West Orange Public Schools

Assessing Student Learning

Presented at:
Board of Education Meeting
May 10, 2021

West Orange Board of Education

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New Jersey State Assessment & District Wide Assessment Program

SY 2020 * SY 2021

New Jersey Cancels Statewide Student Assessments

STATE OF NEW JERSEY
DEPARTMENT OF EDUCATION
A Memo from the New Jersey Department of Education

Date: March 24, 2020

To: Chief School Administrators, Charter School and Renaissance School Project Leads

Route To: Principals, District Test Coordinators, Staff Involved with Statewide Student Assessments

From: Lamont O. Repollet, Ed.D.
Commissioner of Education

New Jersey Cancels Statewide Student Assessments

Given the continued threat of the Novel Coronavirus (COVID-19) to our school communities and the resulting school closures, Governor Phil Murphy today announced that the State of New Jersey is cancelling all statewide student assessments for the spring 2020 testing window. This includes the springtime administration of the New Jersey Student Learning Assessments (NJSLA), ACCESS for ELLs, and the Dynamic Learning Maps (DLM) assessment.

The U.S. Department of Education (USDE) has notified states that it will grant a waiver to any state that is unable to assess its students due to the COVID-19 pandemic, providing relief from federally mandated testing, accountability, and reporting requirements for this school year. With students unable to attend school due to the COVID-19-related closures, it is not feasible to move forward with statewide testing. As such, the New Jersey Department of Education (NJDOE) has applied for the waiver and the USDE has granted approval of the waiver. Therefore, New Jersey will not be required to administer a statewide assessment for federal accountability purposes.

We acknowledge that cancelling statewide assessments will impact various aspects of education, including educator evaluations and certification, and school and district accountability. We recognize educators, students, and families will have questions. We are working to mitigate any unintended consequences, and we will work through multiple channels to keep stakeholders fully informed of updated guidance and other changes.

SY 2020, SY 2021
- ELA, 3-9
- Math, 3-9
- Science 5, 8, 11

Access for ELLs
- Interrupted administration SY 2020
- In progress SY 2021

Dynamic Learning Maps (DLM)
- Cancelled SY 2020
- In progress SY 2021

Revised District Wide Assessment Calendar

District Assessments Kindergarten Early Literacy
- Administered according to calendar

Fountas & Pinnell, K-5
- May 10th – June 11th

iReady Math, 6-8
- Administered according to calendar
- Next administration May 17th – June 11th

iReady ELA, K-8
- Administered to all BSI students
- Next administration May 17th – June 11th

MAP Assessments will resume 2021-2022
- April / May for Honors / Gifted

NNAT
- October 2021

West Orange Public Schools
District Assessment Calendar 2020-2021

FALL 2020

Date	Test	Grade
Sept. 21 – Oct. 9	District Assessments: i-Ready Math	6-8
Oct. 26 – Nov. 13	District Assessments: F&P	1 – 5
Dec. 1 – 22	District Assessments: F&P	K

Winter/Spring 2021

Date	Test	Grade
January 7 – 31	i-Ready Math	6 – 8
February 1 – 19	District Assessments: F&P	1 – 5
February 1 – 19	District Assessments: Kindergarten Early Literacy	K
TBD	NNAT3 (Gifted Program Assessment)	3, 4, 5
TBD	InView (Gifted Program Assessment)	2
Feb. 16 – May 21	ACCESS for ELLs	K – 12
Jan. 4 – May 7	NJSLA-ELA & Math Portfolio Appeals	12
March 8 – June 11	DLM-ELA, Math, Science	3 – 8, 11
March 15 – June 11	NJSLS-ELA	3 – 9
March 15 – June 11	NJSLA-Math	3 – 9
May 24 – June 11	District Assessments: F&P	K – 5
May 3 – 14	Advanced Placement Testing	11, 12
March 15 – June 11	NJSLA-Science	5, 8, 11
May 17 – June 7	i-Ready Math	6 – 8
May 17 – June 7	District Assessments: MAP (Reading / Language)	K – 10
May 17 – June 7	District Assessments: MAP (Math)	1-5, 9-12

Note: The 2020-2021 District Assessment Calendar is subject to change based on direction from the NJDOE and the status of School Reopenings.

The Road Forward Spring Assessment Data Collection

SY 2020 * SY 2021

The Road Forward Spring Assessment Data Collection
November 16th – February 19th, 2021

STATE OF NEW JERSEY
DEPARTMENT OF EDUCATION
A Memo from the New Jersey Department of Education

Date: February 25, 2021

To: Chief School Administrators, Charter School and Renaissance School Project Leads

From: Lisa J. Gleason, Ed.D., Assistant Commissioner
Division of Academics and Performance

The Road Forward: Spring Assessment Data Collection

As announced on February 19, 2021, to fill data gaps caused by unusual statewide assessment circumstances and to ensure that students are making meaningful growth toward grade-level standards, the New Jersey Department of Education (NJDOE) will collect data from locally administered assessments that provide a snapshot of student learning during this school year.

The purpose of this collection is to obtain mid-year local assessment data that can be used to determine whether students are on track to meet their grade level New Jersey Student Learning Standards (NJSLS) for this year. Each district will rely on local English language arts (ELA), mathematics, and science interim assessment data to report student progress through a NJDOE-provided template. Specifically, districts will report progress on:

- ELA; K-10
- Math; K-8; Algebra I, II and Geometry
- Science: K-11; Chemistry, Biology, Physics, Earth and Space Science

Districts will use local assessment data to report on whether students are below, on, or above grade level, with "grade level" referencing the district's expectations of student mastery of the New Jersey Student Learning Standards (NJSLS) at a designated point in time. While yearly midpoints vary across the state, for the purposes of this collection, the interim assessment data must come from assessments administered between **November 16, 2020 and February 19, 2021**. An interim assessment will be defined as a comparison of student understanding or performance against a set of uniform standards within the same school year at periodic intervals, frequently at the end of a grading period. It may contain hybrid elements of formative and summative assessments, or a summative test of a smaller section of content within a unit or a semester. Alternative assessments for special populations of students may be utilized provided that they align with the standards used for all other students and occur within the designated time frame.

Content Area	Grades	District Assessments
ELA	K-5	Vendor: Reading Levels, Raz Kids
	6-10	District: Culminating Writing Assessments
Math	K-5	Vendor: Every Day Math End of Unit Assessments
	6-8	Vendor: iReady Math
	Algebra I Algebra II Geometry	District: Major Assessments
Science	K-5	District: Performance Based Assessments
	6-8	District: Culminating Unit Assessments
	Chemistry Biology Physics Earth & Space	District: Performance Based Assessments

English Language Arts

SY 2021-2022 | **Beatrice Hanratty, K-5**

Elizabeth Veneziano, 6-12

ELA K-12: Spring Assessment Data Collection

ELA K-5 Reading Benchmarks

ELA 6-10 Culminating Writing Assessments

K-5 English Language Arts District Assessments 2020-2021					
Grade Level	# Total Enrollment	# Total Participated	% Total Below Grade Level	% Total At Grade Level	% Total Above Grade Level
K	427	406	33%	52%	16%
1	452	434	23%	25%	52%
2	478	462	41%	28%	31%
3	485	468	32%	32%	36%
4	483	471	39%	24%	37%
5	462	455	39%	23%	38%

6-8 Language Arts Literacy District Assessments 2020-2021					
Grade Level	# Total Enrollment	# Total Participated	% Total Below Grade Level	% Total At Grade Level	% Total Above Grade Level
6	551	474	36%	45%	18%
7	516	466	20%	57%	23%
8	506	482	25%	53%	22%

9-10 English Language Arts District Assessments 2020-2021					
Grade Level	# Total Enrollment	# Total Participated	% Total Below Grade Level	% Total At Grade Level	% Total Above Grade Level
ELA 9	530	522	16%	69%	16%
ELA 10	467	451	16%	66%	18%

