2019 Next Generation Science Standards (NGSS) Results

The **2018-19 Next Generation Science Standards (NGSS) assessment** results for the state, all districts, schools, and student groups are now available on **EdSight**. See state results below.

In addition, the Connecticut Alternate Science (CTAS) assessment was also implemented in 2018-19 for students with the most significant cognitive disabilities. CTAS statewide results are also presented here.

CONNECTICUT NEXT GENERATION SCIENCE ASSESSMENT

Grade	NGSS Participation Rate	Level 1 Not Met	Level 2 Approaching	Level 3 Met	Level 4 Exceeded	Level 3 & 4 Met or Exceeded	Average Scale Score (SS)
5	99.1	15.3	31.1	40.4	13.3	53.6	500
8	97.9	19.3	28.5	43.3	8.9	52.2	800
11	96.7	19.5	32.7	37.2	10.5	47.7	1100

NGSS Assessment State Performance by Grade, 2018-19

Grade	CTAS Participation Rate	Level 1 Not Met	Level 2 Approaching	Level 3 Met	Level 4 Exceeded	Level 3 & 4 Met or Exceeded	Average Score
5	94.5	34.2	25.0	16.8	24.1	40.9	43
8	92.9	29.9	33.3	11.9	24.9	36.7	40
11	95.0	34.1	32.5	10.1	23.3	33.4	41

CTAS Assessment State Performance by Grade, 2018-19

The Connecticut Science Assessments Reporting FAQ provides essential information for interpreting these results.

Discipline Data on EdSight

The 2018-19 discipline data is now available on EdSight. There are four built-in reports:

1) Bullying – The Bullying Counts and number of students with at least one bullying incident have decreased from the prior school year.

2) Incidents – This report shows a breakdown of incidents by category. The number of drugs, alcohol and tobacco offenses as well as fighting and battery have increased while incidents involving violent crimes against persons and weapons have decreased. School policy violations are still the primary reason why students are being suspended, but its proportion is declining.

3) Sanctions – In-school suspension (ISS) continued to decline while out-of-school suspension (OSS) showed a slight increase in 2018-19, even among students in PK-2.

4) Suspension Rates – The overall suspension rate is flat (around 6.7%). In this report you can drill down by the following student groups: EL Status, Gender, Grade, Meal Eligibility status, Race/Ethnicity, and Special Education status.

Understanding of the Smarter Balanced Assessment System

The Performance Office recently created the Information/Resources to Help Increase Understanding of the Smarter Balanced Assessment System document that helps to synthesize the many resources and pieces of information that are involved with the administration of the Connecticut Smarter Balanced Assessment. This valuable resource outlines the Professional Learning Resources, Assessment Support Materials, and detailed explanations of the various summative and interim assessment reporting features.

Next Generation Accountability: Revisiting Arts Access
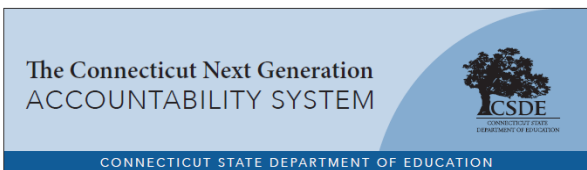
Over the last several years, many stakeholders have requested that the definition of arts coursework for purposes of Indicator 12: *Arts Access* calculations be expanded beyond the current focus on dance, theater, music, and the visual arts (i.e. "Fine and Performing Arts" or Subject Area 5 of the secondary course code list).

In May 2019, CSDE issued an online survey seeking input on potential specific courses in the secondary course list that:

- are not in Subject Area 5;
- are aligned to Connecticut's arts standards;
- provide students with access to the arts; and
- should be considered as an arts course toward Indicator 12.

The survey included the following question and response options: *Should the CSDE consider expanding the types of courses that are considered arts courses for purposes of accountability calculations?*

> **NO**: *Provide a rationale for why the CSDE should not expand the types of courses that are considered arts courses for Indicator 12.*
>
> **YES**: *List up to five course codes that are not in Subject Area 5 ("Fine and Performing Arts") but should be considered for inclusion in Indicator 12 calculations. Please also provide a rationale for why the course should be considered as an arts course for Indicator 12.*

We received 88 unique responses with 60 percent of respondents seeking to expand the definition of an arts course. Many of the respondents opposed to expansion of Indicator 12 cited the importance of curricular alignment of all arts courses to the National Core Arts Standards. Some explained the importance of maintaining a focus on the artistic process, which includes creating, performing, and responding to art rather than an orientation toward technical achievements. Concerns were expressed that redefining arts could undermine the rich experiences that children have through enrollment in arts courses and expanding eligible courses could unintentionally erode student access to the arts.

