



# **K-8 Accountability Models: Impact Data**

Dr. Jennifer Fletcher, ADE

# Introduction to the Models



## Overview

- ADE ran numerous model variations due to various technical requirements of each metric
- Presenting three models that met the criteria of being fair to all schools:
  - ELA, Math, and Science are all combined in one calculation in order to determine school level percent proficient.
  - Utilized a menu of best of two options out of four, for the acceleration/readiness metrics.

## Key Business Rules

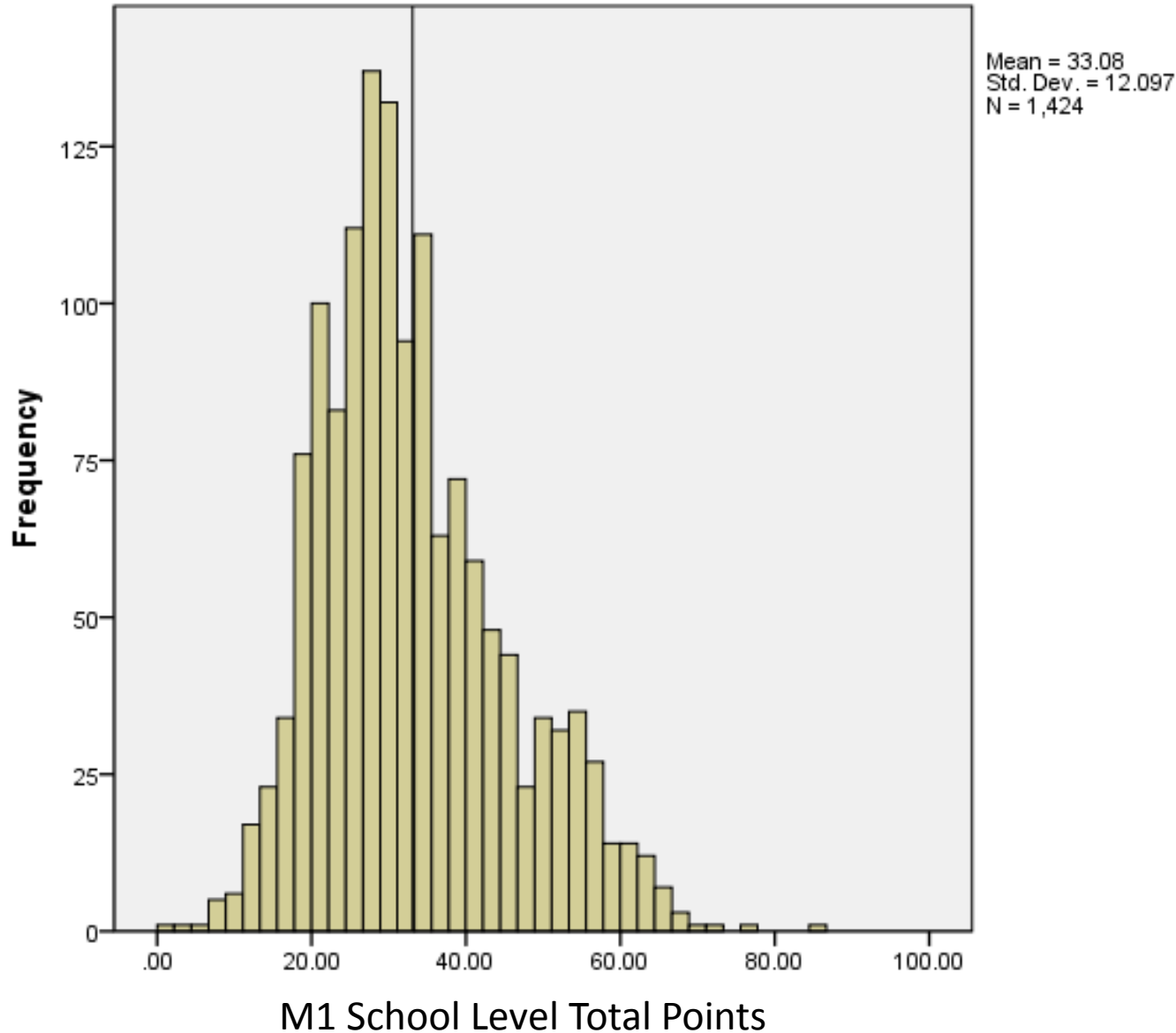
- Only included schools who served grades 3-8.
- Used FY16 data unless the calculation (i.e., growth, B25, T25) required two years in which case we also included FY15 data.
- 8<sup>th</sup> grade students who took a HS EOC, that test was utilized for calculations.
- All tests needed to have a valid test score in order to be counted.
- All proficiency calculations utilized the adjusted 95% denominator per ESSA if the school tested less than 95% of students.
- If a school did not meet the n count of 20 for ELLs, the school was rated out of 90 points rather than 100.
- Excluded schools with less than 100 test records (i.e., small schools) from the analysis.

# Model 1: Unweighted



Category	Component	Weight	Points/Percent
Proficiency	ELA, Math, and Science Proficiency	40%	40%
Growth	ELA and Math Growth	30%	40%
	Bottom 25% Students' Growth	10%	
ELL	ELL Proficiency on AZELLA	5%	10%
	ELL Growth on AZELLA	5%	
Additional Indicators	Best 2 of: Top 25% Students' AzMERIT Performance (ELA and Math), Decrease in % of grade 3 students below MOWR threshold, Increase in grade 6-8 students taking AzMERIT HS EOC	5%	10%
		5%	

# Model 1: School Level Distribution of Total Points

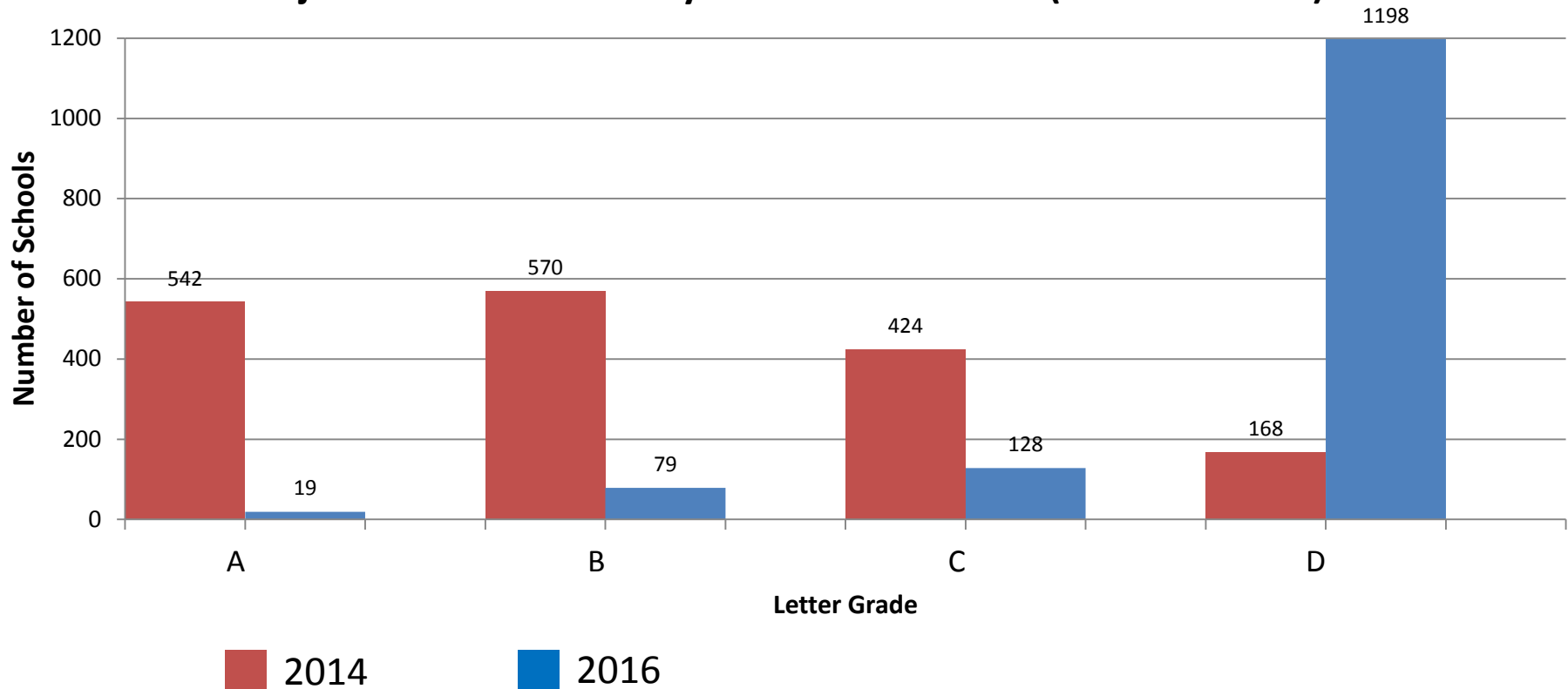


# Model 1: School Level Distribution of Letter Grades

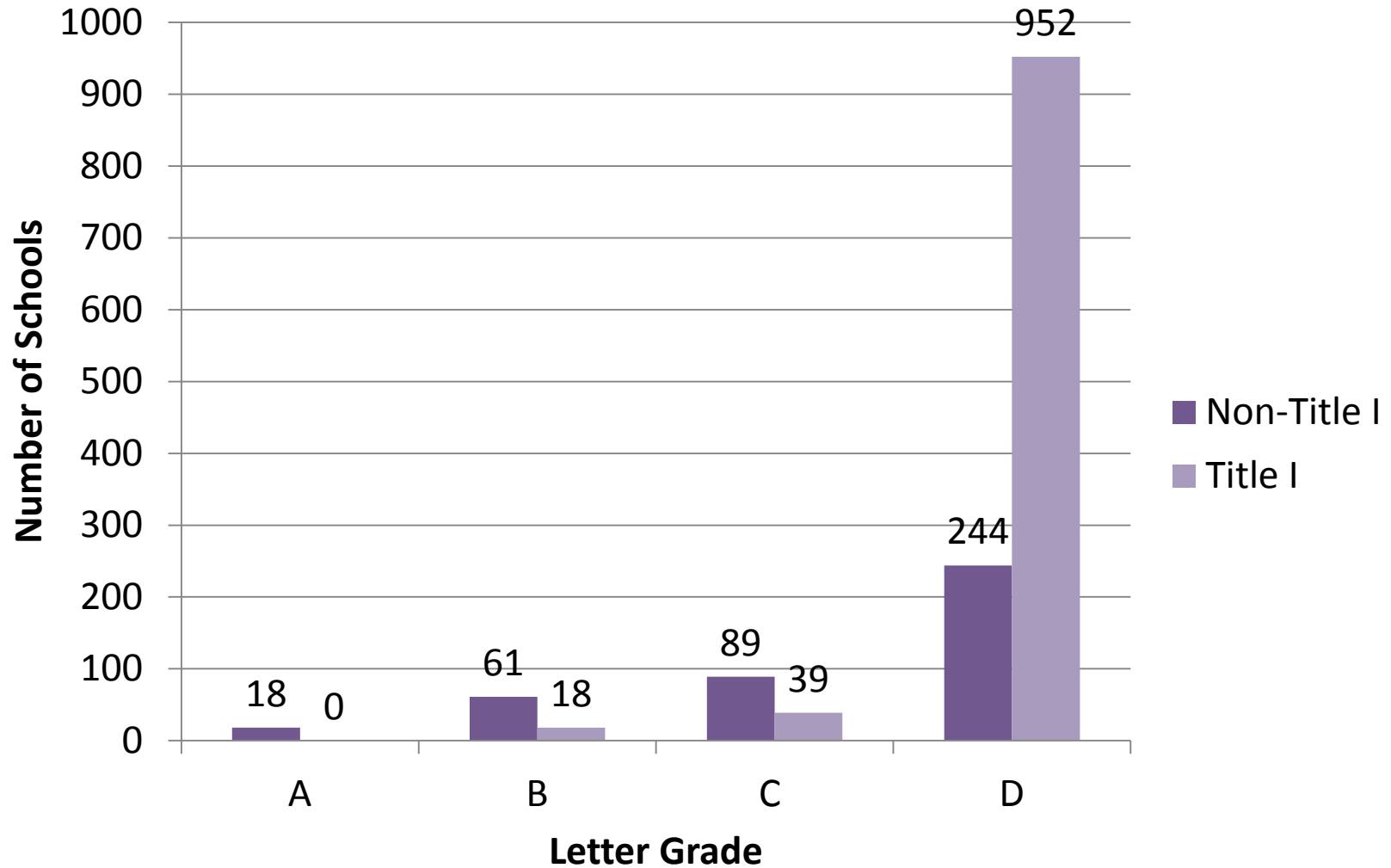


Old accountability system where 70% or higher total points = A, 60-69% = B, 50-59% = C, below 50% = D

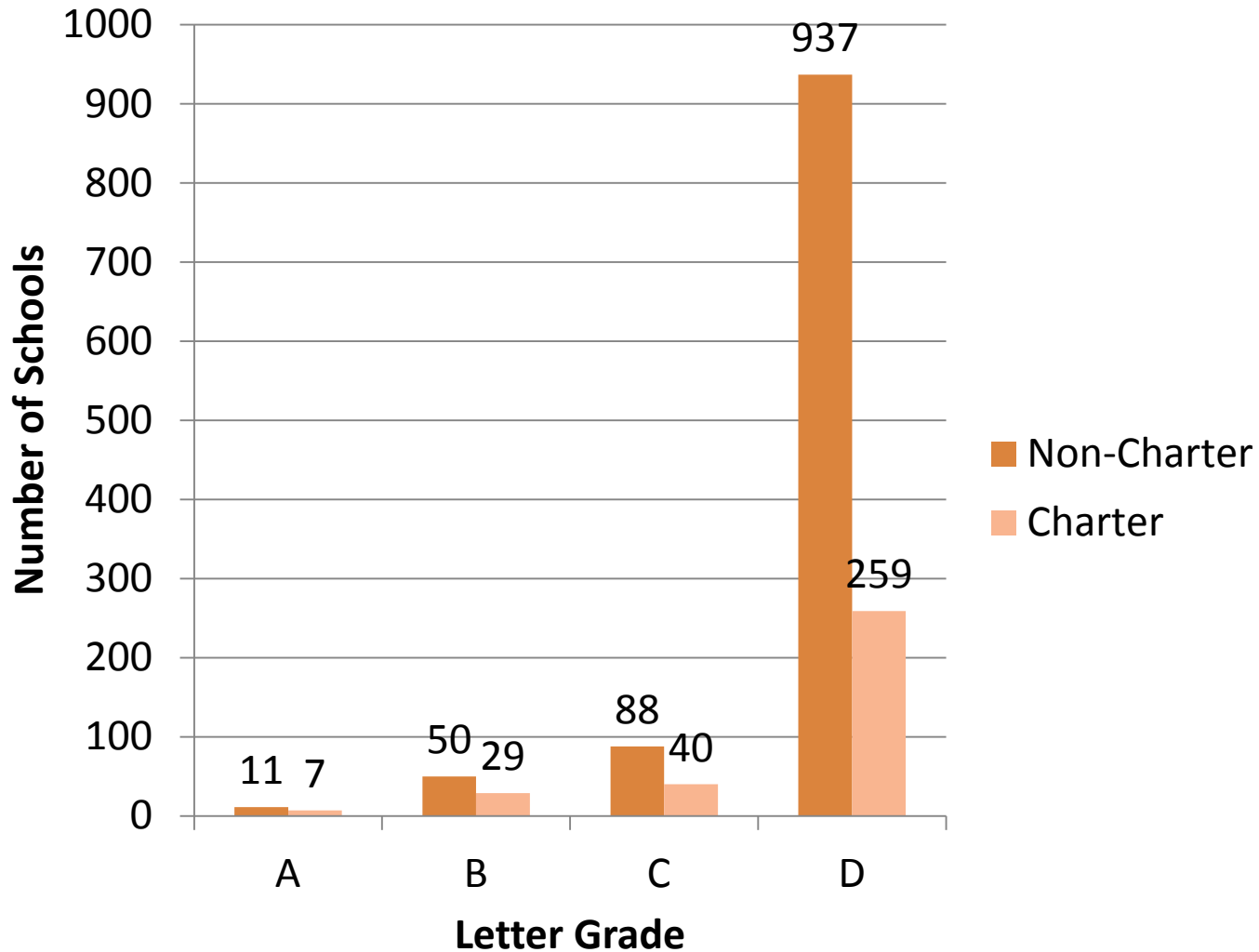
**Projected Letter Grades by Number of Schools (FY14 and FY16)**