Grades K–5

- 63% At or Above Grade Level

Grades 6-10

- 73% At or Above Grade Level

Grade 2

- *41% Below Grade Level*

Grades 4 & 5

- *39% Below Grade Level*

Grade 6

- *36% Below Grade Level*

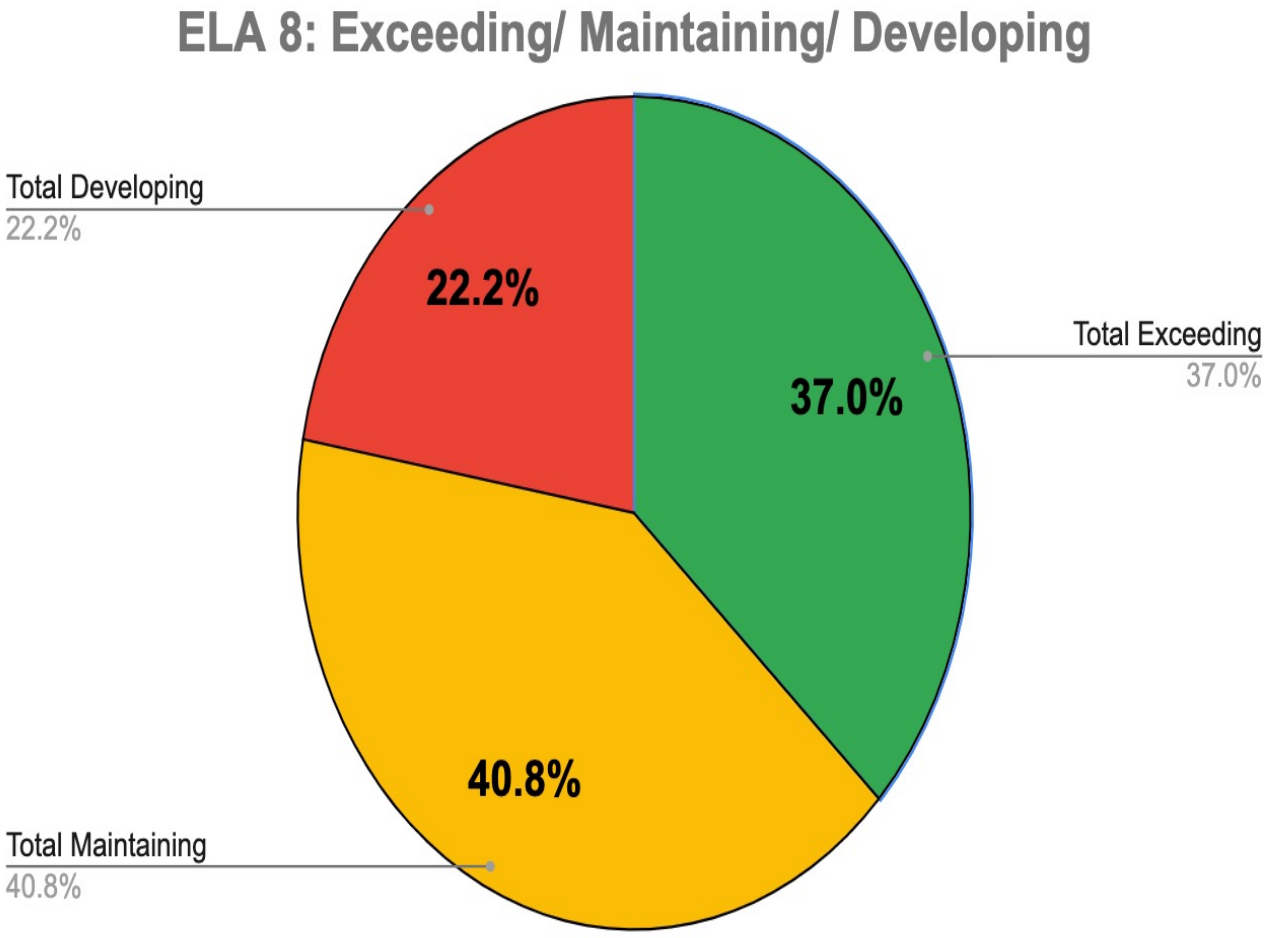
ELA K-12: Assessing Student Learning

ELA K-5 Reading Benchmarks

ELA 6-10 Culminating Writing Assessments

Student Learning Data Review	Findings
NJDOE Data Collection (Nov-Feb) • Reading Benchmarks (K-5) • Culminating Writing Task (6-10)	ELA K-12 Progress Dashboard (Feb 2021) Students Exceeding / Maintaining / Developing by grade level ELA K-12 Standards Analysis (Feb 2021) Examples: English 10 Grade 3 Reading/Writing Grade 4/5 & 5/6 Articulation
District Professional Development Days (Feb/April) • Standards Analysis (K-12) • Prerequisite Skills (6-12)	

ELA Assessing Student Learning: Standards Analysis and General Findings



Part I DIRECTIONS: As a grade level team, review and discuss each critical learning expectation and put an "X" in the appropriate column. Add any notes or comments to provide more specific information.

Grade 10 Critical Learning	To Address in Spring 2021	Needs Explicit Teaching	Needs Reinforcement	Needs Review	Targeted Notes
Reading:Literature					
Cite strong and thorough textual evidence and make relevant connections to support analysis of what the text says explicitly as well as inferentially, including determining where the text leaves matters uncertain.					Incorporated in all text analysis already; not a matter of "needing," as it is used naturally
Determine a theme or central idea of a text and analyze in detail its development over the course of the text, including how it emerges and is shaped and refined by specific details and provide an objective summary of the text.			X	X	Need concensus on how to teach theme (Ex: theme vs. topic)
Analyze how complex characters (e.g., those with multiple or conflicting motivations) develop over the course of a text, interact with other characters, and advance the plot or develop the theme.				X	Reinforced when analyzing texts/short stories
Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language evokes a sense of time and place; how it sets a formal or informal tone).		X			Tone and author's choices need explicit teaching (this is a diffcult concept for students
Analyze how an author's choices concerning how to structure a text, order events within it (e.g., parallel plots), and manipulate time (e.g., pacing, flashbacks) create specific effects (e.g. mystery, tension, or surprise).		X			
Analyze a particular point of view or cultural experience reflected in a work of literature from outside the United States, drawing on a wide reading of world literature.	X	X			Point of view already incorporated; focus for teaching needs to be on cultural experience
Analyze the representation of a subject or a key scene in two different artistic mediums, including what is emphasized or absent in each work (e.g., Auden's "Musée des Beaux Arts" and Breughel's Landscape with the Fall of Icarus).					Not a priority
Analyze and reflect on (e.g. practical knowledge, historical/cultural context, and background knowledge) how an author draws on and transforms source material in a specific work (e.g., how Shakespeare treats a theme or topic from mythology or the Bible or how a later author draws on a play by Shakespeare).			X		There is an opportunity to reinforce this standard with various texts
Reading: Informational Text					
Accurately cite strong and thorough textual evidence, (e.g., via discussion, written response, etc.) and make relevant connections, to support analysis of what the text says explicitly as well as inferentially, including determining where the text leaves matters uncertain.					Incorporated in all text analysis already; not a matter of "needing," as it is used naturally
Determine a central idea of a text and analyze how it is developed and refined by specific details; provide an objective summary of the text.					Need concensus on how to teach theme (Ex: theme vs. topic)
Analyze how the author unfolds an analysis or series of ideas or events, including the order in which the points are made, how they are introduced and developed, and the connections that are drawn between them.		X			
Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language of a court opinion differs from that of a newspaper).		X			
Analyze in detail how an author's ideas or claims are developed and refined by particular sentences, paragraphs, or larger portions of a text (e.g., a section or chapter).		X	X		
Determine an author's point of view or purpose in a text and analyze how an author uses rhetorical devices to advance that point of view or purpose.		X			
Analyze various perspectives as presented in different mediums (e.g., a person's life story in both print and multimedia), determining which details are emphasized in each account.					This can be covered but it is not a priority right now
Describe and evaluate the argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and reasoning.		X			These standards can be taught with texts such as *Just Mercy*
Analyze and reflect on (e.g. practical knowledge, historical/cultural context, and background knowledge) documents of historical and literary significance, (e.g., Washington's Farewell Address the Gettysburg Address, Roosevelt's Four Freedoms speech, King's "Letter from Birmingham Jail", Declaration of the Rights of Man and Citizen, U.N. Universal Declaration of Human Rights, etc.), including how they relate in terms of themes and significant concepts.					Not a priority
Writing: Argument					
Introduce precise claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that establishes clear relationships among claim(s), counterclaims, reasons, and evidence.		X			
Develop claim(s) and counterclaims avoiding common logical fallacies, propaganda devices, and using sound reasoning, supplying evidence for each while pointing out the strengths and limitations of both in a manner that anticipates the audience's knowledge level and concerns.		X			
Use transitions (e.g. words, phrases, clauses) to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.			X	X	
Establish and maintain a style and tone appropriate to the audience and purpose (e.g. formal and objective for academic writing) while attending to the norms and conventions of the discipline in which they are writing.			X	X	
Provide a concluding paragraph or section that supports the argument presented.		X	X		Students need practice writing conclusions for full length essays
Writing: Informational					
Introduce a topic; organize complex ideas, concepts, and information to make important connections and distinctions; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension.		X			

ELA K-12: Standards Analysis and General Findings

NJSLS ELA Strand	Strengths/ Areas of Student Progress	Need Reinforcement/ Areas of Focus
Foundational Reading	•Recognize the distinguishing features of a sentence (e.g., first word, capitalization, ending punctuation). •Decode regularly spelled one-syllable words. •Distinguish long and short vowels when reading regularly spelled one-syllable words.	•Demonstrate mastery of spoken words, syllables, and sounds (phonemes) by using knowledge that every syllable must have a vowel sound to determine the number of syllables in a printed word. •Know spelling-sound correspondences for common vowel teams. •Decode regularly spelled two-syllable words with long vowels. •Decode words with common prefixes and suffixes. •Read with sufficient accuracy and fluency to support comprehension.

NJSLS ELA Strand	Strengths/ Areas of Student Progress	Need Reinforcement/ Areas of Focus
Reading	•Read closely to determine what the text says explicitly, make logical inferences and relevant connections, cite specific textual evidence to support conclusions drawn from the text •Determine central ideas or themes of a text, summarize the key supporting details and ideas. • Integrate and evaluate content presented in diverse media and formats	•Analyze development of central idea or themes •Analyze how and why individuals, events, and ideas develop and interact over the course of a text •Analyze the structure of texts •Read and comprehend complex literary and informational texts independently and proficiently with scaffolding as needed
Writing	•Write arguments, informative/ explanatory texts and narratives •Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience •Use technology to produce and publish writing and to collaborate with others •Draw evidence from literary or informational texts to support **analysis and reflection**	•Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach •Conduct short as well as more sustained research projects •Draw evidence from literary or informational texts to support **research** •Write routinely over extended time frames for a range of tasks, purposes, and audiences

ELA K-12: Standards Analysis and General Findings

NJSLS ELA Strand	Strengths/ Areas of Student Progress	Need Reinforcement/ Areas of Focus
Speaking & Listening	•Prepare for and participate effectively in a range of conversations •Use of digital media to express information and enhance understanding of presentations	•Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally •Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric
Language	•Demonstrate command of the conventions of **basic** grammar and usage when writing or speaking. •Determine or clarify the meaning of words and phrases by using context clues	•Demonstrate command of the conventions of more **complex** grammar and usage when writing or speaking. •Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style •Demonstrate understanding of word relationships in word meanings •Acquire and use accurately a range of general academic and domain-specific words and phrases

ELA: Grade Distribution

English Language Arts: Grades 6-8			
Grade	ELA 6 (538 Students)	ELA 7 (505 Students)	ELA 8 (507 Students)
A	21%	45%	51%
B	37%	26%	28%
C	23%	15%	12%
D	10%	8%	6%
F	9%	6%	3%

English Language Arts (Grades 9-12)				
Grade	ELA 9 (508 Students)	ELA 10 (512 Students)	ELA 11 (505 Students)	ELA 12 (532 Students)
A	41%	41%	35%	41%
B	35%	33%	37%	36%
C	11%	13%	13%	11%
D	8%	6%	9%	8%
F	5%	7%	6%	5%

ELA Assessing Student Learning: Critical ELA Practices & Hybrid Learning

Critical ELA Practices were assessed to determine teacher ability in a hybrid learning environment to closely read, effectively annotate texts, and read / write with stamina. Teachers examined and noted the extent to which they were able to fully embed critical practices, if there were limitations or if they were unable to embed the practices. Areas of focus were identified in order to appropriately support critical ELA practices next year.

