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Connecticut's Next Generation Accountability System

Introductory "YouTube" Video

January 2020

Connecticut's Next Generation Accountability System

- The Elementary and Secondary Education Act (ESEA) was reauthorized in December 2015. The reauthorization is referred to as the Every Student Succeeds Act (ESSA).

- Connecticut used its Next Generation Accountability System initially implemented in 2014-2015 as the foundation of its ESSA plan approved in August 2017.

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Principles of Accountability – Theory of Action

Principle	Description	Theory of Action
Inclusive	Accountability indicators should include more than test scores and graduation rates.	One-size doesn't fit all. An inclusive set of indicators will: • provide a more complete picture of successes and challenges; • guard against narrowing of the curriculum to the tested subjects; • expand ownership of accountability to more staff; and • allow schools to demonstrate progress on "outcome pre-cursors."
Transparent	The system should tell it like it is and be easy to understand.	A system that presents results publically and makes them easily accessible to various stakeholders will gain credibility and invite engagement across the school community.
Reflective	Results of accountability systems should inform decision-making at the local and state level.	An accountability system that provides useful information for decision-making at the state and local level will encourage leaders to view accountability results not as a "gotcha" but as a tool to guide and track improvement efforts.
Collaborative	Indicators and models should be developed with extensive input from district and school leaders.	Listening to local leaders in the development of an accountability system will ensure that the indicators selected and the model used will engender acceptance of the system as a fair reflection of practice and minimize gamesmanship.

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- Values academic growth of the same students over time

- Incorporates indicators beyond test scores

- Student group performance is prominent
  - All student groups (e.g., Black/African American, Hispanic, EL, low income, etc.) are reported separately.
  - Minimum N size remains at 20.
  - "High Needs" *supergroup* receives additional weight in **accountability** calculations
    - Membership: students from economically-disadvantaged families, English learners (ELs), or students with disabilities (SWD)
    - Impact: many more schools with visible student groups AND many more ELs and SWD included in accountability calculations.
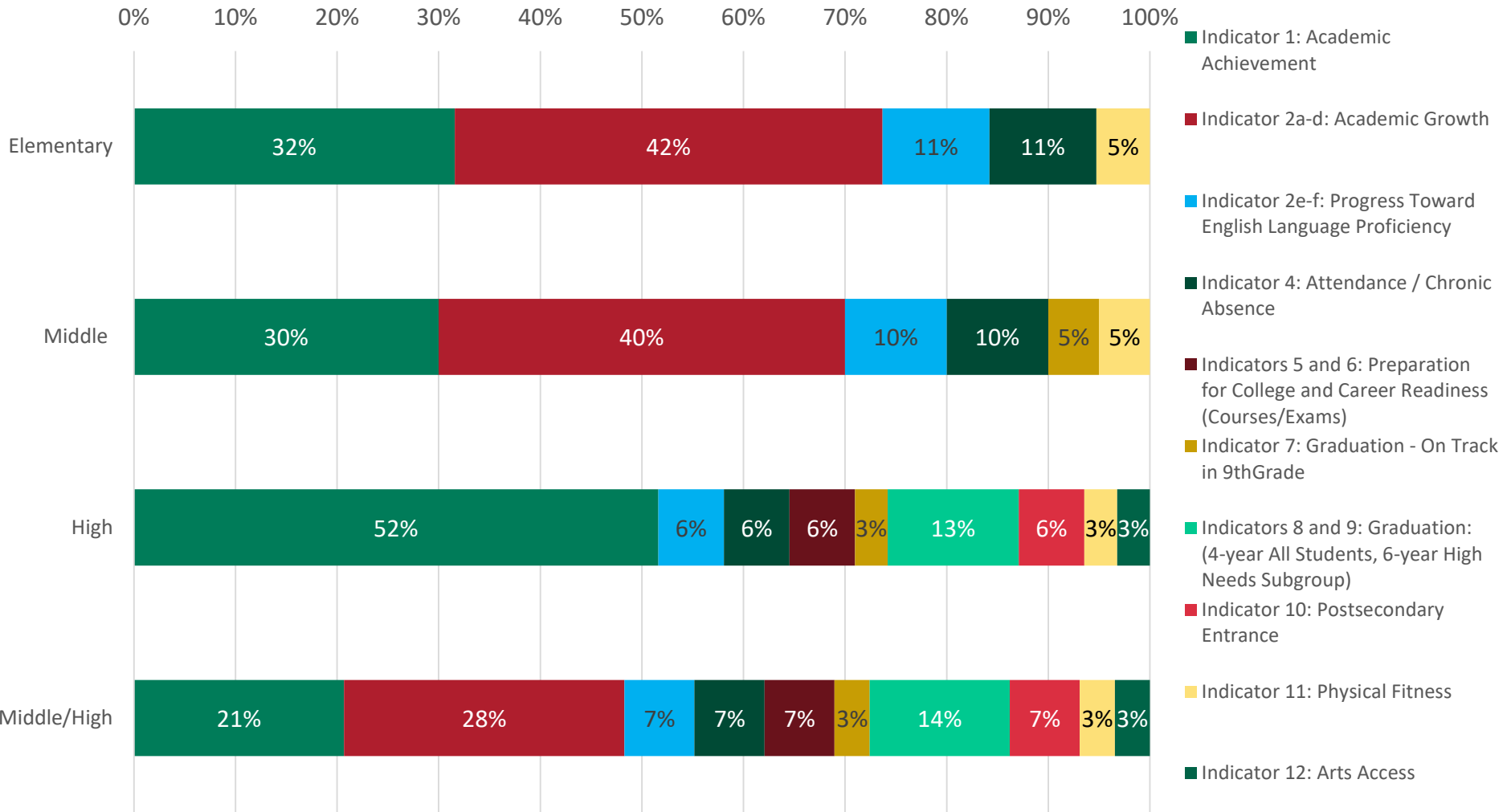
Schools Earn Points on Available Indicators