# Model 1: School Level Distribution of Letter Grades by Title I and Non-Title I



# Model 1: School Level Distribution of Letter Grades by Charter and Non-Charter School

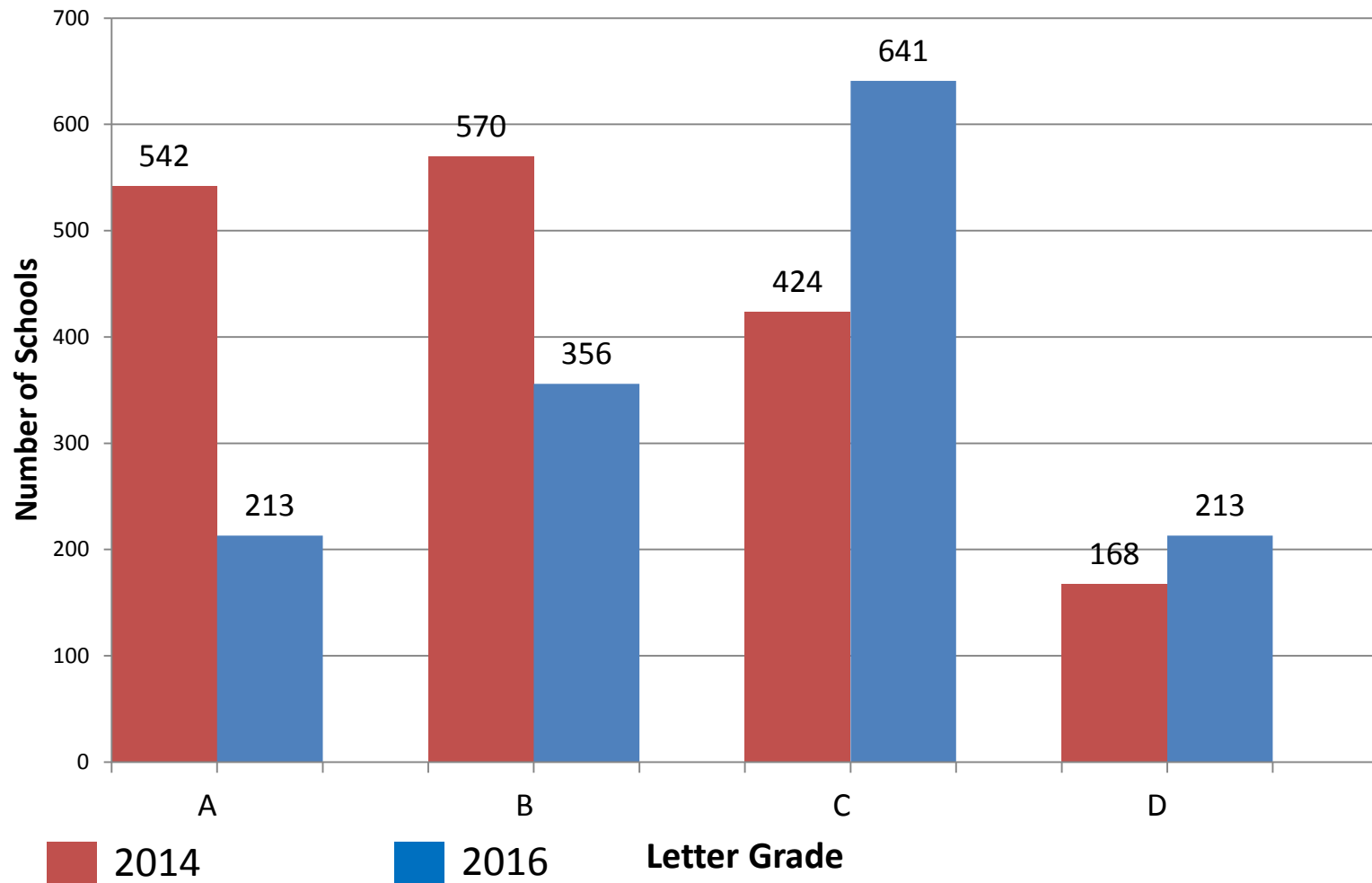


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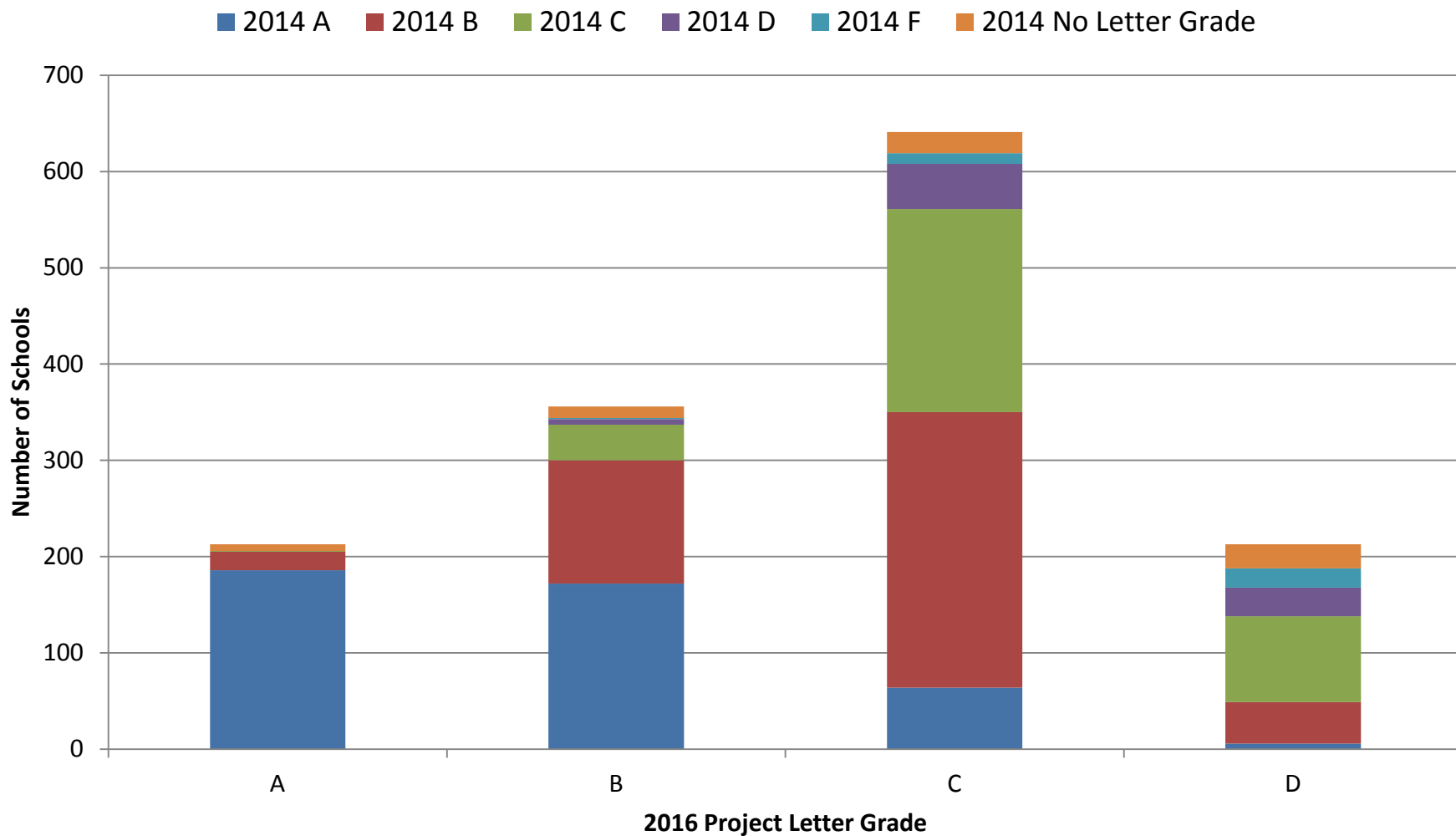
New system where 15% of schools = A, 25% = B, 45% = C, 15% = D