Able to embed	Able to embed with limitations	Unable to embed
• Close reading • Writing on demand • Teacher feedback - Provided oral, written feedback and conducted 1:1 conferences or via office hours • Independence and self advocacy - Remote learning promotes more student independence. Students did make use of office hours and additional support and did reach out to teachers when needing clarification, reteaching and/ or additional support	• Annotates text • Difficult when using electronic texts • Writing as process - Lack of time due to truncated schedule • Student use of teacher feedback - Was difficult to gauge • Actively listens/ productive in groups - this varied from class to class, some students very confident in speaking and collaborating via zoom and others had difficulty • Choral, echo, and partner reading (critical practices to build fluency for primary students)	• Reading stamina - No access to classroom libraries • Writing stamina - Difficult to monitor and support in virtual setting

ELA Assessing Student Learning: Vertical Articulation Meetings

ELA 4/5 Vertical Articulation

Discussion Questions (Approx. 5 min per question)	ELA 4 Responses	ELA 5 Responses

What were some of the academic struggles that were evident in your students upon entering the current grade level as a result of the pandemic closures in the Spring of 2020?	• Writing
	  ○ Text evidence + analysis
	  ○ Editing
	• Higher order thinking/critical thinking beyond text
	• Lack of reading stamina
	• Lack of reading independence
		• Reading fluency
		• Thinking beyond the text
		• Lack of reading stamina
		• Lack of reading independence

What strengths do your current students possess in language arts (reading, writing, word work). Be specific as possible.	• Writing
	  ○ Text evidence
	  ○ Essay structure
		• Writing
		  ○ Across different genres
		  ○ Putting textual evidence
		  ○ Structure

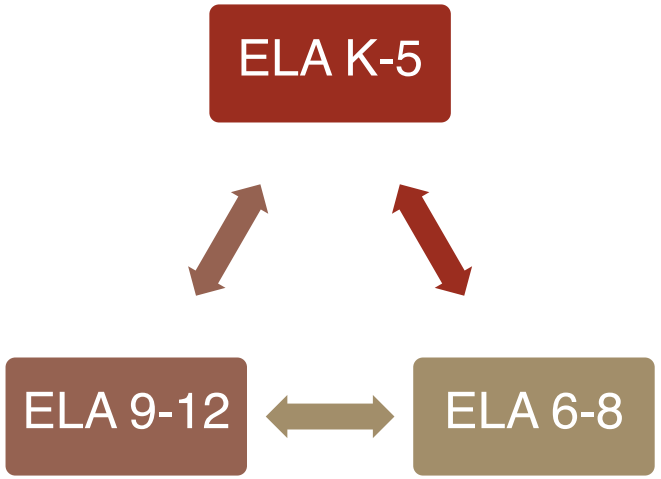
Reflecting on this current school year what are your top literacy (reading, writing, language) student concerns that you feel are a result of virtual/hybrid models?	• "Communication Gap"
	• Grammar
	  ○ Parts of speech
	• Revising/editing skills
	• Lack of independent reading stamina
		• "Communication Gap"
		• Grammar
		  ○ Parts of speech
		• Revising/editing skills
		• Lack of independent reading stamina

Given that these students have spent a full school year involved in a virtual/hybrid compacted curriculum; what are some of your academic concerns moving forward into the summer?	• Working on grammar
	• Increase reading stamina
	  ○ Book clubs
	  ○ Comprehension focus
	  ○ Higher order/critical thinking focus
	• Editing/revising writing
		• Working on grammar
		• Increase reading stamina
		  ○ Book clubs
		  ○ Comprehension focus
		  ○ Higher order/critical thinking focus
		• Editing/revising writing

Vertical Articulation Meetings

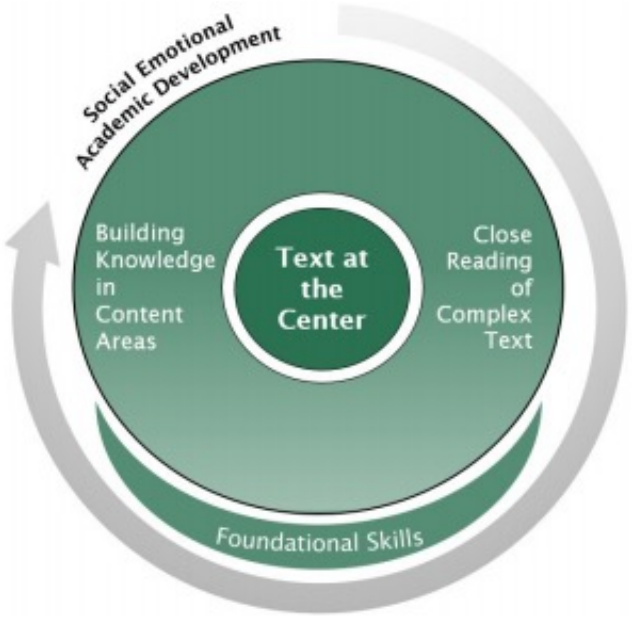
- Grades 4/5 Grades 5/6
- General Education, Special Education, Academic Support
- Guiding Discussion Questions
- Articulation of learning gaps by standard based on:
  - Data Review
  - Standards Analysis
  - Findings
  - Place in Curriculum
  - Pre-Requisite Skills
  - Critical ELA Practices

Assessments in ELA



Formative	Summative / Benchmarks
● Pre- assessments/ Baselines ● Participation in whole group and small gro up discussions ● Teacher observations ● Writing/ Reading conferences ● Conference notes/anecdotal logs ● Reading questions ● Characterization charts ● Text Evidence Selections ● Exit tickets ● Journals/ Portfolio Entries ● Do Now responses ● Short constructed writing responses ● Reading comprehension checks	Kindergarten Assessments: (Fall/Winter) ●Upper and lowercase letter identification ●Letter/ Sound identification ●High Frequency Words Reading Benchmarks: (K-5 measure independent and instructional levels) ●Fall (grades 1-5) ●Winter (all K, and below level 1-5) ●Spring window May 10-June 11 (all K-5) ●Formal Book Club Discussions/ Socratic Seminars ●Formal Writing Pieces (Literary Analysis & Argumentative) ●Performance Based Assessments scored using Standard Based Rubric ●CommonLit Reading Post Assessment

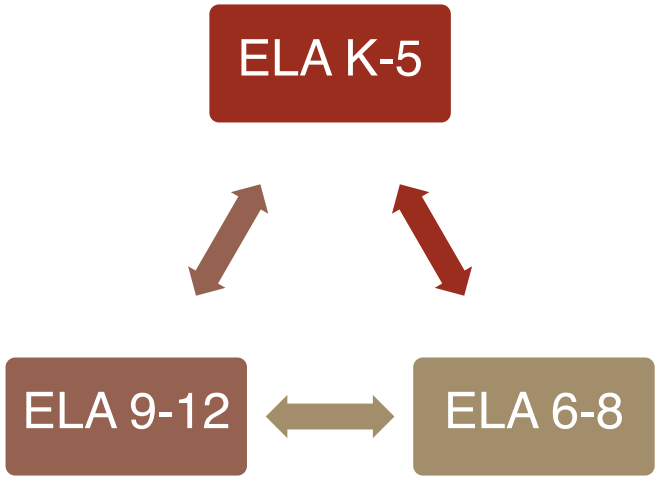
ELA Strategies to Address Student Learning Loss / Acceleration



ELA Strategies Current Year

- Compacted curriculum aligned to Student Achievement Partners Priority Instructional Content (depth vs. breadth)
- Co-teacher Model (K-2) reading and writing conferences
- Small group instruction (intervention to enrichment)
- Tiered intervention by BSI/ Reading Specialists/ Academic Support
- Focus on process and foundational structures of writing vs. product
- Office hours/ 1:1 Support

ELA Strategies to Address Student Learning Loss / Acceleration



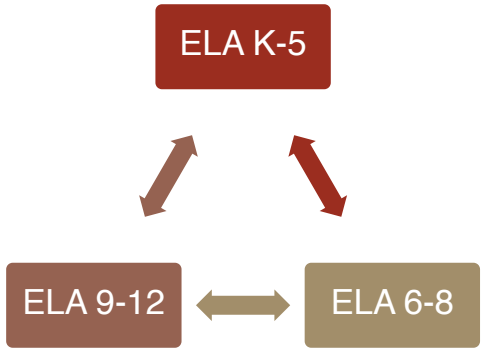
ELA Strategies 2021-2022

- Pre-assessments/ Baseline Assessments
- Identify grade level mastery and content and skills for explicit instruction
- Focus on identified prerequisite skills for units
- Either prerequisite units or embedding prerequisites skills within unit
- Curriculum Compaction
- Support priority standards while allowing time to scaffold prerequisite skills needed
- Word Study 3-5
- Scaffold and support phonics deficits, build upon vocabulary knowledge and word work skills
- Small Group/ Strategy Groups
- Targeted by formative/ summative assessments including reading/writing learning progressions
- Writing Progressions
- Further development of specific writing progressions and expectations per grade level

ELA K-12: Additional Initiatives

2020-2021 School Year

- Development of Virtual book rooms
- Strong Collaboration with Media Specialists (electronic books and resources)
- Added new mentor texts to K-5 curriculum
- Implemented new diverse and inclusive texts in 6-12
- Four Part Professional Development Series on Social Justice and Literacy
- Summer Learning Opportunities
  - K-5 ELA
  - Transitional Academic Support
  - Middle and High School Credit Recovery