Of the respondents advocating for an expansion of Indicator 12, some provided specific suggestions that are already reported as arts courses (e.g. Fashion Design, Art History, Choreography, Sound Production). Others suggested courses not clearly aligned to National Core Arts Standards (e.g. Communication and Audio/Visual Technology, Construction, CAD Design, Culinary Arts). However, there was a group of courses suggested that align with the fifth artistic discipline of the National Core Arts Standards: Media Arts (e.g. Web Design, Interactive Game Design, Media Literacy). These courses have not been part of Subject Area 5 previously, but they will be added for the 2019-20 school year. Therefore, schools may begin reporting these courses through the Teacher-Course-Student (TCS) collection at the end of this school year. Indicator 12 calculations in 2019-20 accountability reports will include credit for courses in Media Arts.

For a complete list of Subject Area 5 courses including those in Media Arts as well as course descriptions, visit the SCED Finder tool at: https://nces.ed.gov/scedfinder/Home/Browse

NAEP Mathematics Framework Updated

In November, the National Assessment Governing Board approved updates to the mathematics assessment framework to be used to guide the development of the 2025 National Assessment of Educational Progress (NAEP). The framework, which provides a blueprint for the content and design of the NAEP mathematics assessment, was last updated in 2006. The new framework better reflects the most recent content standards adopted by states across the country (e.g. Common Core State Standards) and is informed by current research on cognitive development.

The new framework calls for assessing five mathematical practices: Representing; Abstracting and Generalizing; Justifying and Proving; Mathematical Modeling; and Collaborative Mathematics. The NAEP 2025 assessment will include items that measure content objectives and mathematical practices simultaneously. Given that the new framework was designed to better measure content standards implemented across the nation, there were content objectives added, removed, and clarified across the three grades assessed, Grade 4, 8, and 12. Notable changes include less emphasis on Data Analysis, Statistics, and Probability at Grade 4 while increasing the proportion of items in this area for Grade 8. The Grade 4 assessment will have a greater focus on Number Properties and Operations than in the past, and fewer Measurement items will be included for Grade 8. The updated assessment will include scenario-based tasks designed to be more relevant for students while measuring content and practices through familiar contexts.

Free Application for Federal Student Aid (FAFSA) Completion

On November 19, 2019, the CSDE held a webinar regarding Free Application for Federal Student Aid (FAFSA) Completion that featured Dr. Chaka Felder-McEntire from Windsor and Michelle Catucci from Cheshire. On the CSDE Web site you will find copies of the slides, as well as a recorded version of the webinar and other related resources. Two additional resources for working with families on FAFSA Completion are Gear Up Family Engagement Toolkit: Strategies and Resources to Communicate with Families and Tips for Engaging Parents in FAFSA Completion. Additionally, there are financial aid resources for undocumented students available on our web site.
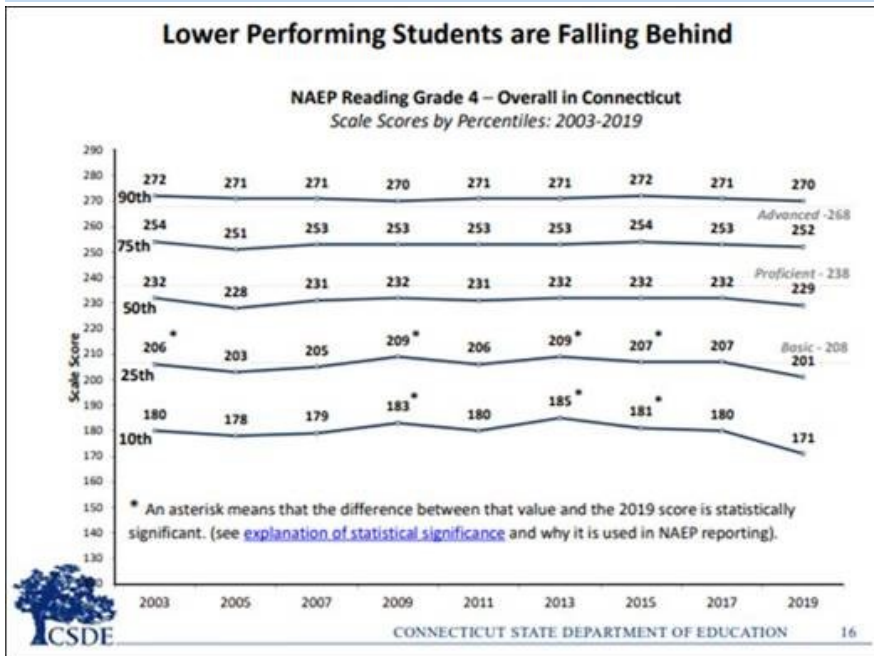
Improving Reading Achievement in the Early Grades