**Projected Letter Grades (FY 14 and FY 16) Number of Schools**

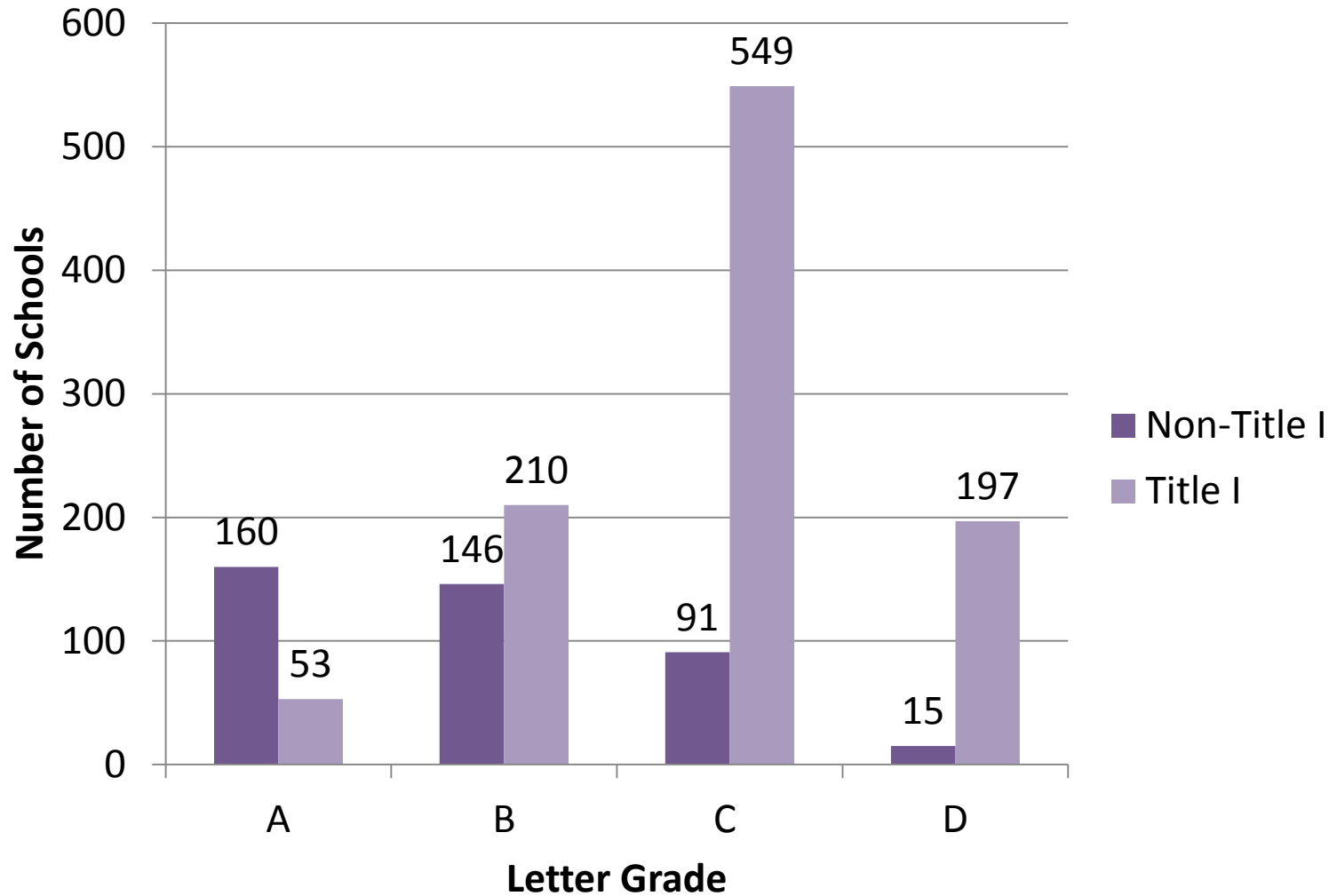




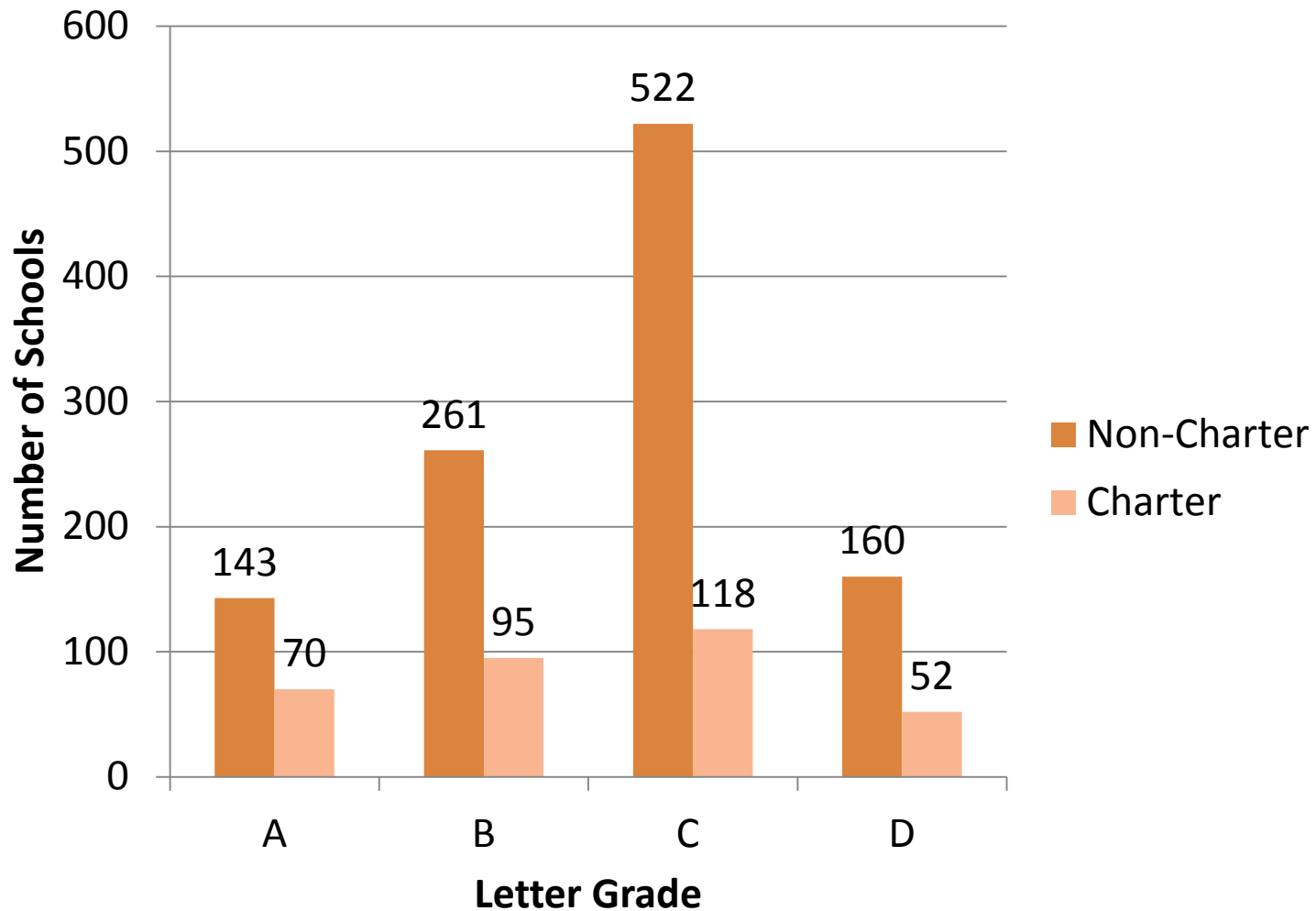
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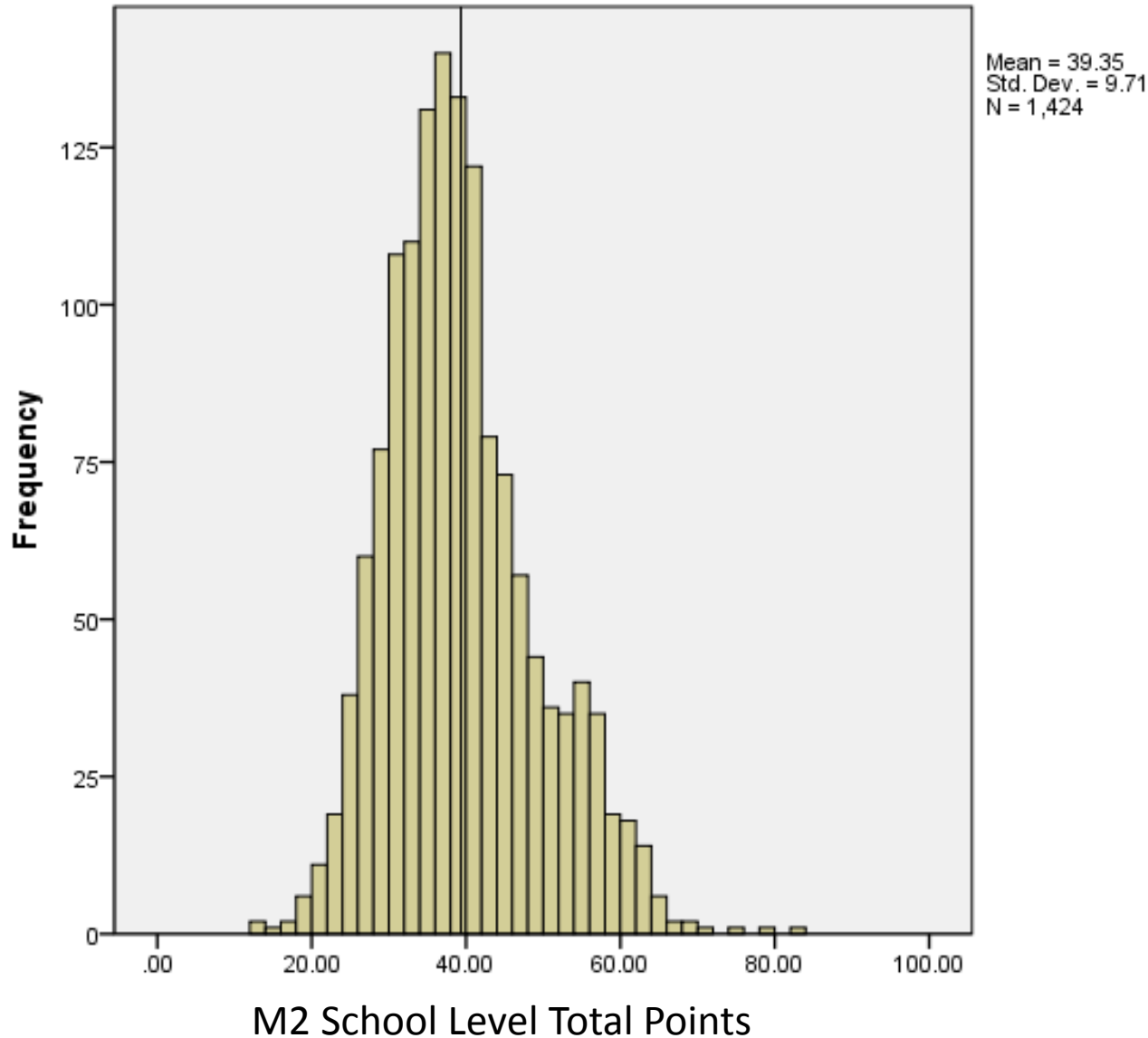


# Model 2: Weighted



Category	Component	Weight	Points/Percent
Proficiency	<u>Weighted</u> ELA, Math, and Science Proficiency	40%	40%
Growth	<u>Weighted</u> ELA and Math Growth	30%	40%
	<u>Weighted</u> Bottom 25% Students' Growth	10%	
ELL	ELL Proficiency on AZELLA	5%	10%
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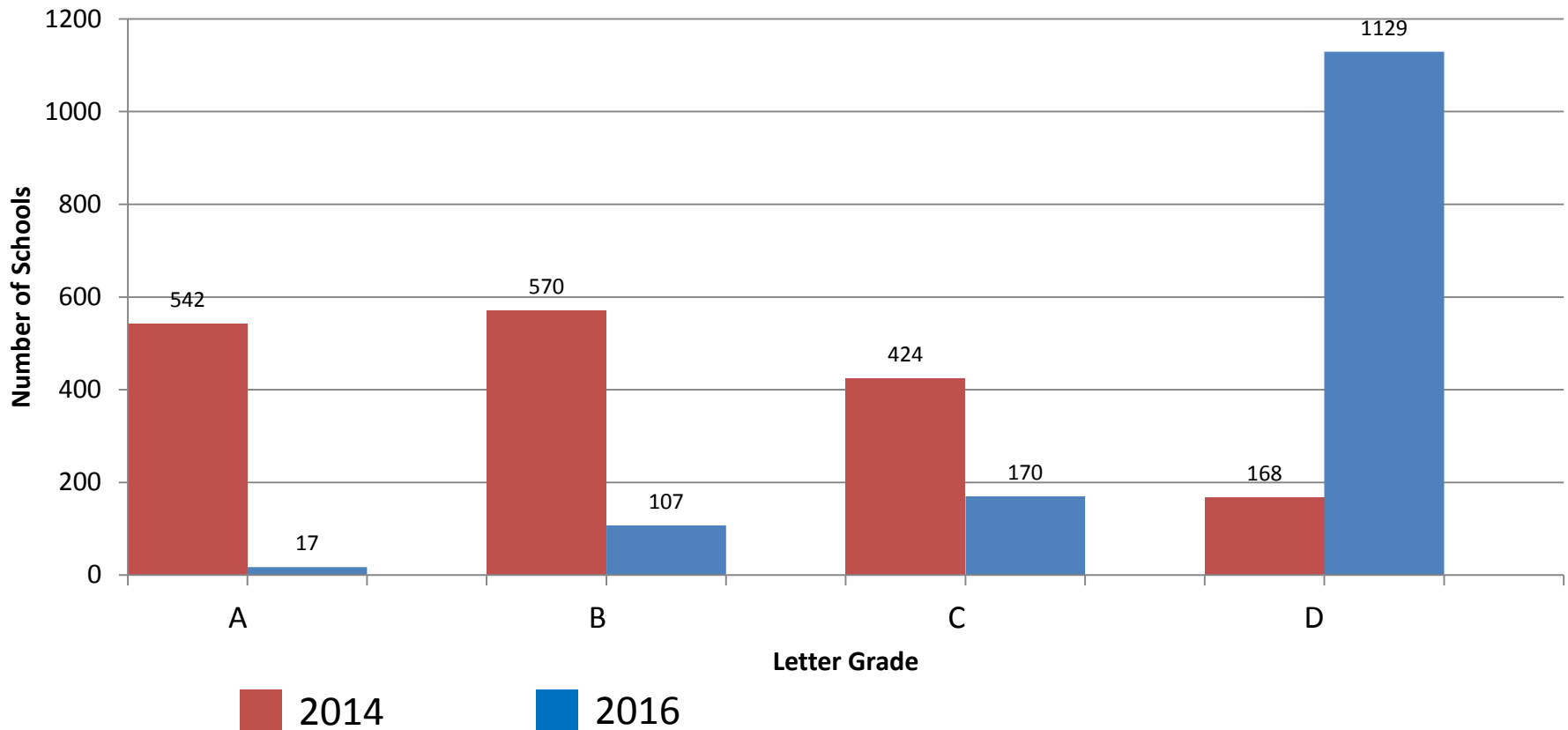


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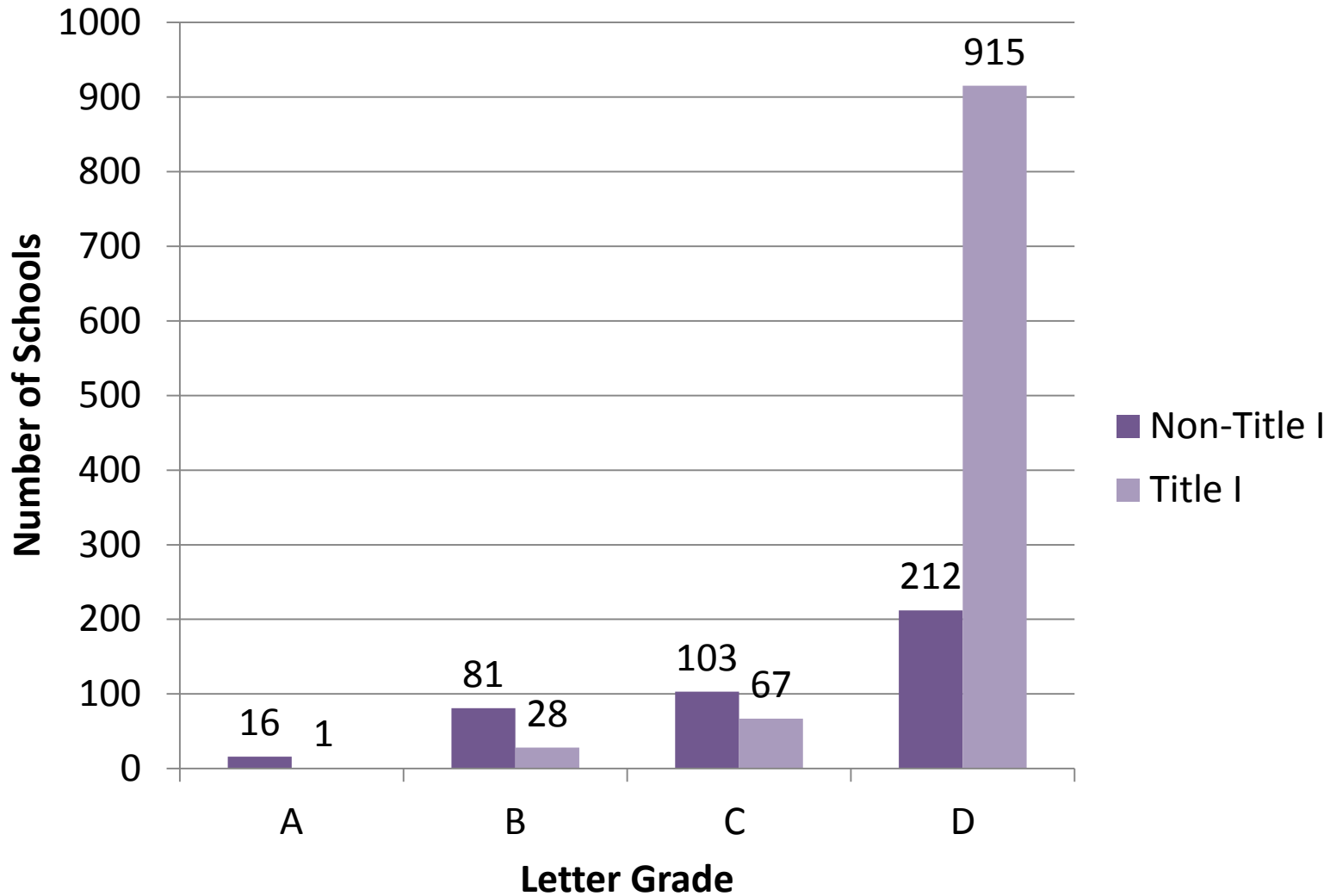


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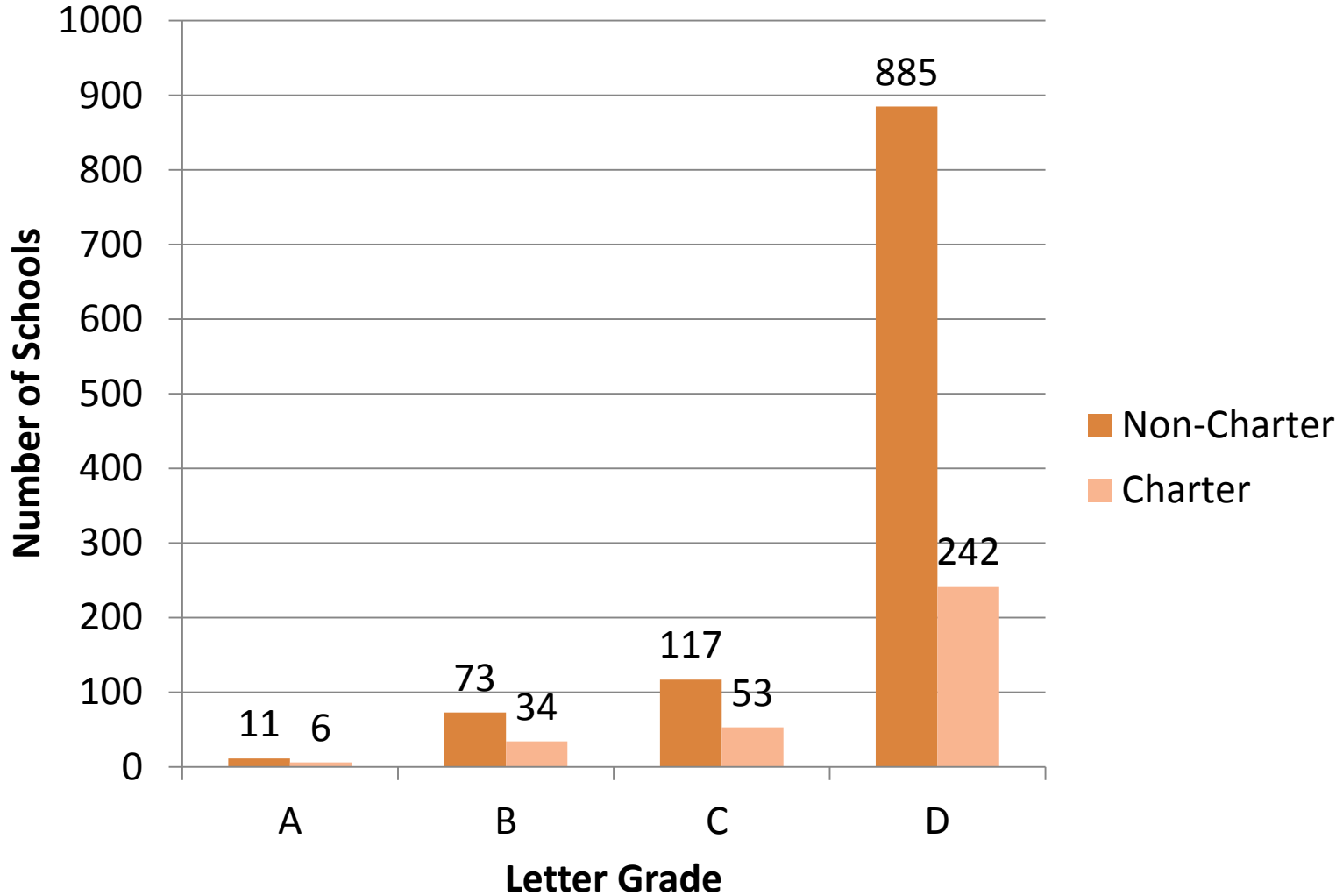
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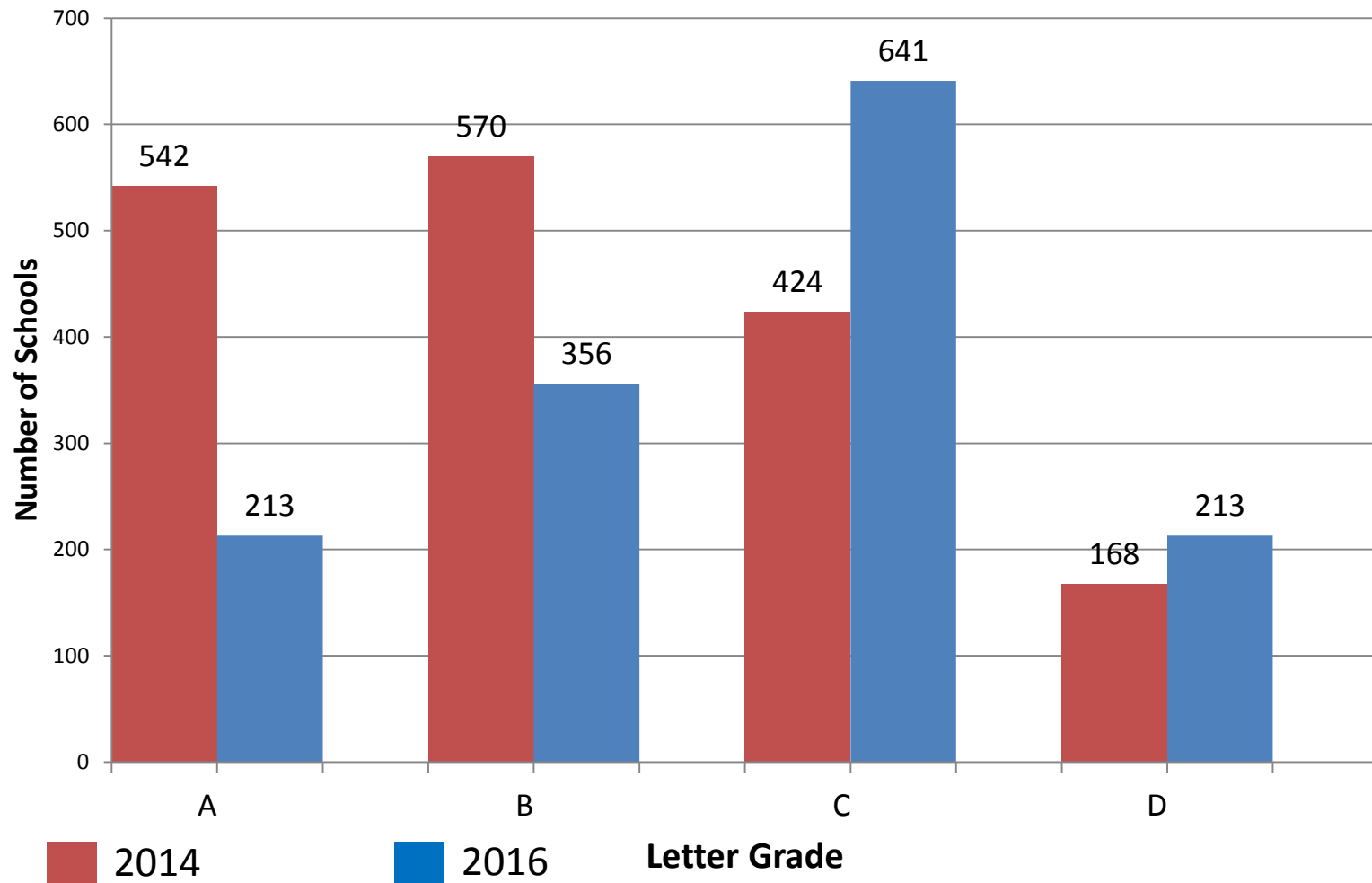