2021-2022 School Year

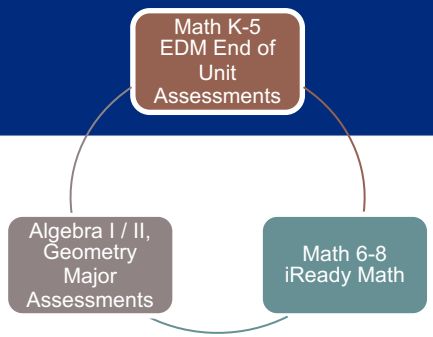
- Add more diverse and inclusive texts to classroom libraries for student access (K-8)
- Revise curricular units to include social justice themes (6-12)
- Continue partnership with Drew University National Writing Project (6-12)
- Continue professional development around Social Justice and Literacy

Mathematics

SY 2021-2022 | **Darlene Berg, K-5**

Emad AbuHakmeh, 6-12

Mathematics K-12



K-5 Mathematics District Assessments 2020-2021					
Grade Level	# Total Enrollment	# Total Participated	% Total Below Grade Level	% Total At Grade Level	% Total Above Grade Level
K	427	409	21%	60%	19%
1	452	437	20%	64%	16%
2	478	471	24%	59%	17%
3	485	475	34%	48%	18%
4	483	477	30%	50%	20%
5	462	453	36%	50%	14%

6-8 Mathematics District Assessments 2020-2021* (iReady November Administration)					
Grade Level	# Total Enrollment	# Total Participated	% Total Below Grade Level	% Total At Grade Level	% Total Above Grade Level
6	549	513	53%	22%	25%
7	502	479	51%	31%	18%
8	496	480	55%	21%	24%

Algebra I, Algebra II, Geometry 7-12 District Assessments 2020-2021					
Grade Level	# Total Enrollment	# Total Participated	% Total Below Grade Level	% Total At Grade Level	% Total Above Grade Level
Algebra I	566	557	23%	51%	27%
Algebra II	530	523	19%	54%	27%
Geometry	569	565	17%	58%	25%

Grades K–5

- 72% At or Above Grade Level

Grades 6-8*

- 47% At or above Grade Level
- iReady, November Administration
- May 17 Administration (Growth)

9-12

- 80% At or Above Grade Level

Grades 3, 5

- *34%, 36% Below Grade Level*

Math K-12: Assessing Student Learning

Data Reviewed		Findings
K-5	• NJDOE Data Collection - EDM End of Unit Assessments • Formative and Summative Classroom Assessments • Teacher anecdotal notes • School-Based Vertical Articulation using the NJSLS Pre-requisite Standards and Learning Objectives	• Summary of Incoming Grade Level Areas for Embedding Resources • Identifying Learning Gaps / Standard Analysis & Prerequisite Skills
6-12	• NJDOE Data Collection • iReady Diagnostic Exams (6-8) • Delta-Math Benchmark Assessments (9-12) • Major Assessments • Major projects and extended writing assignments • Performance Based Assessments (PBAs)	• 6-8 Mathematics - Summary of Data • 9-12 Mathematics - Summary of Data • Student Learning Gaps

Math Performance Based Assessment Example

Unit #5 : Exponential and Logarithmic Functions

- Algebra 2 CP/Honors
- Grades 8-10
- Unit 5 Alg 2-CP PBA

What students are able to demonstrate:

- Apply effective reasoning and modeling skills and practices to solve real world application problems.
- Use exponential growth and decay model to answer same questions related to a wide range of applications; bacteria growth, radioactive decay, and financial planning.
- Apply mathematical equations and functions to model and predict outcomes of natural phenomena and real life situations.
- Expand problem solving techniques and prepare for upper level math courses.

Math Assessing Student Learning: Vertical Articulation K-5

Summary of Incoming Grade One Areas of Embedding resources to support accelerated learning by standard (see below for detailed identification of Pre-requisite Standards and Skills from Grade Kindergarten)

This document is building-based and is prepared for incoming Grades 1-5 in all elementary schools.

Grade 1 Standard	Grade 1 Unit of Instruction	Prior year's Teacher's Notes	Resources
1.OA.A.1 Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions	Grade 1 Units Focus: **Unit 2,** **Unit 3,** **Unit 6,** **Unit 9**	• Focus on subtraction using manipulatives	Identify Readiness Learning Activities Identify prior year's lessons to support: **Kindergarten Lessons** **6.8** The Subtraction Symbol **6.9** Disappearing Train **6.13** Number Stories with Symbols (+, –, and =)
1.OA.B.3 Apply properties of operations as strategies to add and subtract.Apply the associative, commutative and identity properties as strategies to add and subtract (not necessary to use formal language)	Grade 1 Units Focus: **Unit 3,** **Unit 4,** **Unit 7**	• More number stories. • Counting on	Identify Readiness Learning Activities Identify prior year's lessons to support
1.OA.C.6 Add and subtract within 20, demonstrating fluency for addition and subtraction within 10.	Grade 1 Units Focus: **Unit 1,** **Unit 2,** **Unit 3,** **Unit 4,** **Unit 5,**	• Decompose numbers • Number sense is strong • Making ten	Identify Readiness Learning Activities Identify prior year's lessons to support

Planning for Instruction for School Year 2021 - 2022

Grade 4 to 5 articulation.

Grade 4 teachers will lead the discussion to inform Grade 5 teachers on the identification of any gaps in conceptual understanding or skill that might exist in students' understanding of mathematics standards. Grade 5 teachers will make notes to support planning for instruction.

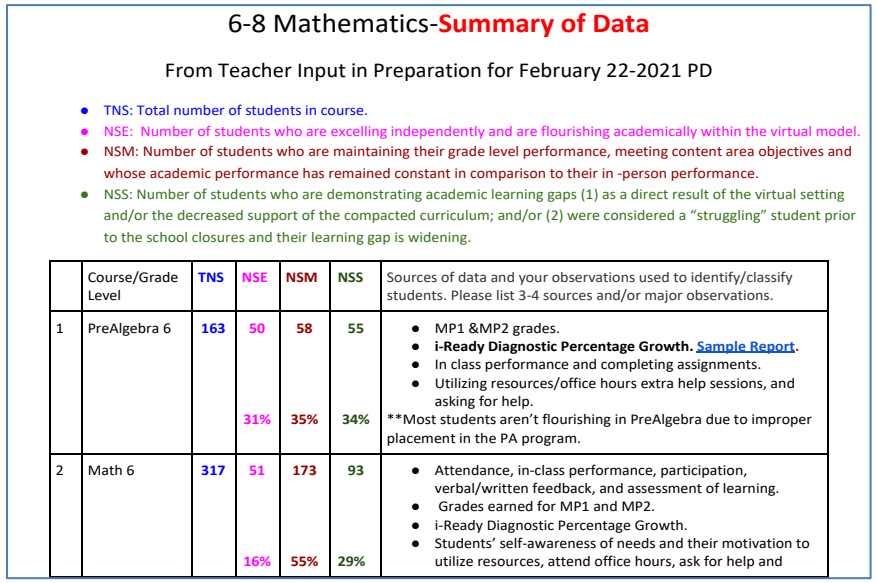
Domain: Number and Operations in Base Ten

Standard and Student Learning Objectives	Previous Grade(s) Standards and Student Learning Objectives **Grade 4 teachers reference the learning objectives here to advise Grade 5 teachers on students strengths or challenges with these prerequisite skills for Grade 5 Learning.**	**Grade 5 teachers make notes based on the information provided by the Grade 4 teachers regarding the need to frontload instruction or embed learning acceleration in Grade 5 Units.**
5.NBT.A.1 Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left. We are learning to/that… ▪ recognize in a multi-digit number that a digit is 10 times the value of the digit to its right ▪ recognize in a multi-digit number that a digit is 1/10 the value of the digit to its left	**4.NBT.A.1** Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. *For example,* recognize that 700 ÷ 70 = 10 by applying concepts of place value and division. We have learned to/that… ▪ recognize that a digit represents 10 times the value of what it represents in the place value to its right.	Grade 5 Units Focus Unit 2, Unit 4, Unit 6 **Students NEED a lot of review with 5.NBT.A.1** Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left.

Vertical Articulation Meetings

- Grades K-5
- General Education, Special Education, Academic Support
- Guiding Discussion Questions
- Articulation of learning gaps by standard based on:
  - Data Review
  - Standards Analysis
  - Gap Analysis
  - Curricular Struggles
  - Just in Time Teaching
  - Pre-Requisite Skills
  - Place in Curricular Units
  - Embedded Readiness and Support Resources
  - Accelerating the Learning / Filling in the Gaps

Math Assessing Student Learning: Standards Analysis & Student Learning Gaps 6-12



6-8 Mathematics-**Summary of Data**

From Teacher Input in Preparation for February 22-2021 PD

- TNS: Total number of students in course.
- NSE: Number of students who are excelling independently and are flourishing academically within the virtual model.
- NSM: Number of students who are maintaining their grade level performance, meeting content area objectives and whose academic performance has remained constant in comparison to their in -person performance.
- NSS: Number of students who are demonstrating academic learning gaps (1) as a direct result of the virtual setting and/or the decreased support of the compacted curriculum; and/or (2) were considered a "struggling" student prior to the school closures and their learning gap is widening.

