54%	57%	52%	53%	51%
Grade 6	47%	51%	51%	55%	52%	58%	57%	54%	53%
Grade 7	29%	35%	28%	36%	33%	40%	39%	43%	42%
Grade 8	30%	29%	33%	36%	36%	37%	36%	36%	38%
Grade 9	23%	21%	22%	20%	27%	23%	21%	24%	24%
Grade 10	15%	14%	18%	15%	17%	21%	18%	19%	18%

## Percent Proficient and Advanced By Grade Minority, Not FRL, Not ALP, Not IEP

Percent Pro	ficent and Ad	vanced M	inority, Not F	RL Eligible,	Not ALP, No	t IEP			
Jeffco TCAF	Data from C	DE School	View/Datalab	)					
Reading	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
Grade 3	76%	79%	82%	83%	77%	84%	85%	81%	83%
Grade 4	70%	72%	75%	76%	78%	75%	81%	82%	80%
Grade 5	74%	72%	79%	76%	82%	81%	80%	83%	85%
Grade 6	80%	77%	84%	86%	86%	88%	90%	88%	86%
Grade 7	68%	67%	67%	73%	78%	79%	80%	80%	80%
Grade 8	66%	64%	71%	68%	73%	78%	76%	77%	79%
Grade 9	66%	63%	65%	69%	67%	73%	74%	75%	74%
Grade 10	63%	68%	66%	69%	64%	68%	72%	78%	73%
Writing	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
Grade 3	58%	62%	62%	61%	55%	62%	63%	56%	59%
Grade 4	54%	54%	61%	60%	59%	63%	59%	66%	61%
Grade 5	62%	57%	65%	63%	69%	70%	67%	67%	68%
Grade 6	68%	65%	67%	73%	66%	77%	68%	70%	68%
Grade 7	59%	65%	62%	67%	64%	67%	72%	71%	68%
Grade 8	49%	51%	51%	54%	58%	56%	61%	62%	63%
Grade 9	48%	46%	45%	51%	48%	57%	55%	59%	58%
Grade 10	45%	46%	45%	47%	44%	47%	50%	50%	51%
Math	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
Grade 3	73%	71%	74%	74%	73%	78%	78%	73%	77%
Grade 4	67%	72%	74%	76%	77%	76%	83%	80%	77%
Grade 5	66%	65%	68%	68%	74%	71%	70%	75%	71%
Grade 6	60%	63%	63%	74%	69%	73%	71%	70%	69%
Grade 7	43%	48%	47%	60%	58%	61%	62%	64%	60%
Grade 8	45%	42%	46%	58%	51%	58%	57%	60%	58%
Grade 9	34%	31%	34%	33%	39%	43%	39%	43%	46%
Grade 10	28%	27%	29%	27%	28%	34%	36%	37%	35%

## Percent Proficient and Advanced By Grade Not Minority, Not FRL, Not ALP, Not IEP

Percent Proficent and Advanced Not MIN, Not FRL Eligible, Not ALP, Not IEP									
Jeffco TCAP Data from CDE School View/Datalab									
Reading	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
Grade 3	86%	88%	88%	89%	87%	90%	90%	89%	90%
Grade 4	84%	83%	85%	84%	86%	85%	87%	87%	88%
Grade 5	87%	85%	88%	86%	87%	89%	89%	90%	90%
Grade 6	87%	90%	90%	91%	92%	92%	94%	93%	92%
Grade 7	82%	82%	82%	83%	85%	87%	86%	86%	88%
Grade 8	82%	79%	84%	79%	84%	83%	87%	85%	86%
Grade 9	82%	82%	83%	84%	83%	83%	82%	84%	81%
Grade 10	80%	83%	80%	85%	80%	81%	81%	84%	83%
Writing	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
Grade 3	72%	74%	70%	75%	69%	73%	68%	68%	67%
Grade 4	70%	67%	73%	70%	70%	75%	67%	69%	69%
Grade 5	80%	73%	77%	75%	75%	77%	75%	75%	73%
Grade 6	79%	78%	78%	80%	79%	82%	74%	78%	77%
Grade 7	74%	77%	75%	77%	75%	76%	78%	78%	78%
Grade 8	64%	67%	66%	66%	69%	69%	69%	70%	71%
Grade 9	68%	65%	65%	68%	64%	68%	66%	72%	69%
Grade 10	62%	66%	62%	64%	62%	60%	61%	62%	62%
Math	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
Grade 3	86%	82%	85%	86%	86%	86%	85%	85%	86%
Grade 4	82%	83%	83%	83%	86%	87%	87%	87%	87%
Grade 5	81%	76%	80%	79%	82%	83%	81%	83%	81%
Grade 6	75%	78%	76%	80%	81%	83%	81%	81%	78%
Grade 7	61%	65%	63%	71%	63%	74%	73%	73%	76%
Grade 8	61%	62%	63%	69%	66%	68%	70%	70%	72%
Grade 9	54%	49%	54%	51%	57%	54%	49%	56%	58%
Grade 10	42%	42%	43%	44%	42%	47%	47%	49%	49%