Indicator	Elem.	Middle	High	Mid / High
Indicator 1: Academic Achievement (ELA/Math/Science weighted equally in elementary, middle, and middle/high schools and at a ratio of 3:3:2 for high schools)	300	300	800	300
Indicator 2a-d: Academic Growth	400	400		400
Indicator 2e-f: Progress Toward English Language Proficiency	100	100	100	100
Indicator 4: Chronic Absenteeism	100	100	100	100
Indicator 5: Preparation for CCR – Coursework			50	50
Indicator 6: Preparation for CCR – Exams			50	50
Indicator 7: On-track to High School Graduation		50	50	50
Indicator 8: 4-year Adjusted Cohort Graduation			100	100
Indicator 9: 6-year Adjusted Cohort Graduation			100	100
Indicator 10: Postsecondary Entrance			100	100
Indicator 11: Physical Fitness	50	50	50	50
Indicator 12: Arts Access			50	50
Total Possible Points	**950**	**1000**	**1550**	**1450**

Note: Indicator 3 is the participation rate.

From page 43 of CT's approved ESSA Plan

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Indicator Weights by School Type

Legend:
- Indicator 1: Academic Achievement
- Indicator 2a-d: Academic Growth
- Indicator 2e-f: Progress Toward English Language Proficiency
- Indicator 4: Attendance / Chronic Absence
- Indicators 5 and 6: Preparation for College and Career Readiness (Courses/Exams)
- Indicator 7: Graduation - On Track in 9thGrade
- Indicators 8 and 9: Graduation: (4-year All Students, 6-year High Needs Subgroup)
- Indicator 10: Postsecondary Entrance
- Indicator 11: Physical Fitness
- Indicator 12: Arts Access

School Type	Ind 1	Ind 2a-d	Ind 2e-f	Ind 4	Ind 5&6	Ind 7	Ind 8&9	Ind 10	Ind 11	Ind 12
Elementary	32%	42%	11%	11%					5%	
Middle	30%	40%	10%	10%		5%			5%	
High	52%		6%	6%	6%	3%	13%	6%	3%	3%
Middle/High	21%	28%	7%	7%	7%	3%	14%	7%	3%	3%

- The percentage of total possible points earned on all available indicators is the "**Accountability Index**".