	Course/Grade Level	TNS	NSE	NSM	NSS	Sources of data and your observations used to identify/classify students. Please list 3-4 sources and/or major observations.
1	PreAlgebra 6	163	50 31%	58 35%	55 34%	• MP1 &MP2 grades. • **i-Ready Diagnostic Percentage Growth.** Sample Report. • In class performance and completing assignments. • Utilizing resources/office hours extra help sessions, and asking for help. **Most students aren't flourishing in PreAlgebra due to improper placement in the PA program.
2	Math 6	317	51 16%	173 55%	93 29%	• Attendance, in-class performance, participation, verbal/written feedback, and assessment of learning. • Grades earned for MP1 and MP2. • i-Ready Diagnostic Percentage Growth. • Students' self-awareness of needs and their motivation to utilize resources, attend office hours, ask for help and

Student Learning Gaps

Course: Algebra II-Cp Grade Level: 10-11

Unit	Title of Unit	Identified up-to-date Learning Gap	Anticipated Future Learning Gaps
1	Quadratic Functions	Understanding graphs of quadratics - identifying main characteristics of graphs Solving quadratic functions by all algebraic methods Standard form, vertex form, general form	Students will struggle with graphing quadratics by hand Transforming to vertex form Absolute value functions
2	Polynomial Functions	End behavior Identifying zeros of the functions Synthetic division Factor Theorem and Remainder Theorem	Long division Higher degree functions - identifying characteristics, identifying functions from graphs
3	Rational Functions	Adding, subtracting, multiplying, and dividing rational expressions Solving rational equations Finding vertical and horizontal asymptotes algebraically	Graphing by hand, interpreting graphs Asymptotes
4	Radical Functions	Simplifying radicals Solving radical functions Domain and range	Graphing by hand Absolute value In-depth rationalizing
5	Exponential and Logarithmic Functions	?	Not sure if we will get to this unit in CP Algebra 2
6	Sequences and Series	?	Not able to get to this unit - anticipate no

Standards Analysis & Student Learning Gaps

- Grades 6-12
- General Education, Special Education, Academic Support
- Articulation of learning gaps by standard based on:
  - Summary Data Review
  - Guiding Questions
  - Gap Analysis against Critical Grade Level Expectations
  - Structure summer work, academic support around student learning loss
  - Embed Pre-Requisite Skills into Curricular Units
  - Accelerating the Learning / Filling in the Gaps

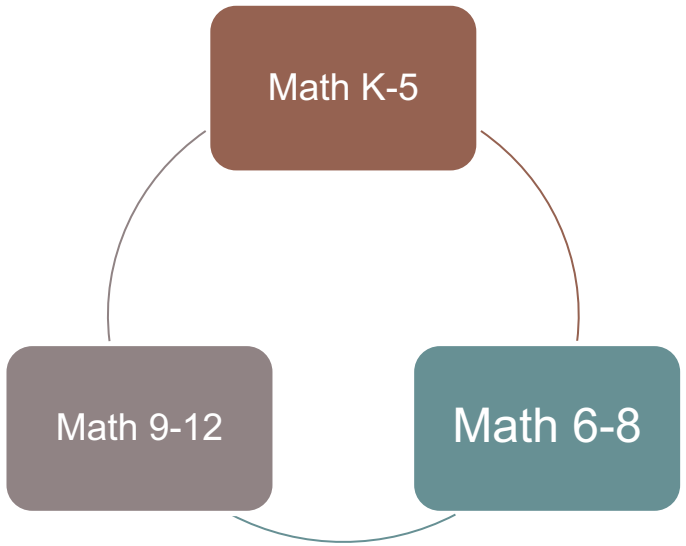
Math Elementary Findings

K-2 Math Findings and Recommendations	3-5 Math Findings and Recommendations
• **Students will need to do more word problems than usual** • Embed practice using number line/grid - counting up and back very hard to do virtually • Embed more practice with combination of 10 Facts • **Embed practice decomposing numbers from 11-19 using ten frames** • Increase use of manipulatives and hands-on demonstrations with objects because it was difficult in virtual setting • **Students do not have fluency with subtraction facts, this will need to be embedded** • Students will need a lot of mathematical modeling with how to draw and use objects to demonstrate their understanding • Students will need more time spent with math vocabulary so they genuinely internalize it and understand what is meant • **Students will need additional support with place value** • **Measurement was very hard virtually. Students will need to practice doing it independently and will need a lot of reinforcement with measurement using concrete manipulatives and tools** • **More time needed on word problems knowing when to add and when to subtract is still a struggle**	• **Frontload 2 step word multiplication and division word problems. Encourage use of drawings, like arrays to solve** • Frontload division • **Frontload reasonableness of answers in two-step word problems using mental computation and estimation strategies including rounding** • **Continue to review place value and build up to higher places** • Fractions Frontload visual equivalency and follow up with algorithm. Include a lot of hands on/and virtual. • **Frontload-unit fractions. Continue to review partitioning a whole** • Review fraction vocabulary (embed in lesson) • **Continue to practice with basic multiplication and chunk multiplication multi-step problems into labeled steps** • Frontload interpret numerical expressions to compare their values without evaluating them • **Embed practice with dividing by power of 10** • Embed reading, writing and comparing decimals to the tenths and hundredths place to review • **Embed additional help with converting improper fractions to mixed numbers.** • **Continue to support division understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions- may need to frontload** • Embed making common denominators for adding and subtracting fractions

Grade 7 and Algebra II: Findings

Grade 7 Math	Algebra II
Major findings (Areas of need of improvement): •Analyzing graphs, determining independent and dependent variables, and writing equations. •Mastery of all four operations with all rational numbers. •Solving equations with rationales. •Understanding and applying the concepts of markup, commission, percent of change, and percent error in modeling and problem solving.	Major findings (Areas of need of improvement): •Identifying main characteristics of the graphs of quadratic functions, solving quadratic equations by all algebraic methods, and representing quadratics using standard and vertex forms. •Analyzing equations and graphs of higher degree polynomial functions. •Analyzing graphs and equations of rational functions and understanding and applying the concepts of vertical and horizontal asymptotes. •Simplifying radical expressions, solving radical functions, and identifying domain and range.
Recommendations: •Ensure understanding of the relationship between graphs, tabulated data, and equations. •Ensuring deep understanding of GCF, LCM, and factors and multiples of numbers. •Emphasize the Distributive property and combining like terms while solving equations. •Applying ratios to modeling and problem solving •Ongoing emphasize of prerequisite concepts. •Focus of summer assignments and support activities should be on key concepts from all prerequisite courses.	Recommendations: •Emphasize inverse operations, factoring, combining like terms, and graphing. •Ensure proper representations of functions using coordinate plane, table of values, domain/range, and x- & y-intercepts. •Ensure better understanding of simplifying and solving techniques of rational and radical expressions and equations. •Establish deep understanding of analyzing graphs of quadratics, higher degree polynomials, rational, and radical functions. •Ongoing emphasize of prerequisite concepts. •Focus of summer assignments and support activities should be on key concepts from all prerequisite courses.

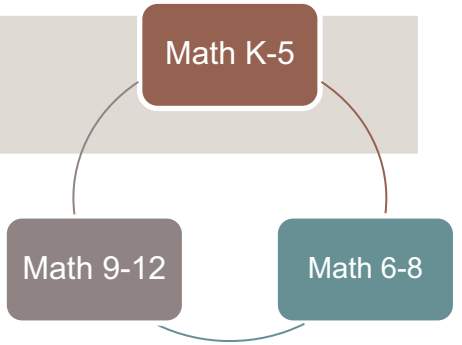
Assessments in Math K-12



Formative	Summative / Benchmarks
Grades K-5 • Daily Formative Assessments: • Mental Math Warm-Up - distributed practice to build fluency • Assessment Check-In identifies in each lesson the level of skill/content mastery for students who are making progress • Daily Writing and Reasoning Prompts to assess students ability to communicate understanding of concepts/skills/ problem-solving strategies • Independent Journal work • Small group work and classroom discussions. Grades 6-12 • Formative assessments / teacher observation • Small group work and classroom discussions. • Assignment completion using Delta Math, Kami documents, and i-Ready lessons/assessments. • Students' reflection and own assessment of learning.	Grades K-5 • End -of-Unit Summative Assessments (6 to 8 in total) • End-of-Unit Open Response or alternative Cumulative Assessments (6 to 8 in total) • MAP Math End-of-Year Assessment (scheduled for May/June) Grades 6-12 • i-Ready Diagnostic Tests for grades 6-8 • Delta-Math benchmark assessments for grades 9-12. • Major unit assessments. • Major projects and extended writing assignments. • Performance Based Assessments (PBAs)

Math Strategies to Address Student Learning Loss / Acceleration

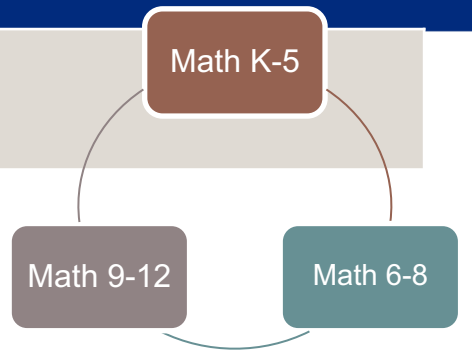
Math Strategies Current Year



- Teach grade-level content and maintain instructional rigor
- Prioritize content and learning using guidance on identifying essential learning at each grade level from Student Achievement Partners, 2020-21 Priority Instructional Content
- Small group instruction during afternoons or Fridays based on students' needs, identified through formative assessment
- Remote Instructional Guide for each grade level K-5 that provides Unit by Unit strategies for teaching specific lessons virtually. The guides include: Identified prior grade level lessons that supported pre-requisite skills to provide additional instructional support for teachers to teach-into-the-gaps as they provided instruction aligned to the on-grade-level curriculum
- Videos and tutorials incorporated into virtual and hybrid lessons. Students view these during the lesson and afterwards as teachers would link some videos to the Google Classroom for easy access
- Increased use of virtual manipulatives and incorporation of student e-Journals to support digital learning
- Sample Math Menus to organize asynchronous-day learning activities for students
- Identified priority lessons to ensure that instructional time was dedicated to the most critical focus standards
- Compacted Curriculum aligned to student achievement partners priority instructional content (depth vs. breadth).
- i-Ready diagnostic tests and instruction for grades 6-8 to provide ongoing and updated individualized learning plans to meet the individual needs of all students.
- Delta-Math for grades 8-12 to provide additional practice and ongoing assessment of learning and help teachers provide individualized learning opportunities for all learners.

Math Strategies to Address Student Learning Loss / Acceleration

Math Strategies 2021-2022



Grades K-5

- Front Load Instruction - identify in curriculum documents
- Embed Learning Acceleration - identify in curriculum documents
- Work with individual schools to analyze data and monitor and adjust- Data will be appropriate to each specific building's instructional team's needs.
- Investigate Opportunities for Flipped Classroom Activities
- Incorporate the First 20 Days for Grades K and 1 as SEL and development of mathematical habits of mind - Provide teachers with PD, June 2021

Grades 6-12

Pre-Assessments

- Administer pre-assessments based of summer assignments
- Utilize data from pre-assessments to establish baseline and effective planning for integration of prerequisite concepts throughout the units of study.