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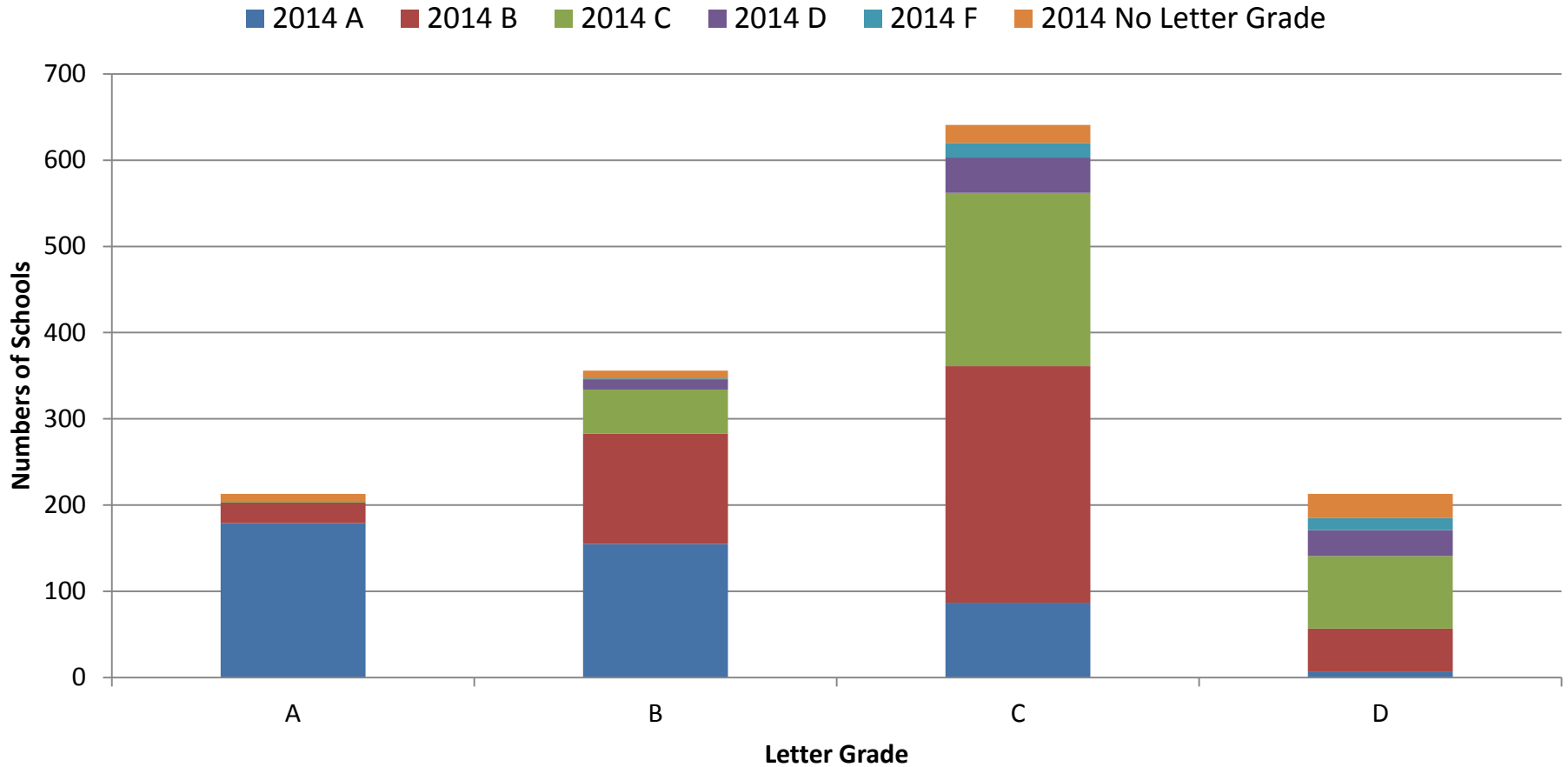


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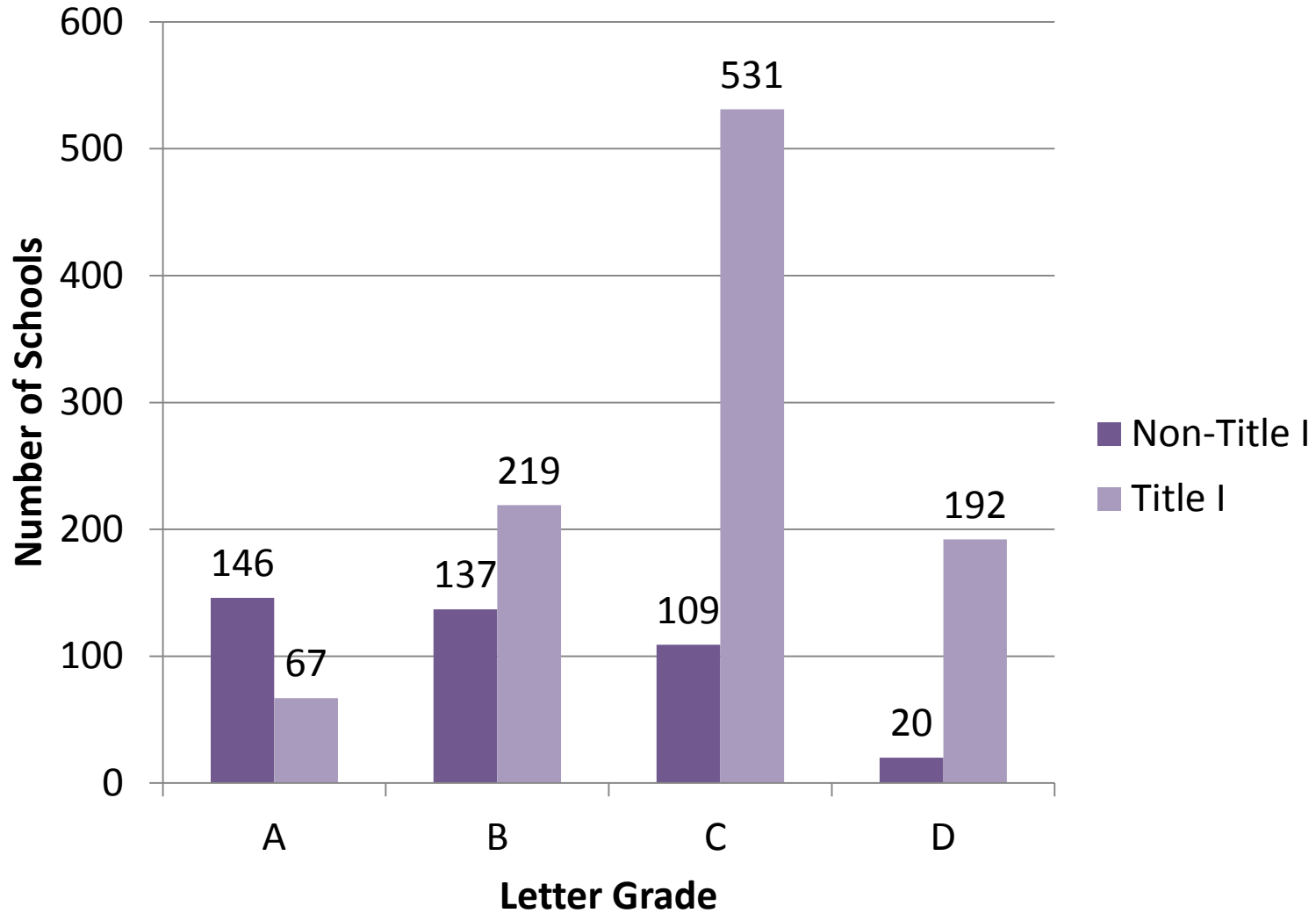
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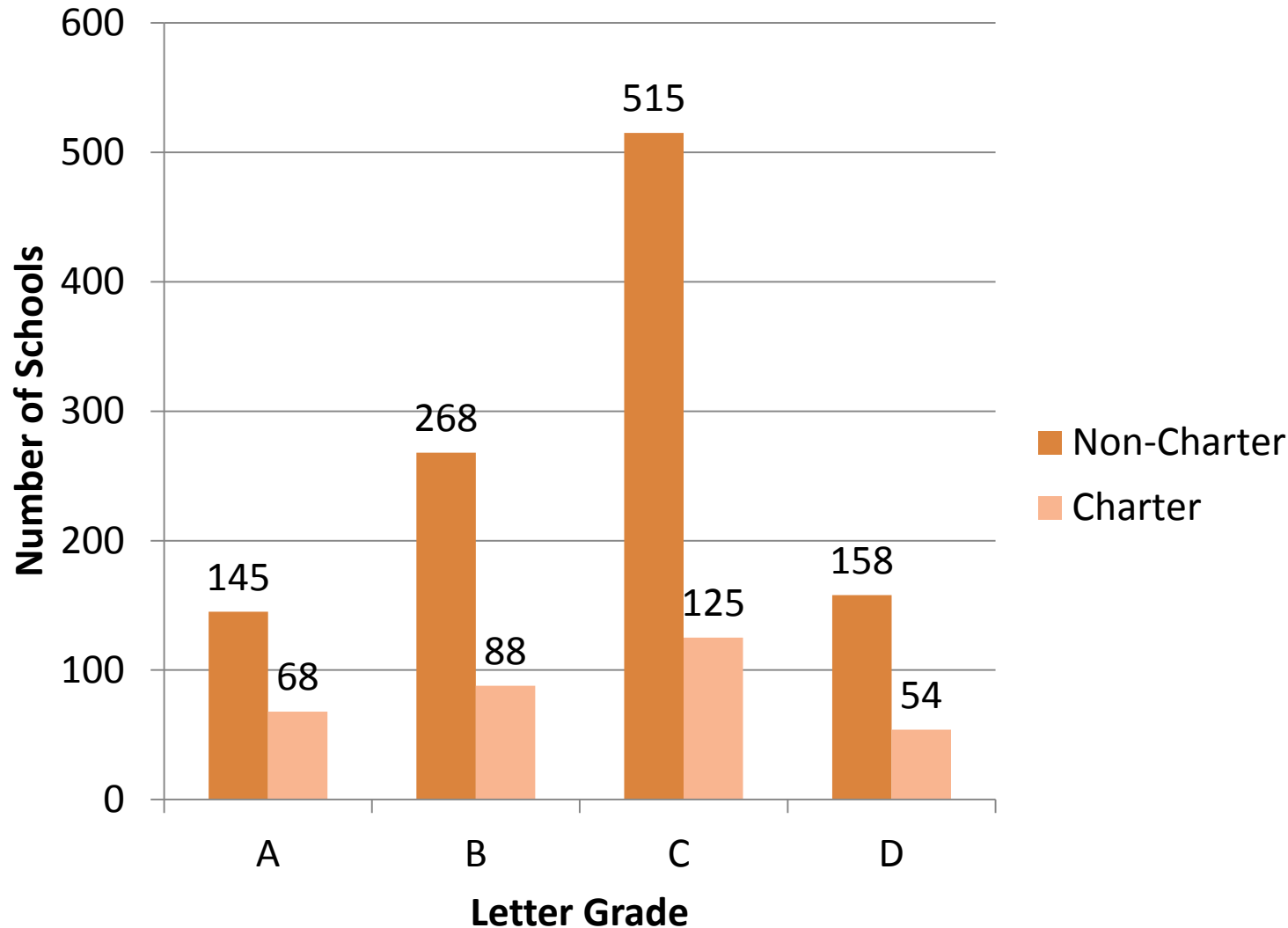
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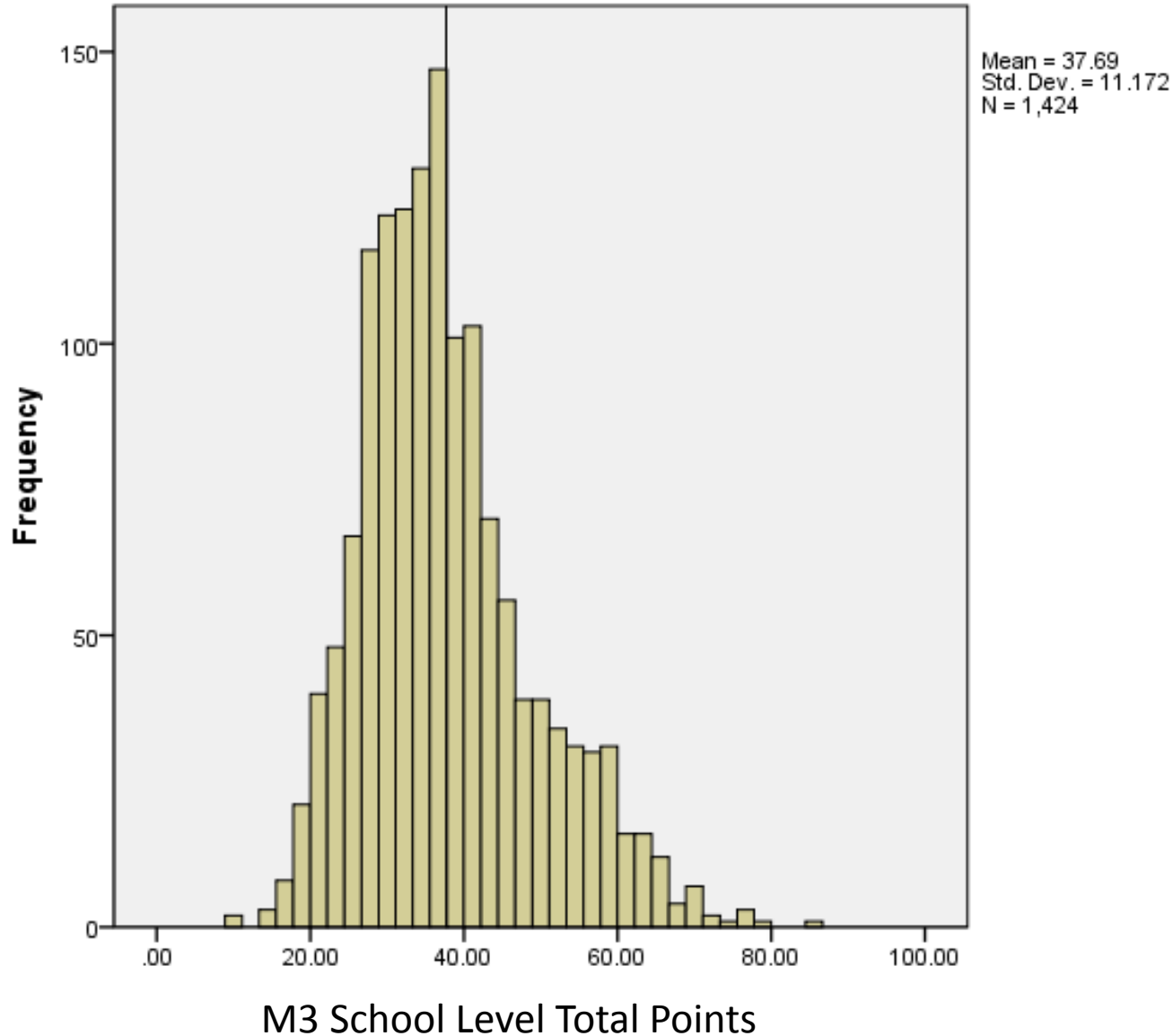