- "**Performance index**" (SPI/DPI) continues to refer to the index scores derived from state assessment results (Indicator 1).
  - Subject-specific (ELA, Math, Science)

Indicator 1: Academic Achievement (Status)

Indicator	Weight	
	Schools with academic growth data (Indicator 2)	**Schools without academic growth data (e.g., 9-12 high schools)**
Subject Performance Index (0-100) in ELA, Math, and Science		
• All Students	150	400
• Students with *High Needs*	150	400

- Assessments used: Smarter Balanced, CTAA, SAT, Next Generation Science Standards (NGSS) assessment, and CT Alternate Science (CTAS) assessment.

- ELA, mathematics, and science are weighted equally in elementary, middle, and middle/high schools and at a ratio of 3:3:2 for high schools per Connecticut's approved ESSA plan.

- Distinct points for the performance of students with High Needs.

Data Source: state assessment files and PSIS for student demographic and program data.

- Subject-specific index scores are calculated based on scale scores, not achievement levels.

- The index is more sensitive to student performance and is a better measure of improvement at the student group, school, and district levels.

- Subject-specific index scores are *reported* for all student groups. Index scores for students with High Needs are used for accountability.

- Resource: Introduction to the Performance Index (video)

- A student with a scale score of 2380 (lower part of Level 2) will get 57.5 index score points while another student with a scale score of 2419 (upper part of Level 2) will get 65.9 index score points.

$$Index = \frac{Scale\ Score - LOSS}{Range} * 110$$

Ultimate target for every Performance Index is 75

INDEX

VERTICAL SCALE SCORE

110   Highest Obtainable Scale Score *(2623)*

Level 4

Level 3

Level 2

Level 1

0   Lowest Obtainable Scale Score *(2114)*

- A district/school has an "achievement gap" if:
  - the size of its index score gap between students with *High Needs* and *Non-High Needs* (or 75, if that's lower) is a significant outlier i.e., at least one standard deviation greater than the statewide gap in any subject area.