Curriculum Compaction

- Support priority standards while allowing time to scaffold prerequisite skills needed

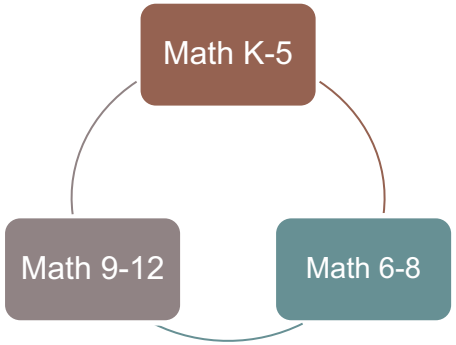
Math K-12: Additional Initiatives

Grades K-5

Leveraging the National Institute for Excellence In Teaching resources which identify the following to support students in accelerating their learning and increase momentum going into the 2021-22 school year.

The Accelerated Learning Cycle identifies four steps to support student learning and includes guiding questions and considerations for school teams and individual educators to help address unfinished learning.

- Analyze benchmark data
- Address the need by focusing on priority content
- Establish groups for accelerated learning
- Monitor and adjust for impact



Grades 6-12

Summer Assignments

- Design summer assignments for all students to focus on key concepts and essential prerequisite materials.
- Provide summer support for students to review key concepts and essential prerequisite materials and complete summer assignments.

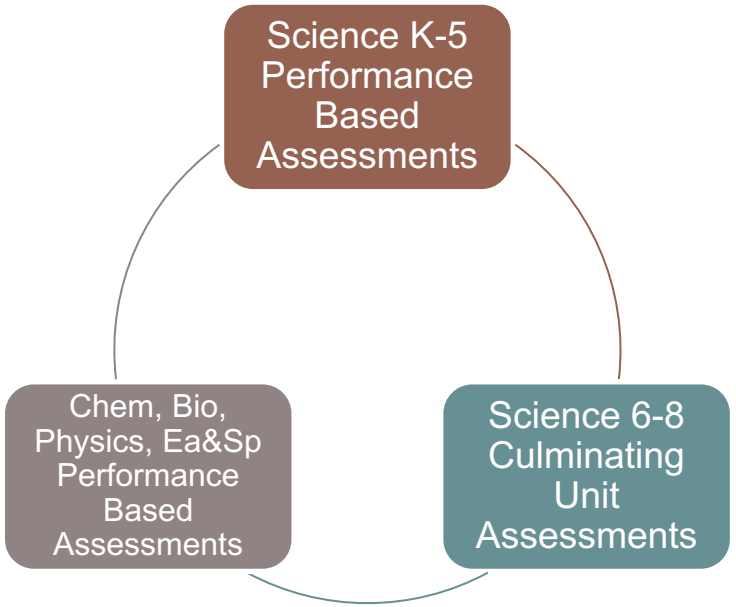
Math Instructional Support

- Summer support and tutorials for all math students 6-12

Science

SY 2021-2022 | Stephanie Suriano, K-12

Science K-12



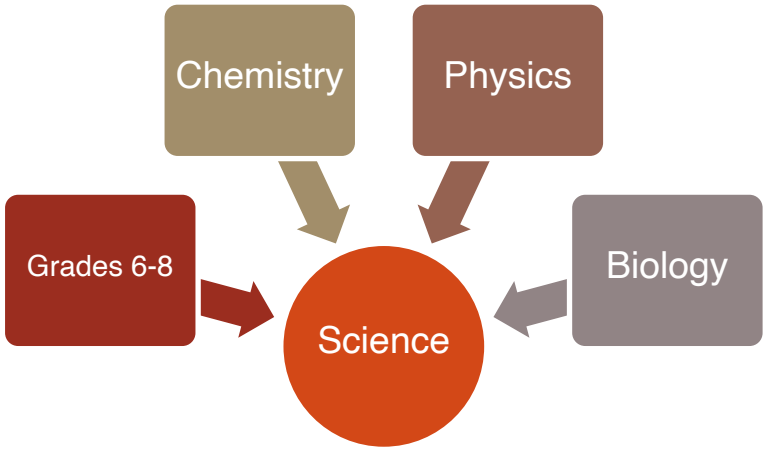
K-5 Science District Assessments 2020-2021					
Grade Level	# Total Enrollment	# Total Participated	% Total Below Grade Level	% Total At Grade Level	% Total Above Grade Level
K	427	403	14%	70%	16%
1	452	432	17%	71%	12%
2	478	466	23%	69%	9%
3	485	472	30%	58%	11%
4	483	417	26%	47%	26%
5	462	458	33%	50%	16%

6-8 Science District Assessments 2020-2021					
Grade Level	# Total Enrollment	# Total Participated	% Total Below Grade Level	% Total At Grade Level	% Total Above Grade Level
6	551	550	19%	40%	40%
7	516	508	11%	40%	49%
8	506	501	22%	55%	23%

9-12 Science District Assessments 2020-2021					
Grade Level	# Total Enrollment	# Total Participated	% Total Below Grade Level	% Total At Grade Level	% Total Above Grade Level
Biology	557	544	18%	51%	31%
Chemistry	615	601	16%	53%	31%
Earth & Space	170	170	18%	79%	3%
Physics	310	286	8%	61%	31%
Other Sciences	70	68	7%	82%	10%

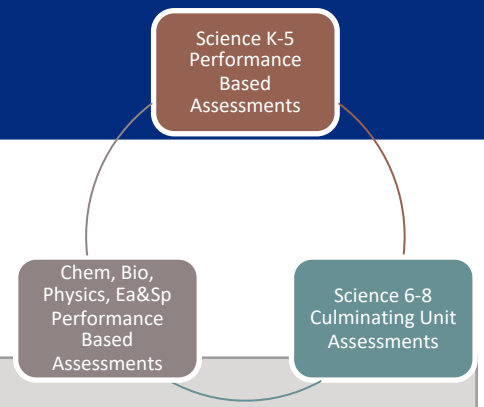
Science: Grade Distribution

Science: Grades 6-8			
Grade	Science 6 (538 Students)	Science 7 (505 Students)	Science 8 (507 Students)
A	28%	50%	46%
B	41%	27%	29%
C	19%	13%	15%
D	7%	5%	4%
F	5%	5%	4%



Science: Biology, Chemistry, Physics			
Grade	Biology (570 Students)	Chemistry (512 Students)	Physics (384 Students)
A	44%	38%	53%
B	25%	29%	30%
C	15%	15%	11%
D	7%	9%	5%
F	9%	9%	1%

Science K-12: Assessing Student Learning



Student Learning Data Review	Findings
NJDOE Data Collection (Nov-Feb) • Performance Based Assessments (K-5), (9-12) • Culminating Unit Assessments (6-8)	Science K-12 Curriculum Progress & Standards Analysis (Feb 2021) Identifying Progress in Student Learning Course Reflection and Action Plan
District Professional Development Days (Feb/April) • Curriculum Progress & Standards Analysis • Student Needs Assessment	

Science K-12: Assessing Student Learning

Part I DIRECTIONS: As a grade level team, review and discuss each NGSS Performance Expectation and put an "X" in the appropriate column. Add any notes or comments to provide more specific information.

Physics Performace Expectations	Addressed	To Address in Spring 2021	Needs Explicit Teaching	Needs Reinforcement	Needs Review	Notes
Kinematics						
HS-PS2-1: Analyze data to support the claim that Newton's second law of motion describes the mathematical relationship among the net force on a macroscopic object, its mass, and its acceleration.	X			x		As of the halfway point in the year, Honors has addressed the performance expactation, and CP will revisit for reinforcement.
Newton's Laws						
HS-PS2-1: Analyze data to support the claim that Newton's second law of motion describes the mathematical relationship among the net force on a macroscopic object, its mass, and its acceleration.	X			x		Basic Free body Diagrams (AP classes did more detail than honors and regular.)
Momentum						
HS-PS2-2: Use mathematical representations to support the claim that the total momentum of a system of objects is conserved when there is no net force on the system.	X			x		As of the halfway point in the year, Honors has addressed the performance expactation, and CP will revisit for reinforcement.
HS-PS2-3: Apply scientific and engineering ideas to design, evaluate, and refine a device that minimizes the force on a macroscopic object during a collision.				X		This performance expectation requires hands-on work that is not feasible during virtual learning, It will be addressed during hybrid instruction where some students will perform the experiment while those at home make observations. Both will share and analyze the respective data collected.
Energy						
HS-PS3-1: Create a computational model to calculate the change in the energy of one component in a system when the change in energy of the other component(s) and energy flows in and out of the system are known.	X	x				As of the halfway point in the year, Honors has addressed the performance expactation, and CP will address this spring.
HS-PS3-2: Develop and use models to illustrate that energy at the macroscopic scale can be accounted for as a combination of energy associated with the motions of particles (objects) and energy associated with the relative position of particles (objects).	X					
HS-PS3-3: Design, build, and refine a device that works within given constraints to convert one form of energy into another form of energy.				X		This performance expectation requires hands-on work that is not feasible during virtual learning, It will be addressed during hybrid instruction where some students will perform the experiment while those at home make observations. Both will share and analyze the respective data collected.
Mechnical Waves						
HS-PS4-1. Use mathematical representations to support a claim regarding relationships among the frequency, wavelength, and speed of waves traveling in various media.		X				
HS-PS4-3. Evaluate the claims, evidence, and reasoning behind the idea that electromagnetic radiation can be described either by a wave model or a particle model, and that for some situations one model is more useful than the other.				X		This is a very narrow standard and can be addressed in the future.
HS-PS4-5. Communicate technical information about how some technological devices use the principles of wave behavior and wave interactions with matter to transmit and capture information and energy.		X				
Electricity and Magnetism						
HS-PS1-3. Plan and conduct an investigation to gather evidence to compare the structure of substances at the bulk scale to infer the strength of electrical forces between particles.	X	x				As of the halfway point in the year, Honors has addressed the performance expactation, and CP will address this spring. This is typical pacing for this performance expectation.
HS-PS2-5. Plan and conduct an investigation to provide evidence that an electric current can produce a magnetic field and that a changing magnetic field can produce an electric current.		x				

Standards Analysis & Student Learning Gaps

- Grades 4-12
- General Education, Special Education
- Articulation of learning gaps by standard based on:
  - Data Review
  - Measuring Curriculum Progress
  - Individual and Collective Course Reflections
  - Science Action Plan / Recommendations

Science K-12: Assessing Student Learning

Course(s)/ Level: Biology and Dynamics of Healthcare

Identifying Student Learning Progress

Resources:
Compacted Curriculum Units
February 22 PD Day: Student Progress 2020-2021 and Science Curriculum Progress

What are your assessments (informal and formal) revealing about student performance this year? (The most important things to list are right from PowerSchool or Google Forms.)	
Observation	**Evidence**
BIOLOGY	
Students needed additional explanation of scientific method and experiment design	On a summative assessment assignment, students scored an average score of 56%. An additional lesson and additional practice was woven into other assignments to increase student proficiency.
Students struggled with investigating homeostasis using human HR model.	Students performed a lab and needed additional lessons to address homeostasis as it relates to return to resting HR following exercise. After several drafts of the lab report were done with instructor feedback, students scored an average of 67%. Some aspects of the assignment included scientific method and experimental design as previously mentioned need more attention to increase proficiency.
Students increased their understanding of human homeostasis.	After continued practice, student scores on a human homeostasis lab simulation later averaged 93%. And another summative activity showed an average of 86% (reduced by the fact that 5 students in one class period did not submit the assignment).
Students demonstrated proficiency with the characteristics of life and cell structure.	Students completed a peardeck activity with an average score of 89%. Students scored an average of 76% on the quiz for this topic.