# Model 3: Disaggregated Weighted



Category	Component	Weight	Points/Percent
Proficiency	<u>Weighted</u> ELA, Math, and Science Proficiency	30%	40%
	Disaggregated ELA and Math Growth (Proficient to Highly Proficient)	10%	
Growth	Disaggregated ELA and Math <u>Weighted</u> Growth (Less than Proficient to Highly Proficient)	30%	40%
	Bottom 25% Students' Growth	10%	
ELL	ELL Proficiency on AZELLA	5%	10%
	ELL <u>Weighted</u> Growth on AZELLA	5%	
Additional Indicators	Best 2 of: Top 25% Students' AzMERIT Performance (ELA and Math), Decrease in % of grade 3 students below MOWR threshold, Increase in grade 6-8 students taking AzMERIT HS EOC	5%	10%
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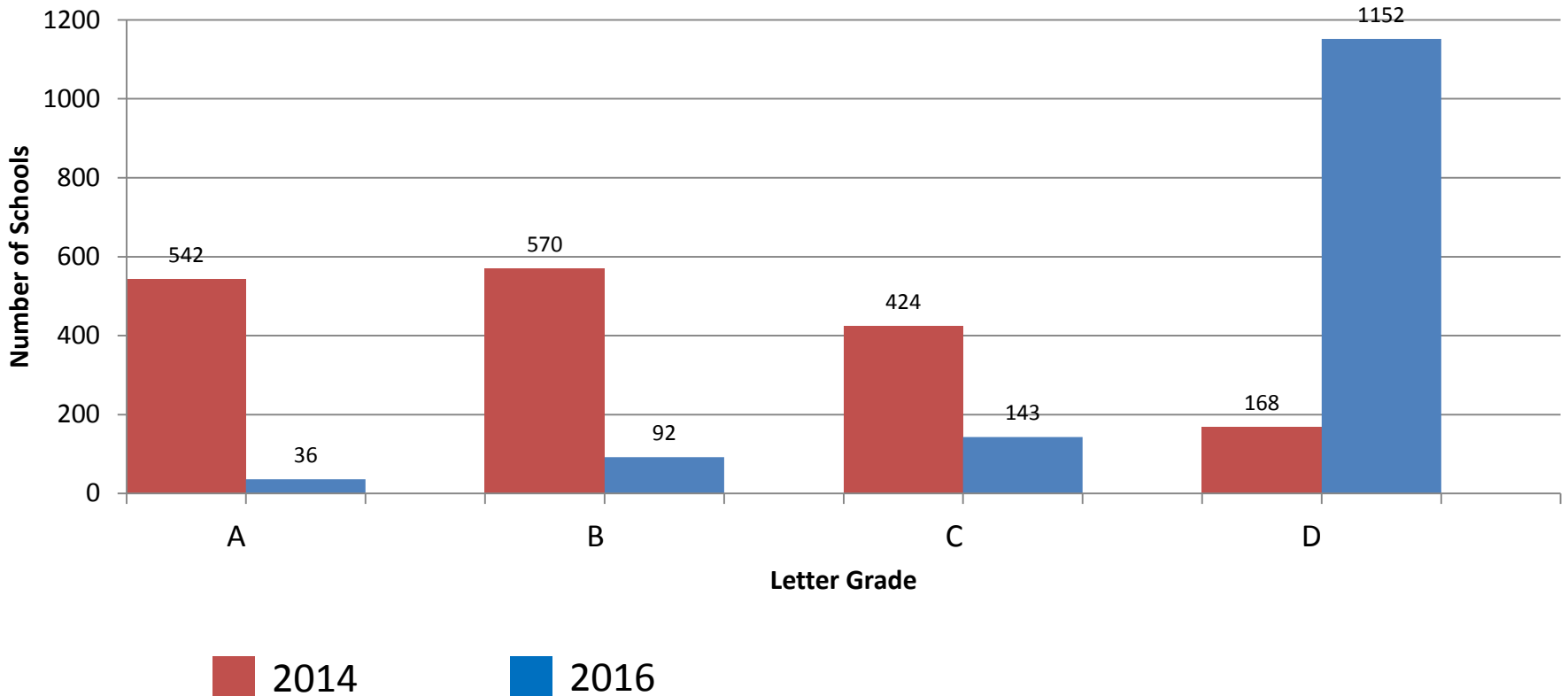


# Model 3: School Level Distribution of Letter Grades

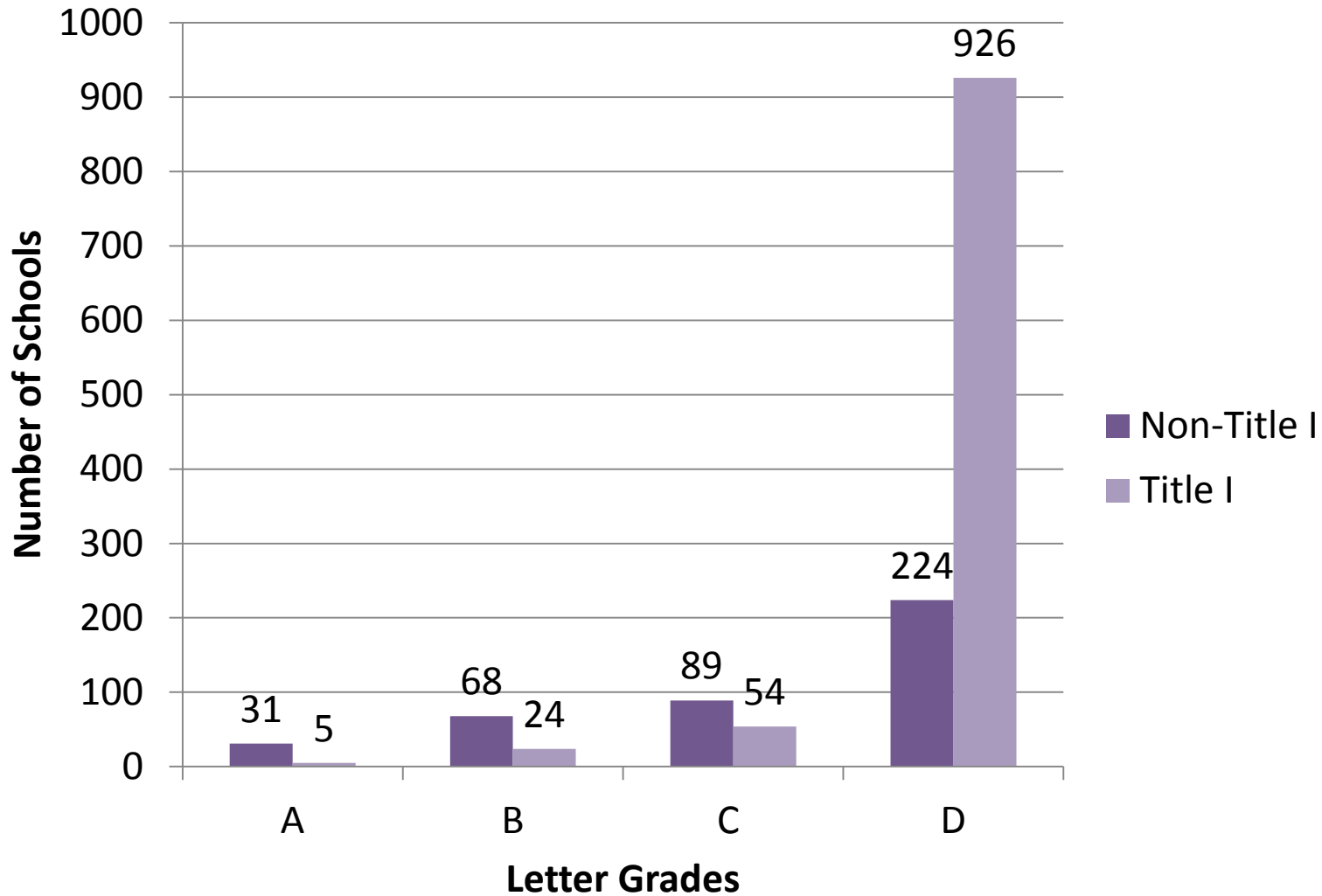


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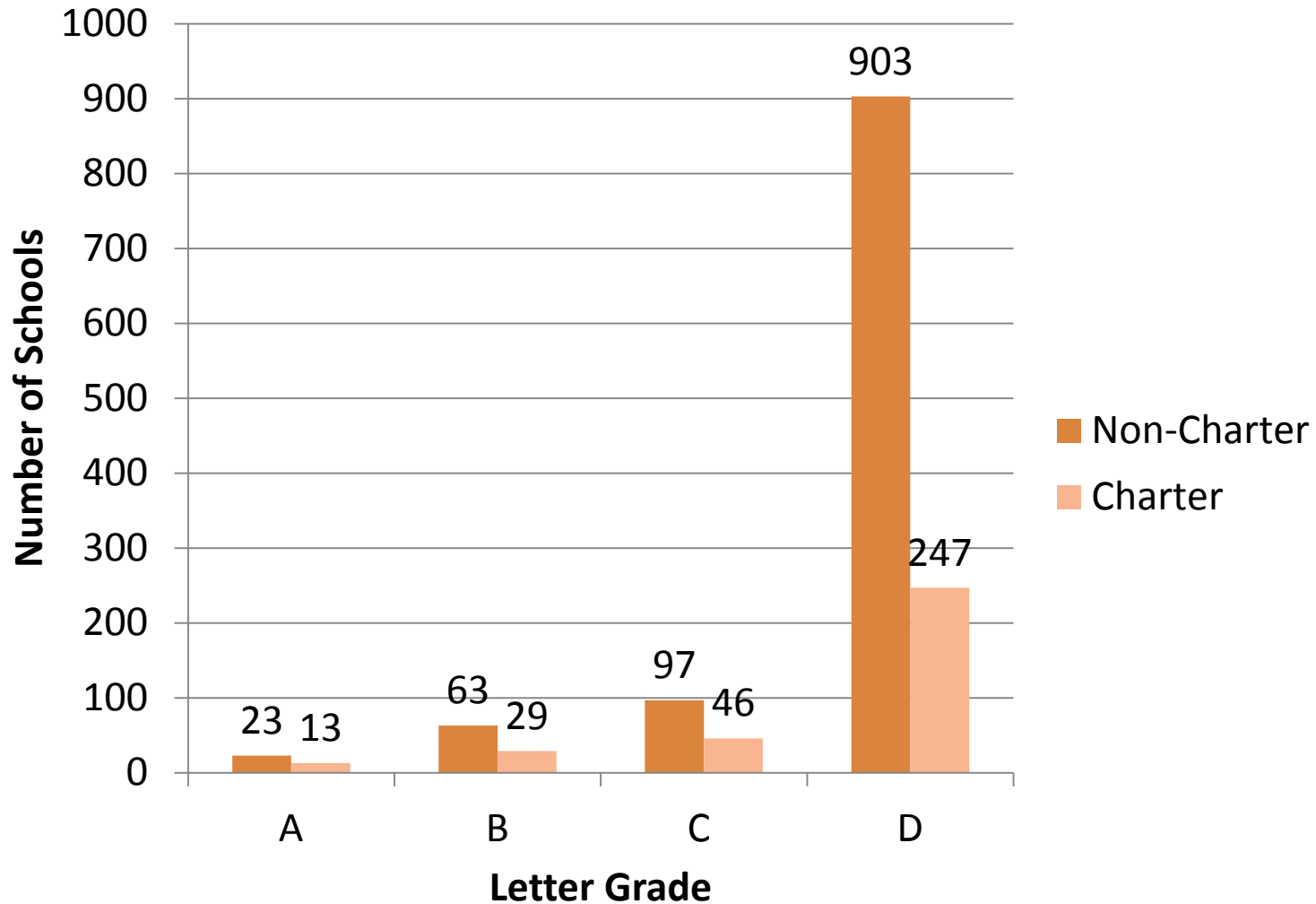