Outliers with High Gap
~ 16%

34.1% 34.1%

0.1%   2.1%   13.6%   13.6%   2.1%   0.1%

−3σ   −2σ   −1σ   0   1σ   2σ   3σ

Percent of Schools/Districts

Size of Achievement Gap
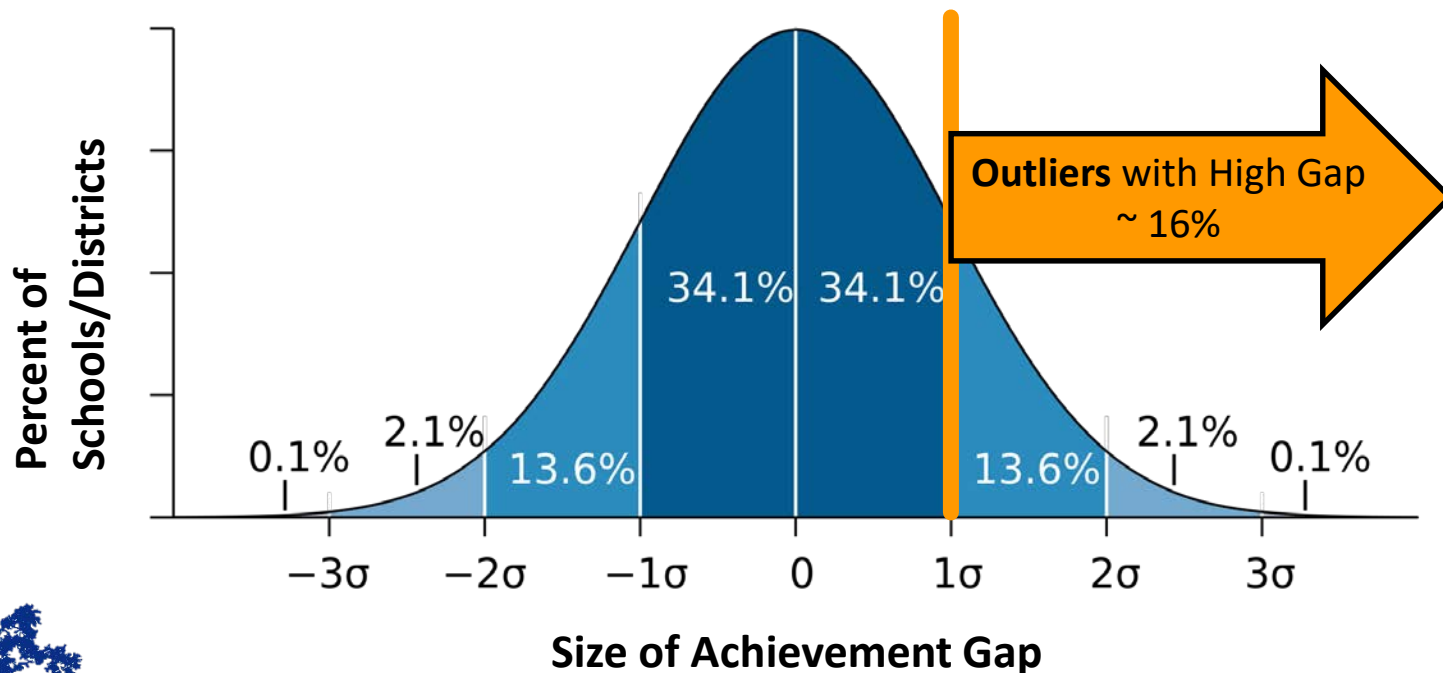
- Only students enrolled in the same district/school on October 1 and at the time of testing are included in accountability calculations.

- An English learner who exits EL status remains a member of the EL group for Indicator 1 calculations for four additional years beyond exit.

Indicator 2a-d: Academic Growth (Longitudinal)

Indicator	Max Points
Average percentage of growth target achieved by students in grades 4 through 8 (½ SB-ELA; ½ SB Math) • All Students • Students with *High Needs*	200 200

- This growth-to-standard model uses the Smarter Balanced vertical scale in ELA and math.

- The model provides student-level vertical scale score growth targets based on a student's score in the prior year.

- Points are assigned to the school/district based on the average percentage of growth target achieved by all students.

- Distinct points are awarded for growth of students with High Needs.

Data Source: state assessment files and PSIS for student demographic and program data.

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- [Technical Report](#): *Developing Connecticut's Growth Model for the Smarter Balanced Summative Assessments in English Language Arts and Mathematics, November 2016.*

- [Video](#): *Connecticut's Growth Model for the Smarter Balanced Summative Assessments*
  - A 20-minute overview of the growth model.

- [Video](#): *Understanding Connecticut's Growth Metrics*
  - An 8-minute explanation of the two different ways Connecticut reports academic growth in ELA and math.

- DEFINITION: "Recently arrived ELs" are students whose initial entry date in a U.S. school is less than <u>two</u> years (i.e., 24 months) prior to test administration.

- "Recently arrived" ELs must test in all content areas annually.
  - Not included in Indicator 1 (academic achievement - status) calculations for ANY subject.
  - Growth (Indicator 2) determined by measuring change from year 1 to year 2 in both ELA and mathematics. Growth included in accountability calculations in the student's second year, still no "status."
  - Scores for ELs (not "recently arrived") will be used in achievement status <u>and</u> growth measures of the accountability system.

Indicator 2e and 2f: Progress Toward English Language Proficiency

Indicator	Max Points
Average percentage of growth target achieved based on LAS Links for all English learners —½ LAS Links Literacy; ½ LAS Links Oral	100

- This growth-to-standard model uses the LAS Links vertical scale for the composite areas of Literacy and Oral.

- The model provides student-level vertical scale score growth targets based on a student's scores LAS Links scores in the prior year.

- Points are assigned to the school/district based on the average percentage of growth target achieved by all English learners.

- Resource: *Connecticut's Growth Model for the English Language Proficiency Assessments*.