Identifying Student Learning in Science

What are your assessments (informal and formal) revealing about student performance this year?

What (if any) critical skills or disciplinary core ideas need to be reinforced so that students are prepared for the next science course?

What strategies / supports can be put in place to support struggling students?

What strategies / supports can be put in place to support our students who are excelling?

Science K-12: Assessing Student Learning

2020-2021 Course Reflection and Action Plan	
Course	Chemistry
Subsequent Course	Physics
PART 1: Individual Course Reflections	
Individual Course Reflections *Make sure your doc is set to "anyone with this link can open." Cut and paste your link into this space so that others can see your data.* Assessing Student Learning in Science 2020-2021 TEMPLATE Sample One Sample Two Sample Three	• Teacher 1 • Teacher 2 • Teacher 3 • Teacher 4
PART 2: Collective Course Reflections	
Collective Course Reflections *Look at the sheets you filled out as individuals and as a group,*	• Students need additional help with balancing chemical equations and determining the types of chemical bonds. • Compared to previous year, some students need more help with conceptual problems and questions that need mathematical calculations.

Patterns across standards

Foundational skills and knowledge from prior science course are required for students to be successful next year, to include

- Topics
- Concepts
- Disciplinary Core Ideas, standards
- Science and Engineering Practices

Adjustments that will be made based on the recommendations

Science K-12: General Findings

- Majority of students have been able to demonstrate their understanding on the Performance Based Assessments.
- Adjustments were made to strategizing and pacing the spring concepts.
- Student were missing the experimental component of investigations, although data analysis could still be conducted.
- It was challenging to integrate the Engineering (problem solving) NGSS components.

Science K-12: Sample Findings

Grade 4	
• Overall students had difficulty with concepts and properties of waves and wave motion. • Students struggled with energy concepts of energy transfer and transformation.. • Students struggled with concepts of digitized information. • Students demonstrated comprehension of Renewable and Non-Renewable Energy resources.	• Reinforce Investigation process. • Once we return to in-person instruction, providing opportunities for more hands-on investigations. • Provide extra-support in guided reading of informational text-use of leveled readers provided. • More integration with ELA teachers and curriculum.
Physics	
• In both classes, data analysis and analyzing patterns seemed to be a big problem compared to the past. This relates to either relating an equation to a linear relationship such as in honors or connecting a graphical representation to words. • In general, using mathematical models such as equations and graphs has posed a weakness this year, more than normal. • There will be an inherent weakness in designing labs next year with real equipment for the AP classes as labs have been either done by video or by simulation. That experience will need to be a focus for next year.	• For AP 1, the end of year project should focus on math modeling, defending with evidence, and communicating information. • In honors, keep the focus on math modeling and analyzing and interpreting data during the waves and electricity unit. • In honors, focus on experimental design during labs to prepare them for AP labs.

Science Strategies to Address Student Learning Gaps

Compacting curriculum

Reflection on DCIs and eliminated any redundancy

Analysis of progress with the compacted curriculum in February.

Monitoring student progress on major assessments. If necessary, adjustments were made to pacing to reinforce core ideas or skills practice.

Monitoring student progress and discuss in department meetings.

Collaboration with disciplinary or grade level teams to analyze this data, find patterns, and develop action plans to resolve any issues.

At the end of this year, vertical articulation will take take place. Each teacher will have access to the information provided by the previous year, to help them plan and provide additional support if necessary.

Science K-12: Ongoing Strategies

- Grade level teachers will provide additional support to students as they develop their CER (Claim, Evidence, Reasoning) writing skills.
- Teachers will provide time introduce and practice conducting investigations including variables.
- Although not typically necessary, constructing explanations will be modeled as a whole class first.
- Summer Assignments for Honors/Advanced Placement students (9-12)
- Grade level teachers will be provided the data from the previous science year to assist in customizing their lessons to student needs.

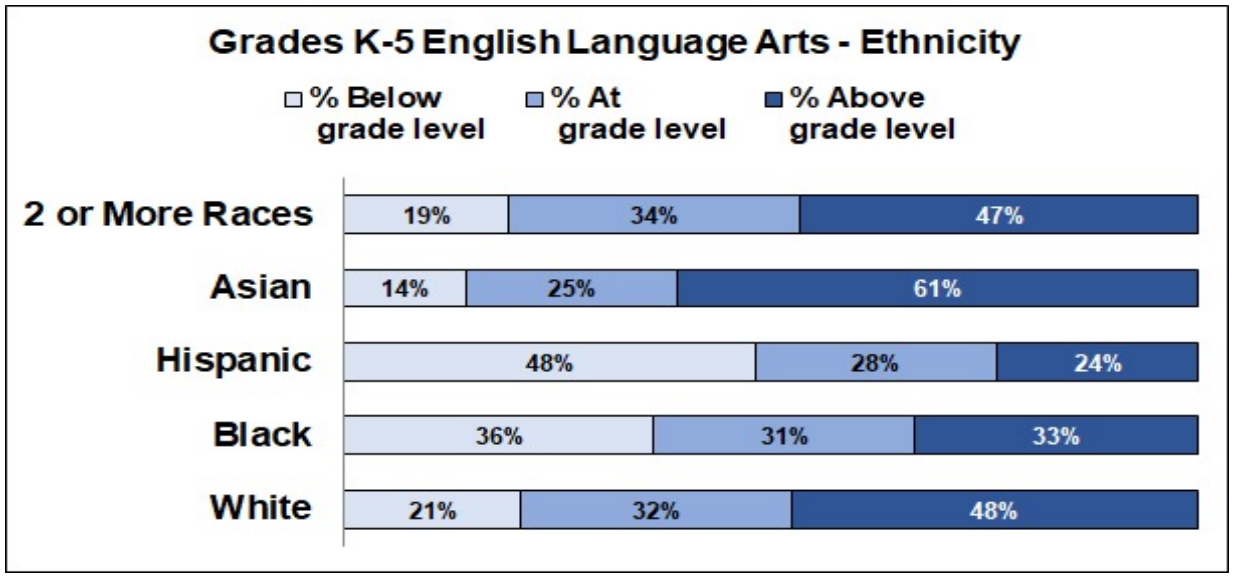
- In general, because NGSS has the same Science and Engineering Practices from K-12, students always have the opportunity to improve their skills. Teachers must recognize in September that they may need to scaffold lessons in the event they find students skills are less developed than a typical year.

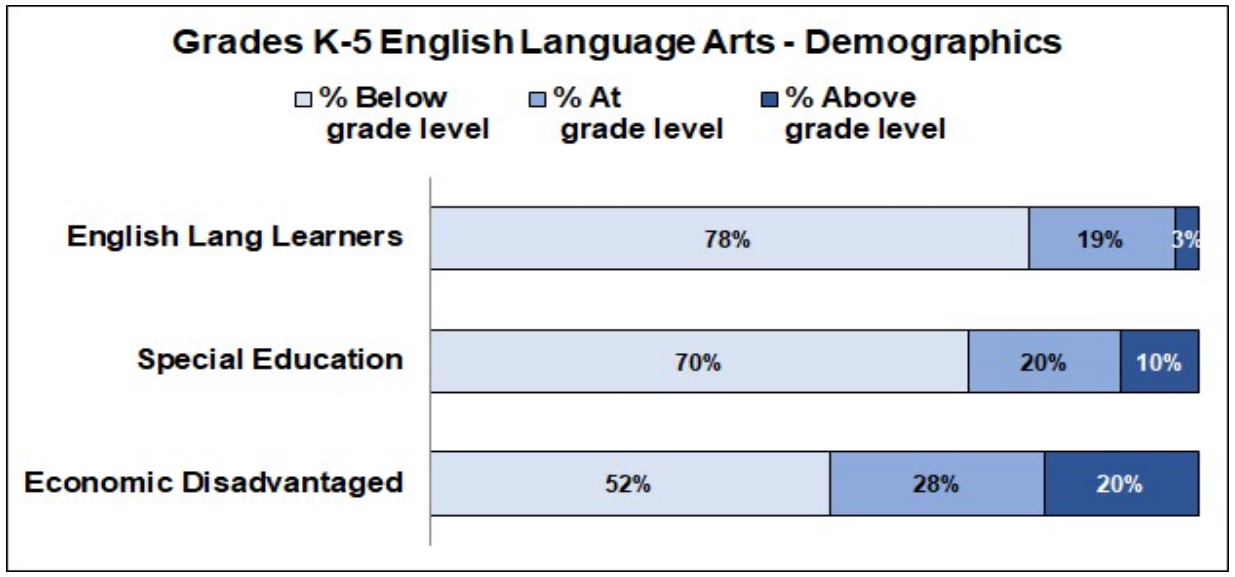
- NGSS also has Disciplinary Core Ideas for Life, Physical, and Earth and Space Science for K-12. If a concept was taught in less time than usual, there is a natural spiraling of the concept built into the standards.