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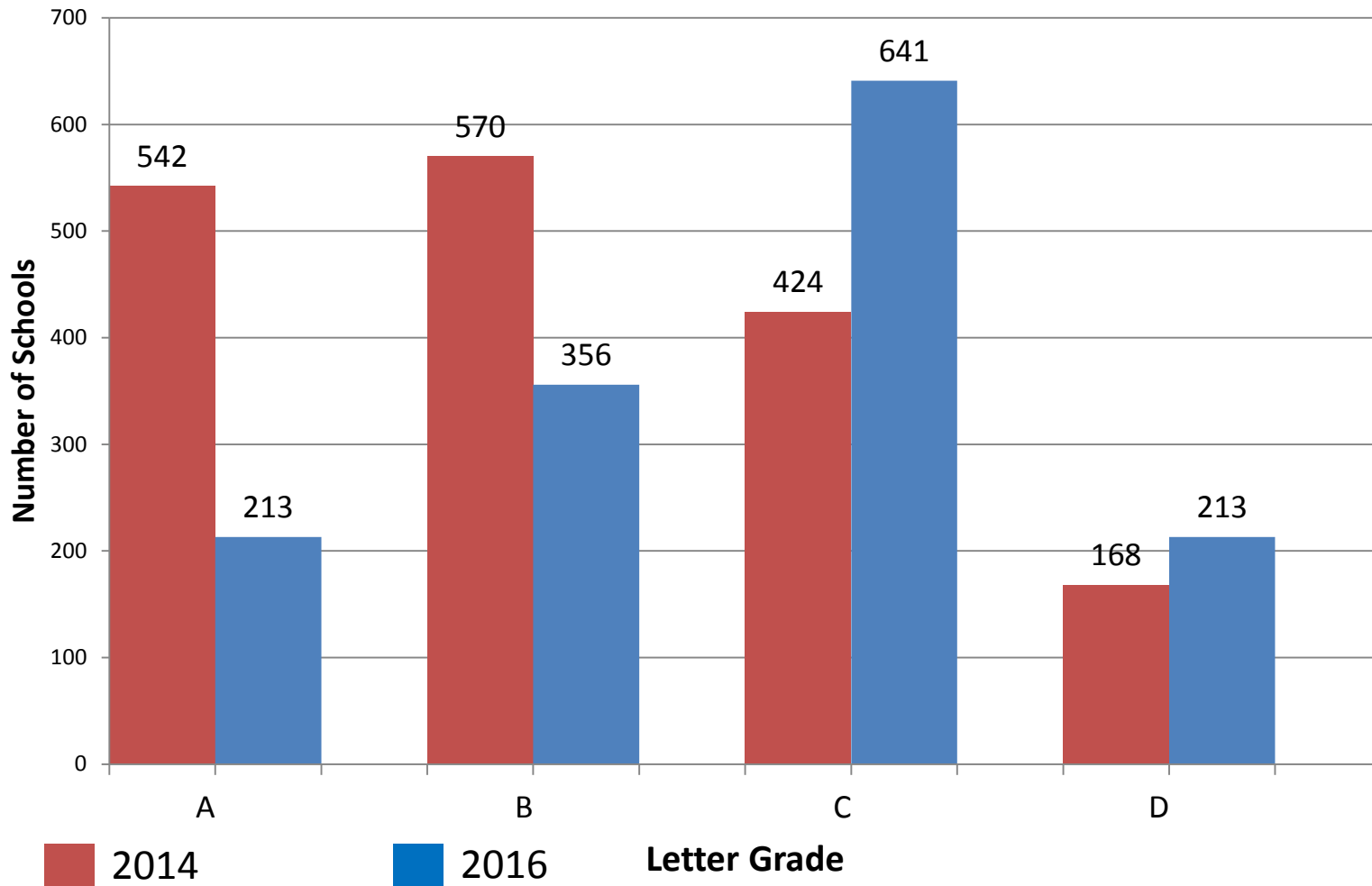


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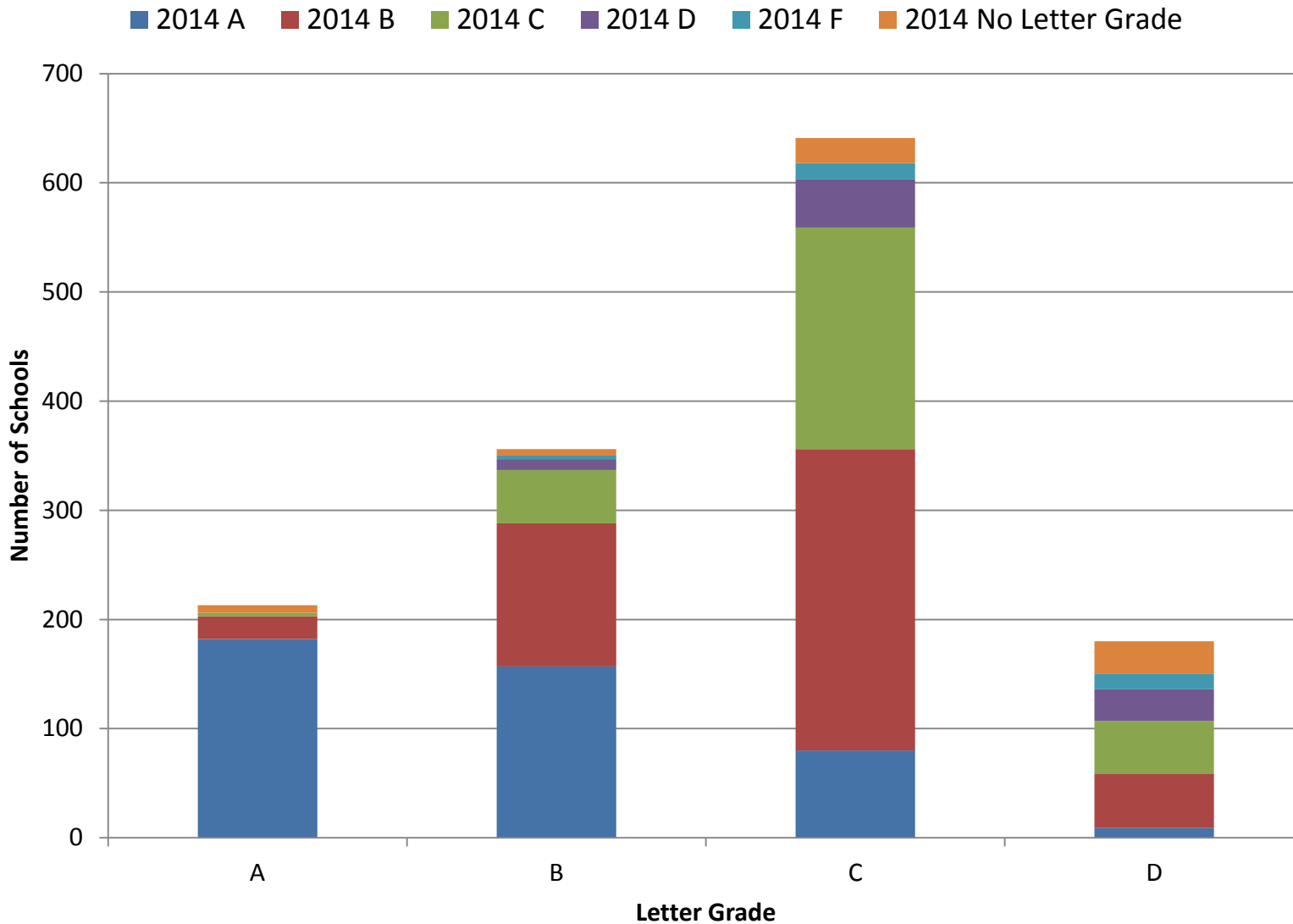


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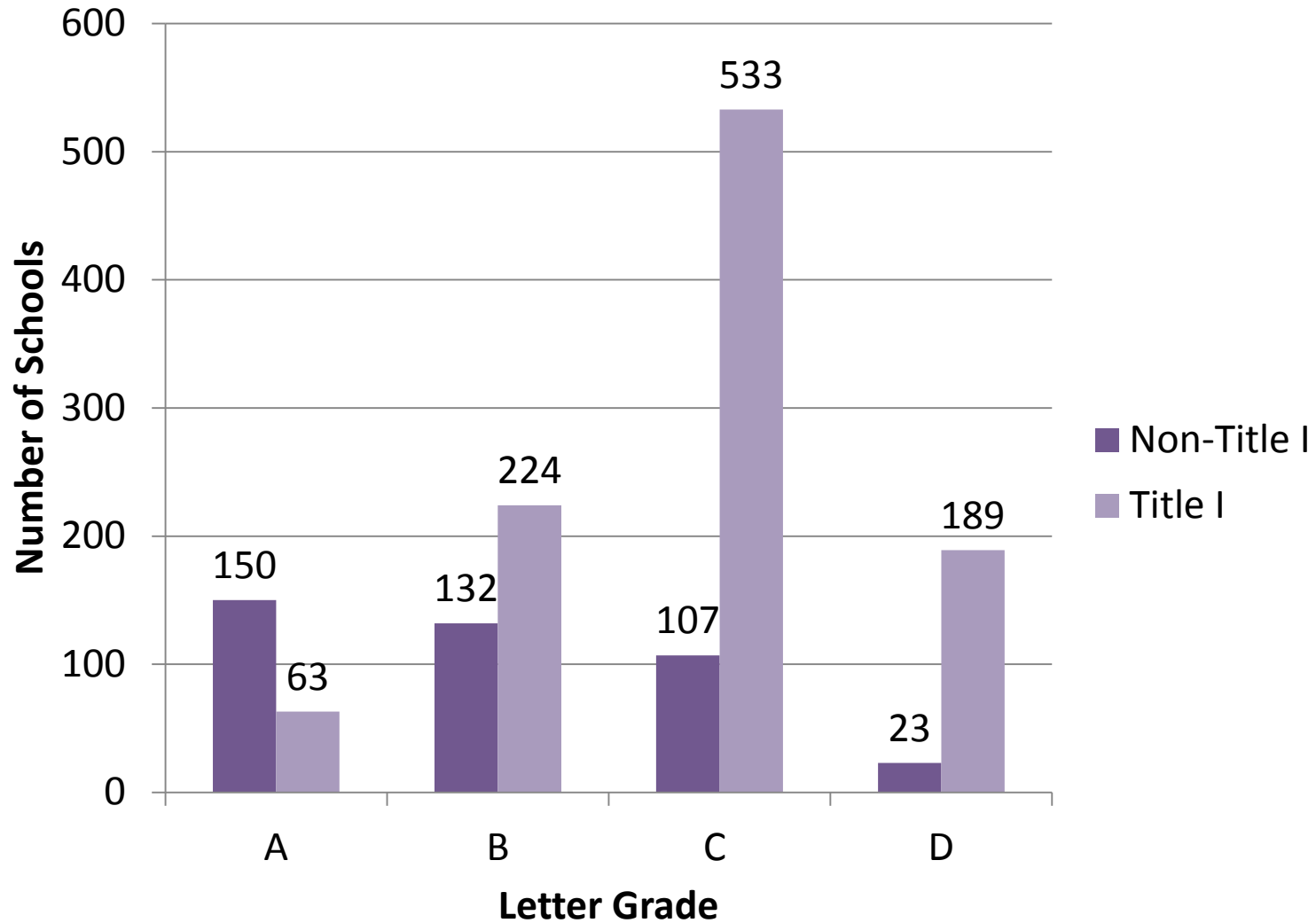
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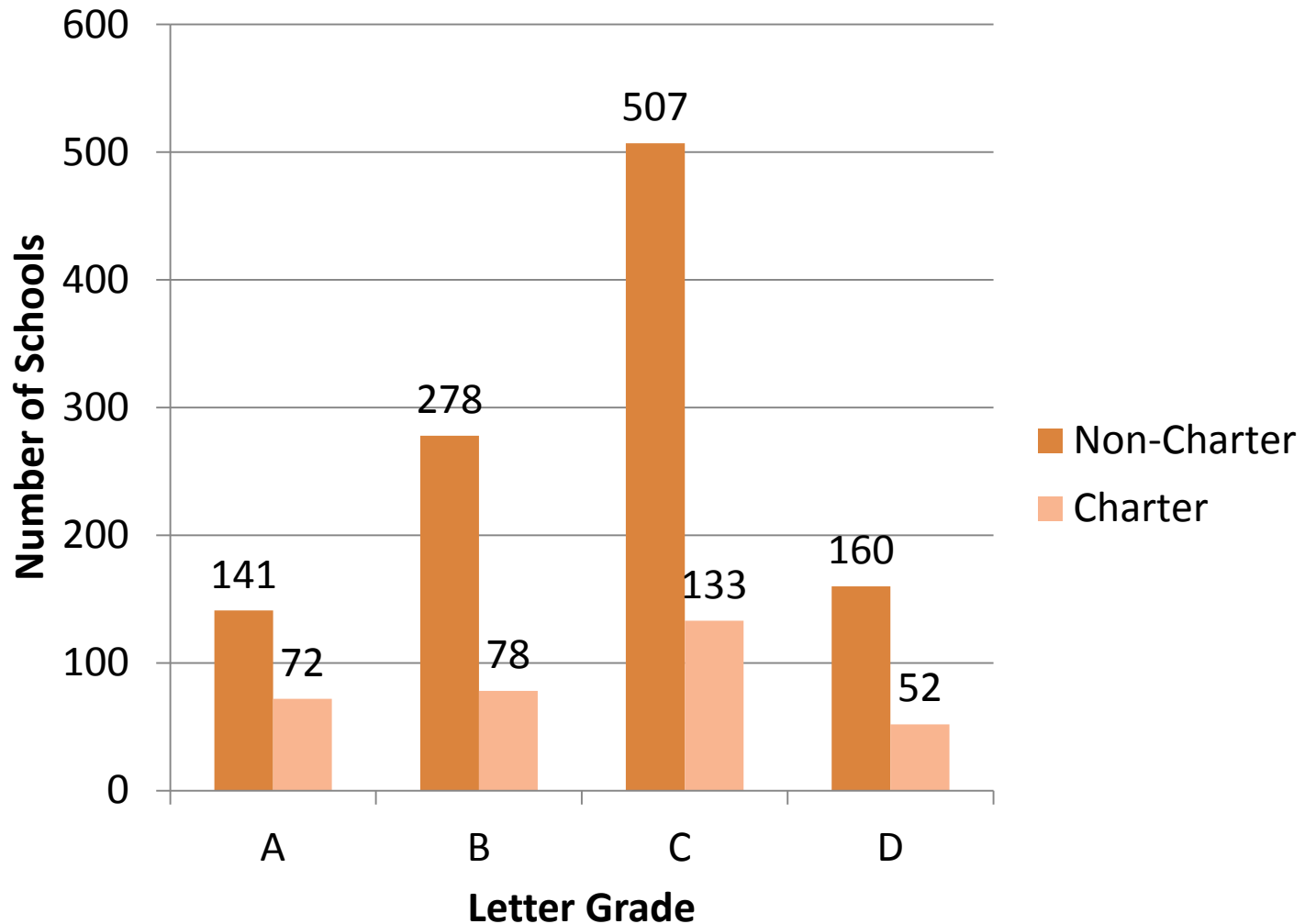
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# Current School Level Information Regarding Each Indicator



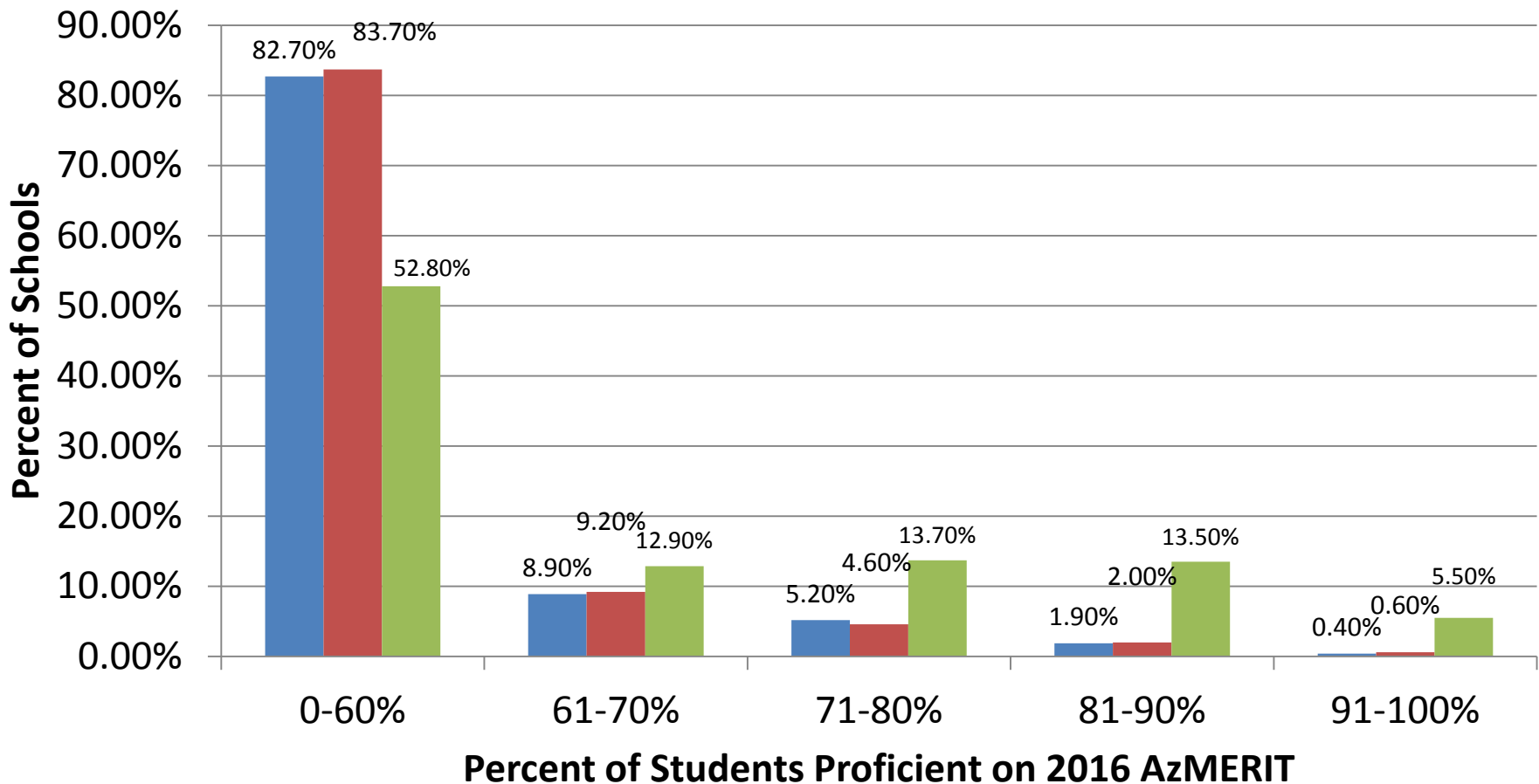
## Contributing Factors to Lower Overall Total Points and Letter Grades