Data Source: state assessment files and PSIS for student demographic and program data.

- This does not contribute to the "accountability index" but impacts school classification

- A school that would otherwise have been classified in Category 1 or 2 *and* has a participation rate that is less than 95% for either the All Students group or the students with High Needs group in any tested subject will be classified into the next lower category.

- Schools of Distinction must meet the 95% standard for All Students and students with High Needs in all content areas.

Indicator 4: Chronic Absenteeism

Indicator	Max Points
Percentage of students chronically absent	
• All Students	50
• Students with *High Needs*	50

- Chronic absenteeism is the percentage of students missing ten percent or greater of the total number of days enrolled in the school year for any reason.

- Distinct points are awarded based on the chronic absenteeism rate of students with High Needs.

- Full points awarded if the chronic absenteeism rate is 5% or lower. No points awarded if rate is 30% or greater. Chronic absenteeism rates between 30% and 5% are awarded proportional points.

Data Source: June PSIS

Indicator	Max Points
Percentage of students in grades 11 & 12 participating in *at least one* of the following during high school: Two courses in AP/IB/dual enrollment; *or* Two courses in one of seventeen CTE categories; *or* Two workplace experience "courses" in any area.	50

- Ultimate target is 75%. Points are prorated based on the percentage of the ultimate target achieved.

Data Source: June PSIS (to establish 11th and 12th graders) and Teacher-Course-Student Data Collection (TCS)

Indicator 6: Preparation for Postsecondary and Career Readiness - Exams

Indicator	Max Points
Percentage of students in grades 11 & 12 achieving CCR benchmark on *at least one* of the following: SAT *or* ACT *or* AP *or* IB	50

- Percentage of 11th and 12th graders who meet the following benchmark scores on at least one exam:
  - SAT– Evidence-Based Reading and Writing score of at least 480 and a Math score of at least 530 on the Redesigned SAT; or
  - ACT – meeting benchmark on 3 of 4 exams (English=18, Reading=22, Math=22, Science=23); or
  - AP – 3 or higher on an AP exam; or
  - IB – 4 or higher on an IB exam.
- Ultimate target is 75%. Points are prorated based on the percentage of the ultimate target achieved.

Data Source: June PSIS (to establish 11th and 12th graders), SAT/AP from College Board, ACT from ACT, Inc., IB from International Baccalaureate Organization

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Indicator 7: Graduation - On-Track in 9th Grade

Indicator	Max Points
Percentage of 9th graders earning at least five full-year credits in the year.	50

- The University of Chicago's Consortium on Chicago School Research "identifies students as on-track if they earn at least five full-year course credits and no more than one semester F in a core course in their first year of high school."

- In the future, CSDE may consider adding the criteria that there be no more than one "failing grade" in a core course in the school year.

- Ultimate target is 94%. Points are prorated based on the percentage of the ultimate target achieved.

Data Source: June PSIS (to establish current year 9th graders and prior year 8th graders) and Teacher-Course-Student Data Collection (TCS)

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Indicator 8: Graduation – Four Year Adjusted Cohort Graduation Rate – All Students

Indicator	Max Points
Percentage of first time 9th graders who graduate with a regular high school diploma in four years or less – All Students	100

- The ultimate target for all students is 94%.

- Districts/schools can earn up to 100 points based on the pro-rated percentage of the ultimate target achieved by All Students.

Data Source: PSIS Registration and Collection
Supporting documentation available on EdSight.

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Indicator 9: Graduation – Six Year Adjusted Cohort Graduation Rate – Students with High Needs

Indicator	Max Points
Percentage of first time 9th graders who graduate with a regular high school diploma in six years or less – *High Needs Group*	100

- The ultimate target for students with High Needs is 94%.

- Districts/schools can earn up to 100 points based on the pro-rated percentage of the ultimate target achieved by students with High Needs.