# Percent of All Students With Advanced Learning Plans (ALPs) Scoring Advanced

	ALP Students								
Jeffco TCAF	Data from C	CDE School	/iew/Datalab						
Reading	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
Grade 3	31%	39%	34%	39%	42%	37%	33%	34%	32%
Grade 4	30%	39%	28%	42%	25%	34%	26%	24%	26%
Grade 5	41%	41%	42%	45%	51%	43%	42%	41%	40%
Grade 6	48%	53%	54%	58%	64%	65%	55%	55%	49%
Grade 7	39%	41%	41%	40%	41%	44%	41%	42%	44%
Grade 8	41%	39%	47%	33%	38%	44%	37%	40%	40%
Grade 9	23%	21%	33%	19%	23%	19%	23%	19%	17%
Grade 10	48%	42%	47%	43%	41%	36%	29%	40%	33%
Writing	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
Grade 3	50%	47%	50%	44%	46%	37%	31%	34%	27%
Grade 4	38%	40%	44%	41%	47%	51%	34%	35%	34%
Grade 5	52%	41%	52%	45%	44%	47%	46%	38%	34%
Grade 6	50%	48%	46%	44%	50%	55%	44%	45%	35%
Grade 7	48%	57%	50%	54%	48%	46%	53%	52%	54%
Grade 8	36%	43%	43%	34%	42%	42%	39%	39%	35%
Grade 9	33%	35%	37%	34%	34%	33%	31%	31%	33%
Grade 10	36%	35%	40%	37%	36%	21%	22%	28%	30%
Math	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
Grade 3	85%	72%	83%	77%	91%	83%	83%	79%	78%
Grade 4	76%	76%	73%	80%	82%	82%	82%	80%	81%
Grade 5	79%	82%	83%	79%	85%	86%	84%	80%	82%
Grade 6	71%	80%	78%	83%	81%	88%	85%	87%	80%
Grade 7	73%	71%	73%	82%	76%	80%	86%	87%	84%
Grade 8	74%	69%	74%	74%	79%	75%	79%	84%	80%
Grade 9	62%	56%	63%	57%	63%	61%	58%	67%	68%
Grade 10	31%	28%	31%	31%	29%	33%	37%	35%	36%

## Contrasting Views About the Validity of TCAP Results

- One frequently hears two arguments against the validity of TCAP results:
  - "TCAP doesn't assess what we teach"
    - The obvious counter to this is that, since TCAP assesses students against Colorado State Grade Level Standards, why are we teaching something different? Are most of our students using curricula that are ahead of and/ or behind these standards? Does this vary by subject?
  - "Students don't take TCAP seriously, because it is a low stakes test"
    - How does this claim relate to the obvious differences in proficiency levels across subjects and grades? Do students take reading more seriously than writing, and writing more seriously than math?
    - Also, the TCAP Technical Reports do not find evidence that suggests the tests are not valid or reliable, or that a significant portion of students are simply answering randomly

### Contrasting Views About TCAP Results (cont'd)

- The UIPs that Jeffco has submitted to CDE contain descriptions of the "major root causes" of Jeffco's achievement shortfalls, and do not claim that a lack of TCAP validity is one of them. These root causes have included the following:
  - "Educators have received inconsistent training on effective literacy instruction and the use of research-based resources"
  - "The district lacks systemic practices in writing instruction and effective feedback in every classroom"
  - "Math instruction tends not to be differentiated, lacking a variety of structures to meet students' needs"
  - "Teaching and learning have not consistently demanded high expectations in every classroom due to superficial coverage of a large number of standards, lack of understanding of grade level mastery, lack of relevance for students, and lack of systemic progress monitoring"
  - "Systemic implementation of intentional lesson design to engage students' conceptual understanding of their learning and increase student cognitive load is not evident in all classrooms"

All of these root causes beg for deeper analysis of why they exist.

### The Grade 11 ACT Is A High Stakes Test

- ACT scores are an important input in the college admissions process
- Results on the ACT are highly correlated with the military's ASVAB entrance test, and with the pre-employment screening tests used by an increasing number of companies
  - For the correlation with ASVAB, see, "ACT and General Cognitive Ability"
     by Koenig, Frey, and Detterman
  - For the correlation with pre-employment screening tests, see, "Ready for College and Ready for Work: Same or Different?" by the ACT organization
- While the ACT doesn't measure all the factors that drive success in college and work (e.g., persistence, resiliency, conscientiousness, etc.), it does assess critical reading, math, and science capabilities

### Jeffco's 2014 Grade 11 ACT Results

- Unfortunately, ACT results cannot be broken down with the same level of specificity as TCAP. However, we can break out students by eligibility for free and reduced lunch, and by high school
- Here are the 2014 ACT results for all of Jeffco, showing the percentage of students scoring at or above the minimum "College and Career Ready" standard:

	Pct of C&C Ready Students					
	Reading	Math	Science			
FRL Students	26%	23%	23%			
Not FRL Students	52%	55%	52%			
All Jeffco	46%	47%	45%			

• And here are the results for non-FRL students from Jeffco's six most affluent articulation areas (Chatfield, Columbine, Conifer, Dakota Ridge, Evergreen, and Ralston Valley):

Pct of C&C Ready Students					
Reading	Reading Math				
58%	64%	59%			