1. Percentage of Grades 3-8 Students Attaining Proficiency on AzMERIT in 2016
  - a) 2016 State Level Percent Proficient on ELA, Math, and Science: 43%
  - b) 2016 State Level Percent Proficient on ELA: 41%
  - c) 2016 State Level Percent Proficient on Math: 40%
  - d) 2016 State Level Percent Proficient on Science: 60%
2. Percentage of Grades 3-8 Students Growing (moving up at least one proficiency level) from 2015 AzMERIT to 2016 AzMERIT
  - a) 2016 State Level Percent Growth on ELA and Math: 24%
  - b) 2016 State Level Percent Growth on ELA: 24%
  - c) 2016 State Level Percent Growth on Math: 23%
3. Menu of Acceleration/Readiness
4. Grades 3-8 ELL Proficiency and Growth Performance on AZELLA
  - a) 2016 State Level ELL Percent Proficient on AZELLA: 22.4%
  - b) 2016 State Level ELL Percent Growth on AZELLA: 35.6%

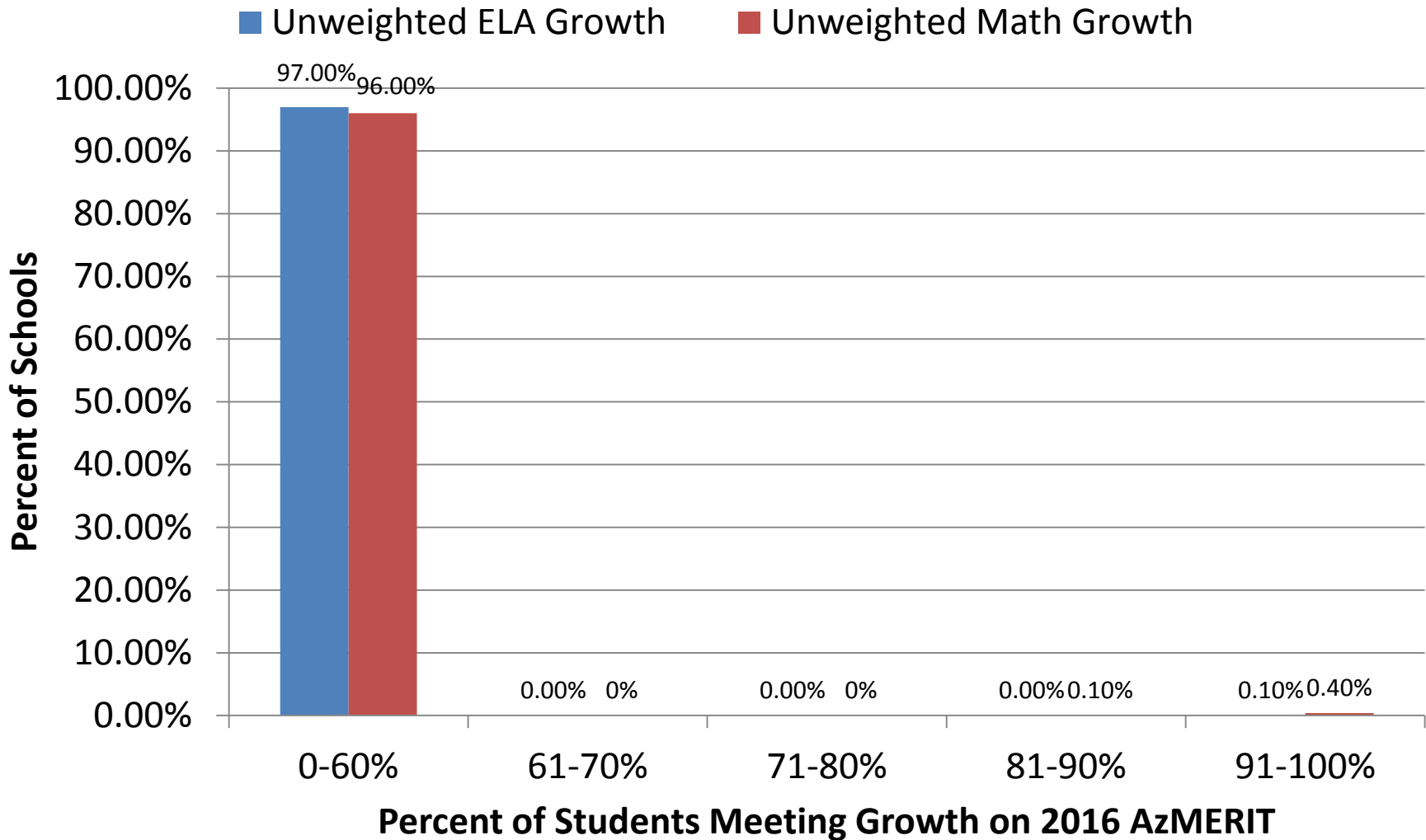
# School Level Percent Proficient by Subject



- Unweighted ELA Proficiency
- Unweighted Math Proficiency
- Unweighted Science Proficiency



# School Level Percent Growth by Subject

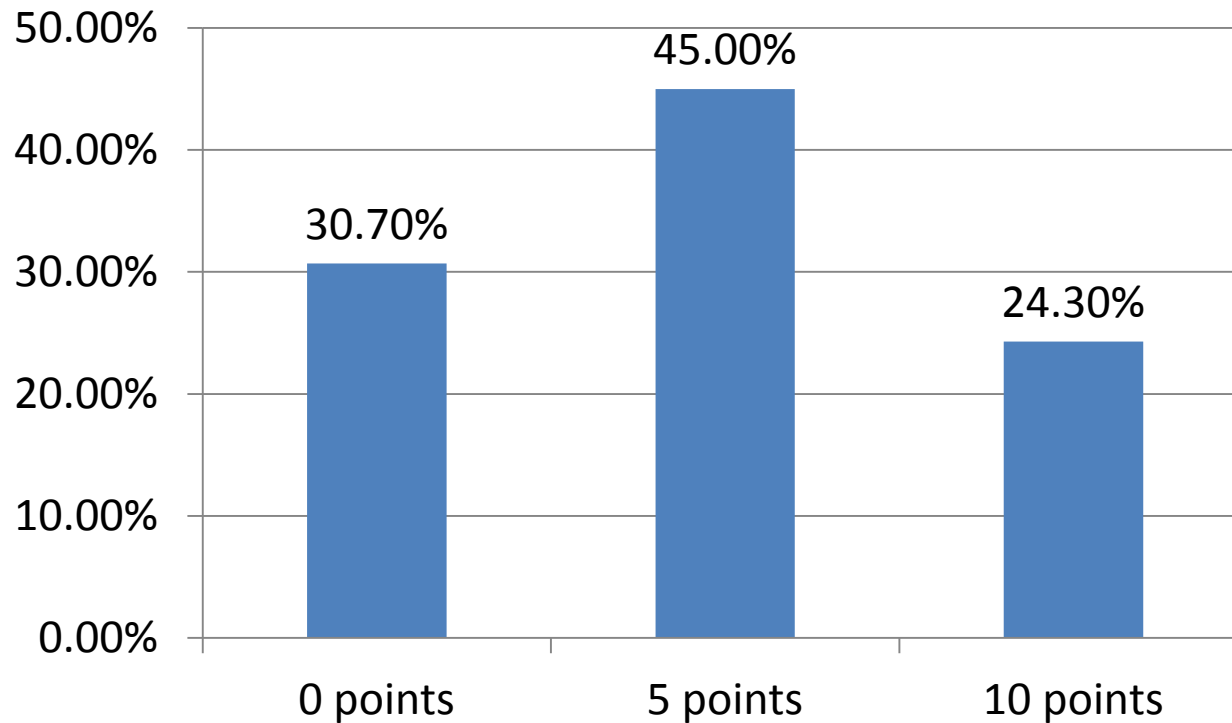




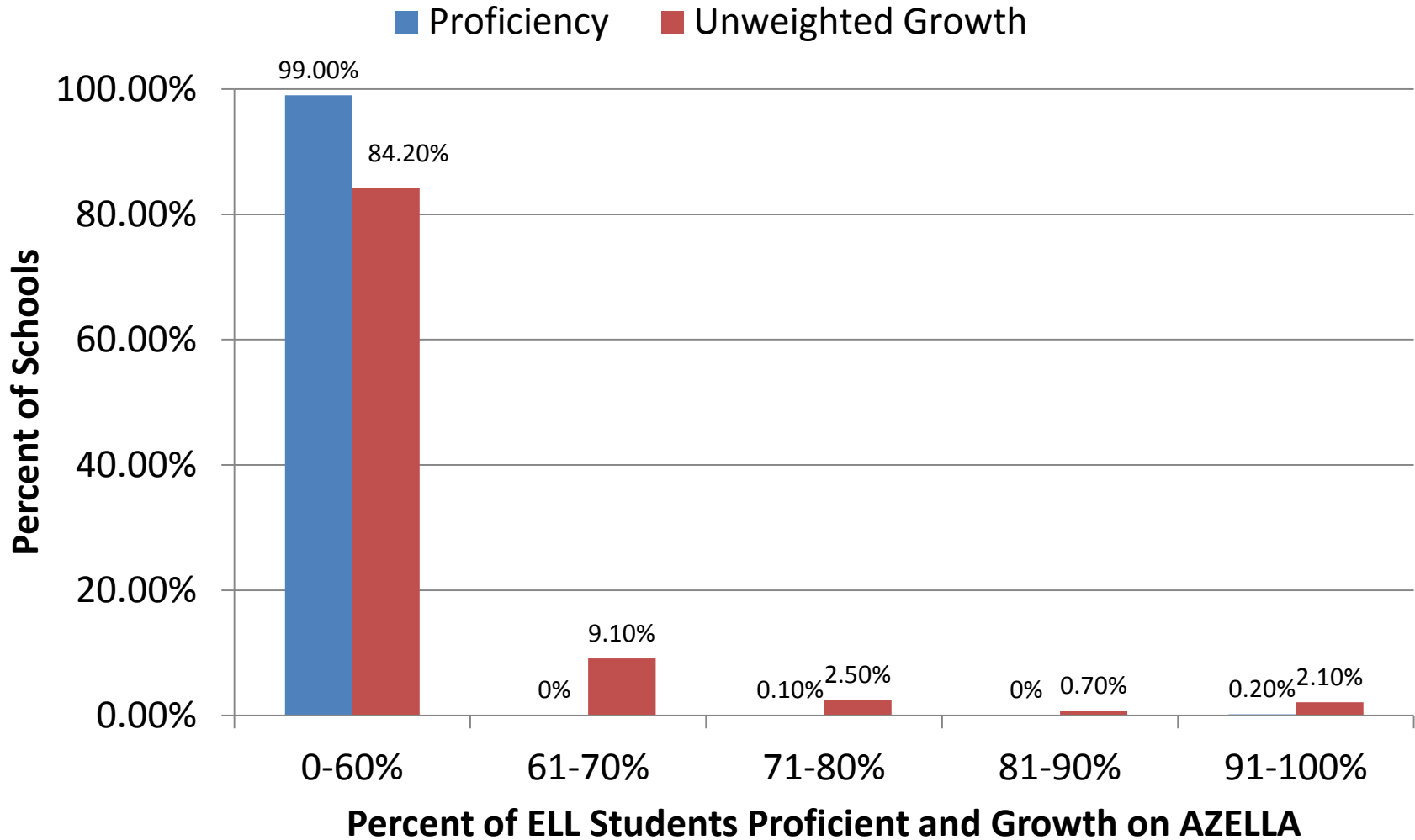
# Percent of Schools Meeting the Acceleration/Readiness Menu