Data Source: PSIS Registration and Collection

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- A district/school is identified as having a graduation rate gap if:
  - the size of the six-year graduation rate gap between the High Needs student group and the Non-High Needs group (or 94% if that's lower) is at least one standard deviation greater than the statewide gap

- Similar to achievement gap "outlier" approach

Indicator 10: Postsecondary Entrance Rate – All Students

Indicator	Max Points
Percentage of graduating class who enrolled in a 2- or 4-year postsecondary institution any time during the first year after high school graduation	100

- ## The ultimate target is 75%.

- ## Districts/schools can earn up to 100 points based on the pro-rated percentage of the ultimate target achieved.

Data Source: PSIS and National Student Clearinghouse
High School Reports available on EdSight. Select Performance, then College/Postsecondary.

Indicator 11: Physical Fitness

Indicator	Max Points
Percentage of students meeting/exceeding the "Health Fitness Zone Standard" in all four areas of the CT Physical Fitness Assessment	50

- The ultimate target is 75%.

- Multiplier for Estimated Participation Rate
  - At least 90%   1   (approximately 82% of schools)
  - At least 70% but less than 90%   0.5   (approximately 11% of schools)
  - At least 50% but less than 70%   0.25   (approximately 3% of schools)
  - Less than 50%   0   (approximately 4% of schools)

- Districts/schools can earn up to 50 points based on the pro-rated percentage of the ultimate target achieved as adjusted by the estimated participation rate multiplier.

Data Source: ED 165 and June PSIS

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Indicator 12: Arts Access

Indicator	Max Points
Percentage of students in grade 9 through 12 participating in at least one dance, theater, music, or visual arts course in the school year	50

- Ultimate target is 60%. Points are prorated based on the percentage of the ultimate target achieved.

Data Source: June PSIS to identify students in Grades 9 through 12 and Teacher-Course-Student Data Collection (TCS)

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Schools Identified for State Support per ESSA Plan

- **Turnaround Schools**: Consistently Lowest Performing Overall
  - Three-year average of the accountability index is in the bottom 5 percent of all schools statewide (or)
  - Six-year adjusted cohort graduation rates for all students is less than 70 percent in each of the three most recent cohorts

- **Focus Schools**: Consistently Underperforming Student Group

  <u>Schools with growth results on the Smarter Balanced growth model</u>
  - Bottom 10 percent of schools statewide based on the average percentage of target achieved by students with High Needs in ELA or mathematics (Indicators 2 b and 2d) in each of the prior three years.

  <u>High schools only</u>
  - Bottom 10 percent of all schools statewide based on the performance index for students with High Needs in ELA or mathematics (Indicator 1) in each of the prior three years; or
  - Six-year adjusted cohort graduation rate for the High Needs student group that is less than 70 percent in each of the three most recent cohorts.

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- Turnaround and Focus schools identified per the ESSA plan in Winter 2018-19 will exit if:
  - they no longer meet the reason for their identification in two consecutive years after identification; and
  - they demonstrate substantial improvement and continued progress.

- New Turnaround schools are identified every three years. Focus schools are identified annually.

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Recognition - Schools of Distinction

These are schools that are not identified as Turnaround or Focus *and* are in the top 10 percent in any of the following four categories *and* are not flagged as having an achievement gap, a graduation rate gap, or participation rate below 95 percent on the state summative assessments. Schools of Distinction are identified annually.

1. Overall Performance (top 10 percent of accountability index)

2. Growth – All Students (top 10 percent on points earned for All Students in ELA and/or Math i.e., Indicators 2a and 2c)

3. Growth – High Needs (top 10 percent on points earned for students with High Needs in ELA and/or Math i.e., Indicators 2b and 2d)

4. Overall Improvement – Schools without Indicator 2 growth only (top 10 percent of rate of improvement on the Accountability Index from one year to the next)

School Category Assignment Per State Law

Category 1
Accountability Index = 85 - 100

Category 2
Accountability Index = 70 - 84.9

Category 3
Accountability Index = 0 - 69.9

Category 4 (Turnaround/Focus)

Category 5 (Turnaround/Focus)

- Assignment to categories 1-3 based on Accountability Index. Criterion-referenced cut scores rather than relative performance (i.e. quartiles) implemented for the first time in 2017-18 reporting. Criterion-referenced cut scores provide consistent targets for schools and districts.