The 2019 results from the National Assessment for Educational Progress (NAEP) showed that Connecticut's Grade 4 Reading performance had declined. This was the first time since NAEP's inception in the 1990s that Connecticut's reading performance in Grade 4 had declined when compared to the prior NAEP administration. A closer look revealed that the declines occurred among the lowest achieving students i.e., those achieving at the 10th and 25th percentiles (see figure on page 4 and the full presentation of CT NAEP 2019 results). While the Smarter Balanced assessments do not evidence a similar decline, achievement in English language arts has shown anemic improvement in the early elementary grades (3 and 4).

Improving Reading Achievement in the Early Grades (continued from page 3)

Lower Performing Students are Falling Behind

NAEP Reading Grade 4 – Overall in Connecticut
Scale Scores by Percentiles: 2003-2019

	2003	2005	2007	2009	2011	2013	2015	2017	2019	
90th	272	271	271	270	271	271	272	271	270	
75th	254	251	253	253	253	253	254	253	252	Advanced -268
50th	232	228	231	232	231	232	232	232	229	Proficient - 238
25th	206*	203	205	209*	206	209*	207*	207	201	Basic - 208
10th	180	178	179	183*	180	185*	181*	180	171	

* An asterisk means that the difference between that value and the 2019 score is statistically significant. (see explanation of statistical significance and why it is used in NAEP reporting).

CONNECTICUT STATE DEPARTMENT OF EDUCATION   16

The EdWeek news site has published a series of reports focused on underlined improving reading instruction in the early grades that may be of interest to educators. Links to the specific reports, with select snippets from those reports, are outlined below:

A Look Inside One Classroom's Reading Overhaul: *Wary teachers say they're now seeing gains with structured programs*

With a clear research base to back them up, Mad River's *[a school in Ohio]* leaders have paired carefully structured phonics lessons in K-2 with related practices that are known to support good reading skills: helping students build content knowledge and strong vocabularies.

As the project enters its fourth year, Mad River's leaders are hopeful. State test scores in English/language arts have risen sharply in the buildings where children have had the most exposure to the new approach, and principals notice that more students—even the struggling ones—are better at tackling tough reading passages.

More Than Phonics: How to Boost Comprehension for Early Readers

In the literacy world, there's a perennial concern that focusing on foundational skills will come at the expense of giving kids opportunities to practice language and enjoy stories. But researchers and educators say that it's not only possible to teach useful vocabulary and meaningful content knowledge to young children—it's necessary.

"Decoding has a really outsized role on reading comprehension in the early grades," said Gina Cervetti, an associate professor of education at the University of Michigan, who studies the role of content-area knowledge in literacy. "But as students consolidate their decoding, very quickly that equation shifts."

The Most Popular Reading Programs Aren't Backed by Science

In a nationally representative survey, the Education Week Research Center asked K-2 and special education teachers what curricula, programs, and textbooks they had used for early reading instruction in their classrooms. The top five include three sets of core instructional materials, meant to be used in whole-class settings: The Units of Study for Teaching Reading, developed by the Teachers College Reading and Writing Project, and Journeys and Into Reading, both by Houghton Mifflin Harcourt. There are also two early interventions, which target specific skills certain students need more practice on: Fountas & Pinnell's Leveled Literacy Intervention and Reading Recovery. An Education Week analysis of the materials found many instances in which these programs diverge from evidence-based practices for teaching reading or supporting struggling students.

For additional resources, please see the Academics Office English Language Arts site.