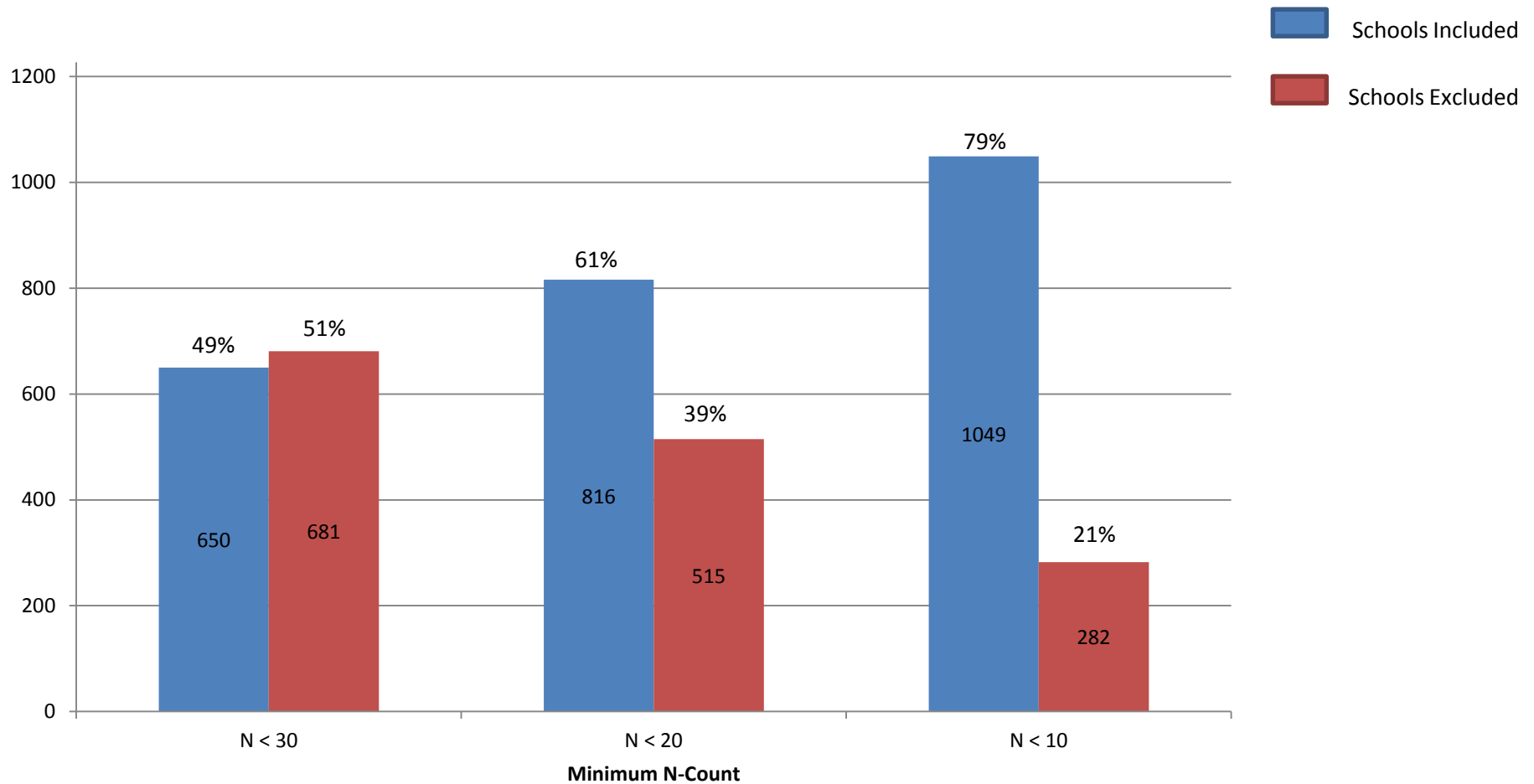
**Menu**



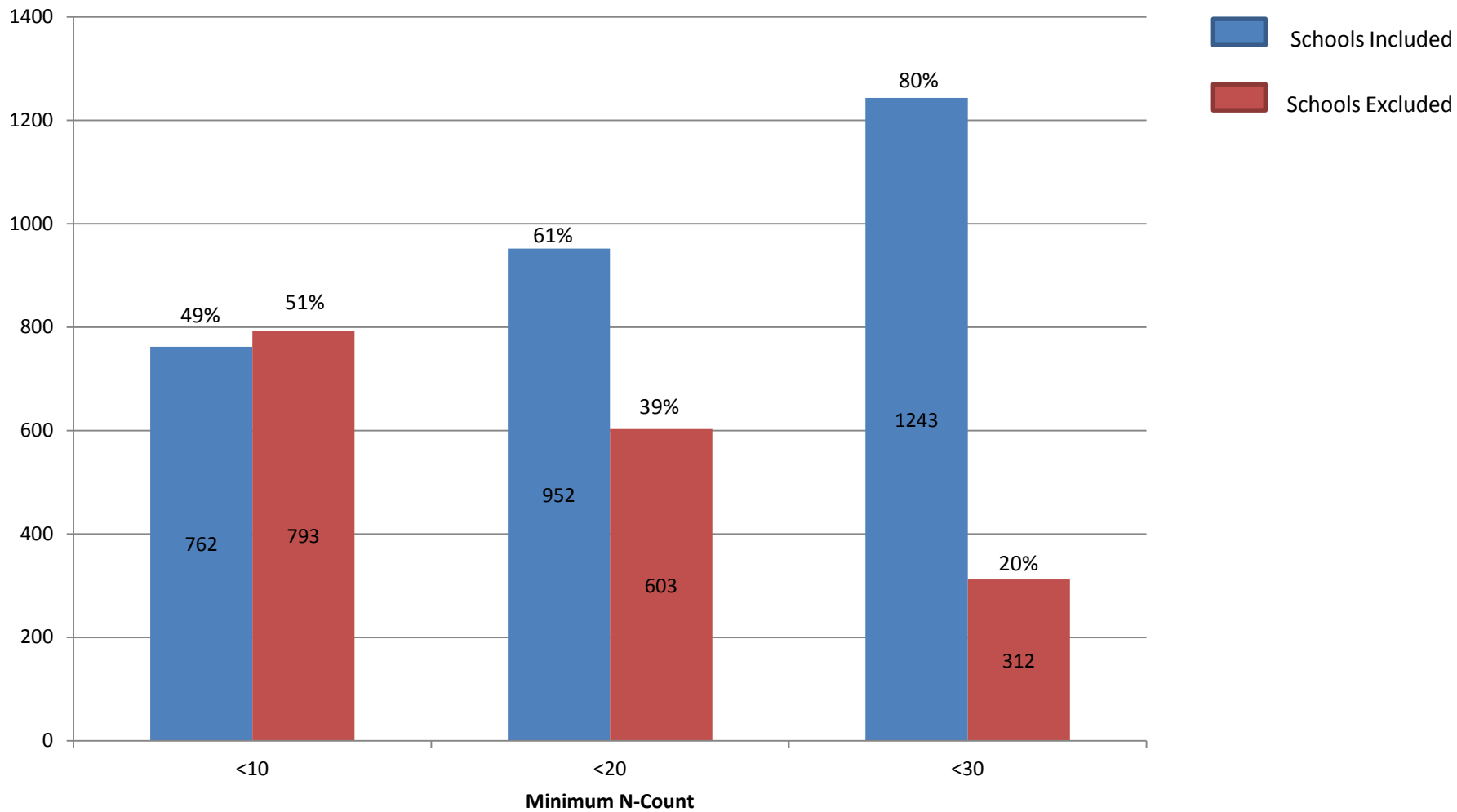
# ELL Proficiency and Growth Percentages



# ELL Proficiency 2016 Minimum N-Count Impact



# ELL Growth 2016 Minimum N-Count Impact



# Open Items regarding K-8 Model



- Included in these models are schools who offer grades k-12. We will need guidance on how to handle these in the future.
- Should we continue to use an n count of 20 for ELLs?
- Historically, we've categorized small schools as those with fewer than 100 test records. Would you like to continue that practice or change?

# Comprehensive and Targeted Schools



## ESSA Requirements

- Comprehensive
  - Lowest performing 5% of all Title I schools
  - HS only – schools graduating less than 67% of their students
  - All schools with a subgroup(s) that is performing at a level equal to a student performance at the lowest 5% of schools in the state
- Targeted
  - Schools having at least one subgroup consistently underperforming



## Focus School Identification prior to 2015

- **Within school gap:**
  - Achievement gap between bottom quartile and the top two quartiles >65%
  - No growth in bottom quartile passing rate
- **Low Achieving subgroup**
  - Bottom quartile < 10% passing
  - No growth in bottom quartile passing rate
- **Low Graduation Rate**
  - 4 year cohort grad rate <60% for three consecutive years

**CONSENSUS CONCEPTUAL DESIGN FOR  
THE A-F SCHOOL ACCOUNTABILITY SYSTEM**

<b>Guidance on weight</b>	<b>Indicators</b>	<b>9-12</b>	<b>ESSA</b>
40%	Proficiency, Statewide Assessment	X	X
20%	Growth, Statewide Assessment	X	
15%	High School Graduation Rate	X	X
15%	College and Career Readiness	X	X
10%	Proficiency and Growth, English Language Learners	X	X

**Conceptual considerations:**

- **A menu of assessments is preferred.**
- **Multiple criteria/measures are important.**
- **Multiple indicators are important.**
- **While conforming to federal and state law, local decision making should be preserved and multiple options available.**
- **In general, the students shall be the unit of analysis.**
- **With the use of end of course assessments, no single high stakes exam shall be required.**
- **The weights or guidance may be altered by the ad hoc committee as potentially approved by the State Board of Education.**
- **Proficiency shall be the primary criteria.**
- **One A-F accountability system shall be designed that meets both federal and state requirements.**
- **A review of the issue of character as a component shall be considered.**
- **The bottom 25% shall be removed as a separate subgroup and the calculation shall be included as a growth calculation.**



**Arizona Career and College Ready Task Force**  
**A-F Accountability System Proposal**  
*A-F Ad Hoc Committee Meeting*  
*October 24, 2016*

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**Introduction:**

The Arizona Career and College Ready Task Force was formed to develop recommendations for incorporating career readiness into the new A-F School Accountability System. The seventeen member Task Force is made up current and former members of the Arizona State Board of Education, superintendents, and other education leaders. The Task Force held its first meeting in July 2016, and has had numerous meetings since then.

**Arizona Career and College Ready Task Force:**  
**Working Definition of College and Career Readiness**

Arizona students are considered college AND career ready when they can demonstrate the knowledge, competencies, and behaviors required to successfully complete introductory, credit-bearing, post-secondary courses and programs without remediation; make an informed decision about their career goals and identify the best pathway to those goals; and/or enter directly into employment, the military or workforce training that leads to an economically-viable profession.

## Arizona Career & College Ready Task Force

### *Task Force Membership*

**Chair:** Tim Carter, Vice President, Arizona State Board of Education

**Co-Chair:** William Symonds, Director, Global Pathways Institute

<b>Name</b>	<b>Title</b>	<b>Organization</b>
<b>Lisa Anderson</b>	Assistant Superintendent	Yuma Union High School District
<b>Amanda Burke</b>	Senior Director, Education	Center for the Future of Arizona
<b>Tim Carter</b>	Vice President	Arizona State Board of Education
<b>Richard Condit</b>	President	Economic Independence LLC
<b>Patti Greenleaf</b>	CTE Director	Amphitheater Unified School District
<b>Meg Hughart</b>	President	Arizona School Counselors Association
<b>Roger Jacks</b>	Superintendent, Former Member, AzSBE	Kingman Unified School District
<b>Carol Lippert</b>	Associate Superintendent, High Academic Standards for Students	Arizona Department of Education
<b>Charles Losh</b>	Educational Consultant	Instructional Systems Ltd
<b>Greg Miller</b>	CEO <i>Former President, AzSBE</i>	Challenge Charter School, Inc.
<b>John Mulcahy</b>	Adult Education & Professional Development Administrator	West-MEC
<b>Jeramy Plumb</b>	Superintendent	Mountain Institute JTED
<b>Jeanne Roberts</b>	Deputy Associate Superintendent, CTE	Arizona Department of Education
<b>H.T. Sanchez</b>	Superintendent	Tucson Unified School District
<b>William Symonds</b>	Director	Global Pathways Institute
<b>Tom Tyree</b>	Superintendent of Schools <i>Former President, AzSBE</i>	Yuma County
<b>Jim Zaharis</b>	Vice President, Education	Greater Phoenix Leadership Council

# PROPOSED A-F ACCOUNTABILITY RUBRIC FOR HIGH SCHOOL COLLEGE AND CAREER READINESS

## ARIZONA CAREER & COLLEGE READY TASK FORCE

### COLLEGE READINESS

A student must meet the established cut scores on one of the following exams:

- ACT
- SAT
- Cambridge
- Accuplacer

*Note: We recommend that cut scores be established by ABOR and the community college presidents.*

### CAREER READINESS

A student must meet both of the following requirements:

- Qualifies as completing a CTE program and pass the Arizona Technical Skills Assessment for that CTE program
- Demonstrates academic readiness by meeting benchmarks for ASVAB, ACT WorkKeys or one of the college entrance exams

### BONUS POINTS

Schools can receive a bonus for any student who meets one or more of the following items:

- Is college AND career ready
- Earns an Industry-Recognized Credential, Certificate, or License
- Qualifies to earn college credit by meeting the scoring threshold on an AP, IB or Cambridge AS/A exam
- Earns at least three college credits through dual enrollment
- Earns credit from an internship or other work-based learning experience

### **SCORING:**

We recommend that schools receive 1 point for each student who is college ready or career ready. Bonuses would be worth significantly less, for example, 0.3 points.

## Potential Model for A-F: College and Career Ready

This model will award points to schools based on the number of college and career ready opportunities earned by the graduating cohort of the school.

Total points would be broken into two categories, one for college ready, and one for career ready. Each category would allow for a maximum of 10 points. The sum of the two categories would have a ceiling of 15 points, allowing for schools to excel in one area over the other and still be eligible for full points.

### Framework

The formula is:

$$\left(\frac{\text{Total College points}}{\text{Total \# Graduates}}\right) \times 10 + \left(\frac{\text{Total Career points}}{\text{Total \# Graduates}}\right) \times 10$$

Students achieving one or more college/career benchmarks will generate points within each category of the formula listed below. Categories with an asterisk are data currently required/recommended to be kept by ADE. All other data is relatively accessible by LEA's, however may require a small fee.

<b>College Ready</b>	<b>Career Ready</b>
# of AP Test Scores Passed	CTE Assessments Passed*
ACT/SAT Achievement	ACT Work Keys Tests Passed
Dual Enrollment Classes Passed	Internships/CTE Placements*
IB/Cambridge Courses Passed	Industry Certificates*
= Total College Points	= Total Career Points

Under this model, a student could generate multiple College or Career points for their school (Based on school samples, ceilings could be later placed on the number of points students could earn, ex. cap of 4 AP test scores per student count).

Achievement target on ACT/SAT and the ACT WorkKeys would need to be determined. ACT and SAT exams have college readiness benchmarks. Additionally, The WorkKeys test has established levels of achievement.

By targeting the graduating cohort, the system would be honoring the total cumulative HS experience (as many of these opportunities are not offered to 9<sup>th</sup> and 10<sup>th</sup> grade students or are cumulative achievements). The theory would be a school should aim at generating more college and career points than it has students. The number of points in each category could be increased/decreased to adjust when in actual practice.



Proficiency is a goal represented in the calculations of the formula because it is a starting goal for our students. It should remain the backbone of the high school calculation. And because there is not as much time in high school to measure growth, it makes sense in our minds that if there is a growth component, for it to be recognition of the growth of the number of students who are proficient or highly proficient, and who graduate.

Additionally, no matter what you do with growth, please recognize the challenge of *new* ELL students to get to proficiency and to graduate – whether on time or in a later cohort. Their work, and the work of the school to get them there, should be recognized.

Additionally, we strongly support activities that lead to post-secondary readiness for work and education. The balance between proficiency, growth and these Graduation Options should be carefully modeled as these Graduation Options come to scale in high schools across Arizona. It may be necessary to phase in a higher percentage for this portion of the high school formula.

A Graduation Options index for work and education after high school – The GO Index if you will, should be a single index so students can mix and match and not be tracked by high schools. The points for the GO Index would be earned by growing the number of students each year who participate and complete at least one activity. Such activities could include:

- Earning Trade Certifications
- Participating in Internships
- Completing a CTE course sequence (CTE assessments shouldn't count until rigor resolved)
- Taking Nationally recognized work-ready assessments such as Work Keys
- Taking Nationally recognized college entrance exams
- Enrollment in a Post-secondary institute – private, public, technical
- Military service
- Earning early college credit for academic core – AP, Cambridge, dual, etc.
- Graduating Early
- Schools that offer early college and industry focused academies on campus (Coding Academy)
- Working students can get one semester of elective credit
- State and Nationally recognized community service and work programs such as AmeriCorps

Should additional indicators come in to play, students' on track rate, reducing the drop out rate and doing more to reduce expulsion and chronic absenteeism are valid school outcome measures that have value for individual students.

Lastly, for your conversation on Long and Short term State Goals: The Progress Meter is a good start for framing those as it is P-20 in nature and there is already some statewide consensus around these levers. However, the larger goals are to **Close the Achievement Gap**, and **increase the number of students who have access to an "A" school**. We suggest these latter two be considered in your State Goals.



22

# Why Educators Support?

## M-V Physical Activity Improves Academics



- **Reallocating time from PE does not improve achievement**
  - Wilkins et al, 2003; Trudeau & Shephard, 2008
- **Keeping time allocated to PE does not harm achievement**
  - Lees & Hopkins, 2013; Rasmussen & Laumann, 2013; RWJF, 2009; Shephard, 1996; Trudeau, 2010
- **Regular PA throughout day helps academic outcomes**
  - Ahamed et al, 2007: Action School BC; Donnelly et al, 2009: PAAC
- **Moderate-to-vigorous PA (MVPA) improves academics**
  - Hillman, Castelli et al, 2007 - ; Hollar et al, 2010; Kamijo et al, 2011, 2012; Shephard, 1996
- **PE, PA, Sports increase engagement & reduce drop-outs**
  - Desy et al, 2013; Rumberger, 2011

Notes: e.g., Trudeau & Shephard, 2008: "Given competent providers, [up to 60 minutes] PA can be added to the school curriculum by taking time from other subjects without risk of hindering student academic achievement. On the other hand, adding time to 'academic' or 'curricular' subjects by taking time from physical education programs does not enhance grades in these subjects and may be detrimental to health." Lees & Hopkins, 2013: systematic review of RCTs: "There was no documentation of APA [aerobic physical activity] having any negative impact on children's cognition and psychosocial health, even in cases where school curriculum time was reassigned from classroom teaching to aerobic physical activity." References: See other slides, [edunuity.org](http://edunuity.org) for detailed references. Slide @10/23/2016