- Schools eligible for Category 1 or Category 2 status with an outlier achievement gap, or graduation rate gap, or a participation rate less than 95% will be dropped one category.

- Assignment to categories 1-3 occurs annually.

District-Level Accountability Report: Indicator Table

Indicator	Index/Rate	Target	Points Earned	Max Points	% Points Earned	State Average % Points Earned
1a. ELA Performance Index - All Students	73.1	75	48.8	50	97.5	90.2
1b. ELA Performance Index - High Needs Students	63.3	75	42.2	50	84.4	77.5
1c. Math Performance Index - All Students	69.1	75	46.1	50	92.2	84.1
1d. Math Performance Index - High Needs Students	59.4	75	39.6	50	79.2	70.2
1e. Science Performance Index - All Students	71.6	75	47.7	50	95.5	85.0
1f. Science Performance Index - High Needs Students	61.2	75	40.8	50	81.6	72.2
2a. ELA Academic Growth - All Students	62.1%	100%	62.1	100	62.1	59.9
2b. ELA Academic Growth - High Needs Students	56.4%	100%	56.4	100	56.4	55.1
2c. Math Academic Growth - All Students	64.9%	100%	64.9	100	64.9	62.5
2d. Math Academic Growth - High Needs Students	57.5%	100%	57.5	100	57.5	55.2
2e. Progress Toward English Proficiency - Literacy	72.8%	100%	36.4	50	72.8	60.0
2f. Progress Toward English Proficiency - Oral	67.4%	100%	33.7	50	67.4	52.1
4a. Chronic Absenteeism - All Students	4.1%	<=5%	50.0	50	100.0	78.3
4b. Chronic Absenteeism - High Needs Students	6.5%	<=5%	46.9	50	93.8	55.7
5. Preparation for CCR - Percent Taking Courses	82.9%	75%	50.0	50	100.0	100.0
6. Preparation for CCR - Percent Passing Exams	51.9%	75%	34.6	50	69.2	56.7
7. On-track to High School Graduation	94.5%	94%	50.0	50	100.0	93.6
8. 4-year Graduation: All Students (2018 Cohort)	93.1%	94%	99.0	100	99.0	93.9
9. 6-year Graduation: High Needs Students (2016 Cohort)	97.5%	94%	100.0	100	100.0	88.6
10. Postsecondary Entrance (Graduating Class 2018)	74.6%	75%	99.5	100	99.5	94.5
11. Physical Fitness (estimated participation rate = 93.7%)	53.2%	75%	35.5	50	70.9	70.6
12. Arts Access	55.8%	60%	46.5	50	93.0	86.5
Accountability Index	.		1188.1	1450	81.9	74.2

District-Level Accountability Report: Gap & Participation Tables

Gap Indicators

Indicator	Non-High Needs Rate	High Needs Rate	Size of Gap	State Gap Mean +1 Stdev	Is Gap an Outlier?
ELA Performance Index Gap	75.0	63.3	11.7	15.4	N
Math Performance Index Gap	75.0	59.4	15.6	17.6	N
Science Performance Index Gap	75.0	61.2	13.8	16.1	N
Graduation Rate Gap (2016 Cohort)	94.0	97.5	-3.5	11.1	N

If the Non-High Needs Rate exceeds the ultimate target (75 for Performance Index and 94% for Graduation Rate), the ultimate target is used for gap calculations.
If the size of the gap exceeds the state mean gap plus one standard deviation, the gap is an outlier.

Assessment Participation Rates

Indicator	Participation Rate (%)
ELA - All Students	99.2
ELA - High Needs Students	98.7
Math - All Students	99.1
Math - High Needs Students	98.4
Science - All Students	99.6
Science - High Needs Students	99.0

Minimum participation standard is 95%.

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Visit EdSight for access to Next Generation Accountability System reports and other resources including:

- Informational videos;

- Customizable reporting tools; and

- *Using Accountability Results to Guide Improvement.*