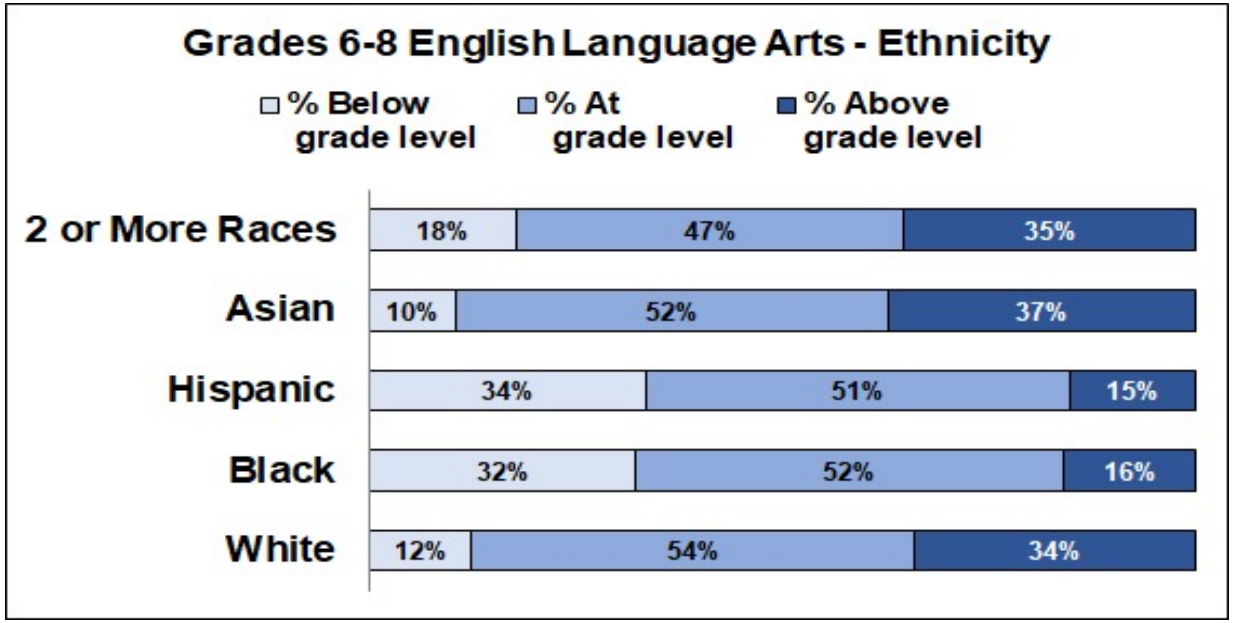
Performance by Demographic

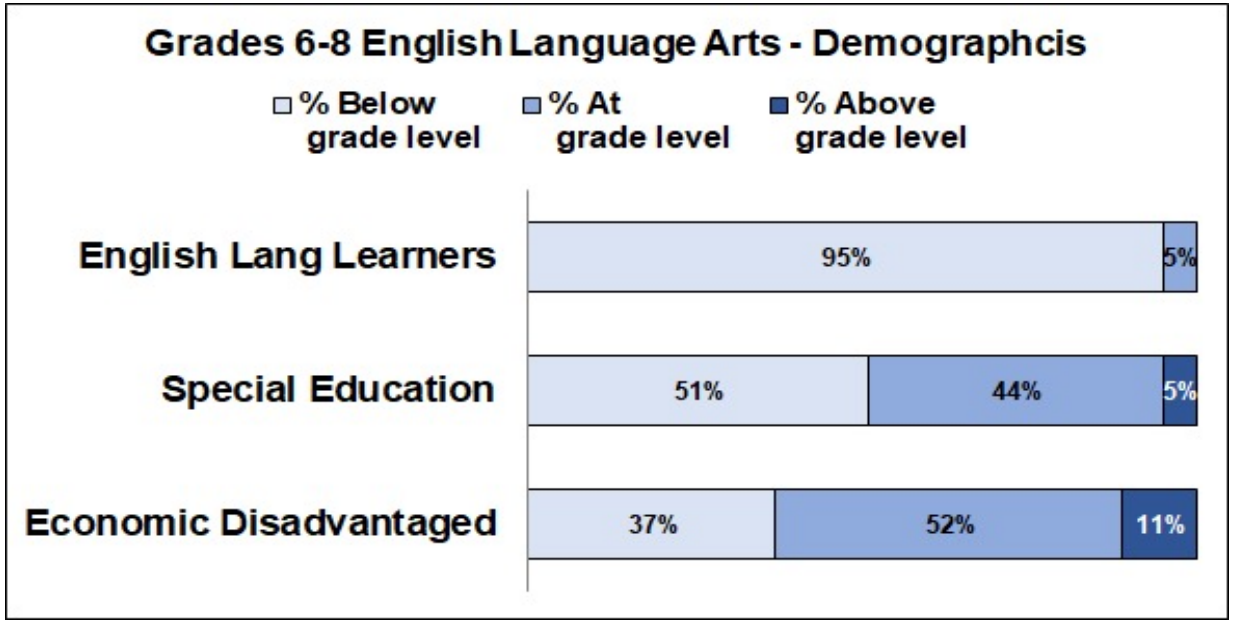
SY 2021-2022

ELA: Performance by Ethnicity & Demographic









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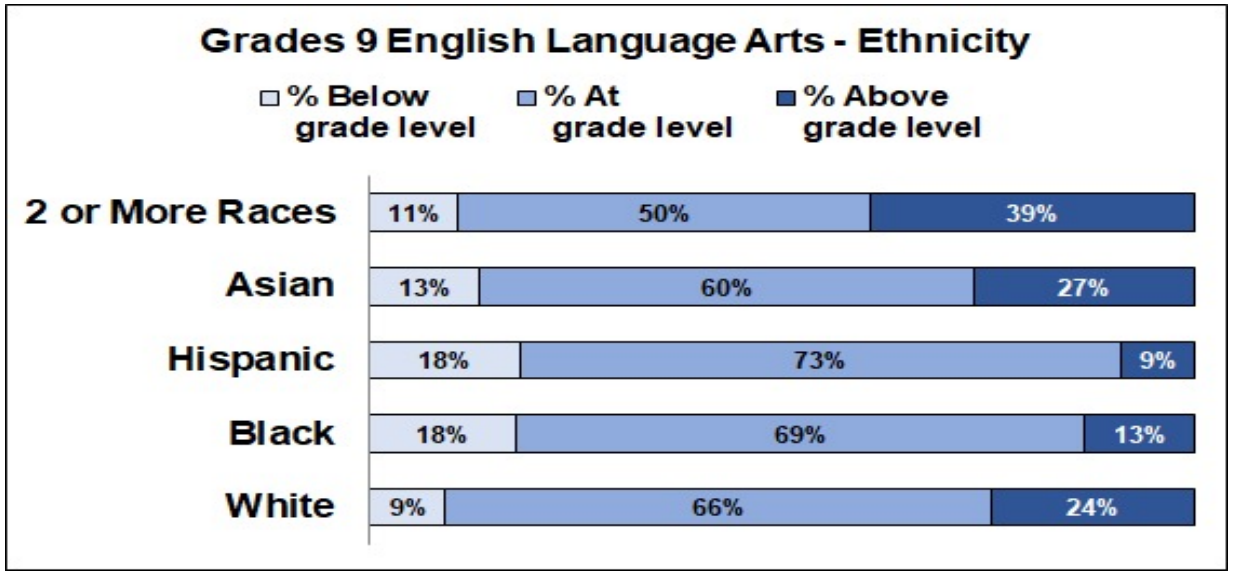
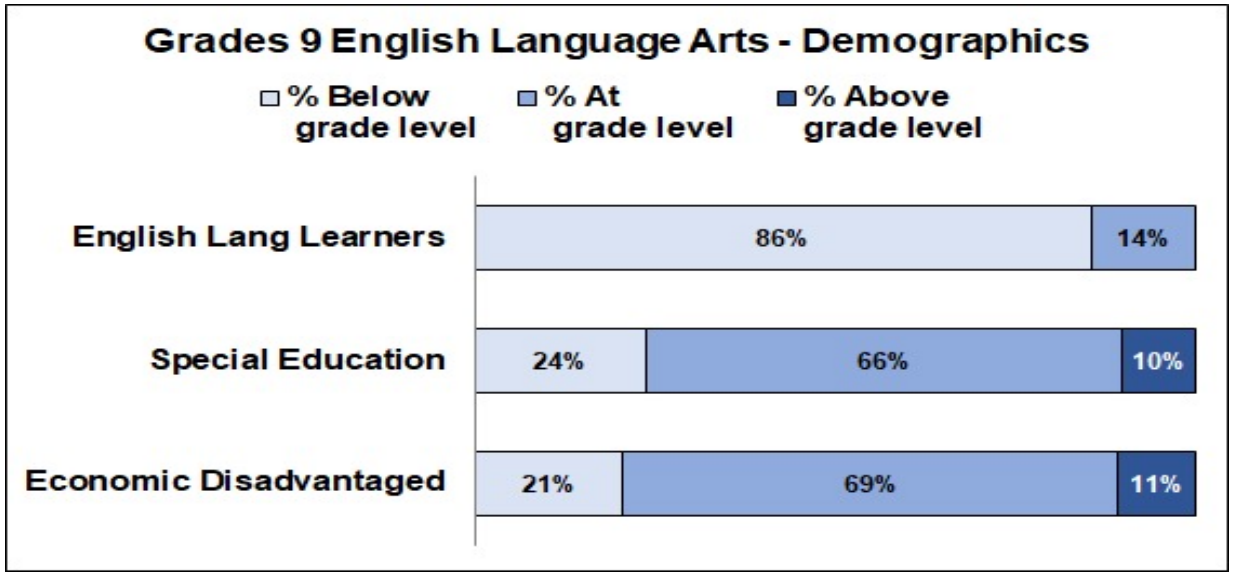
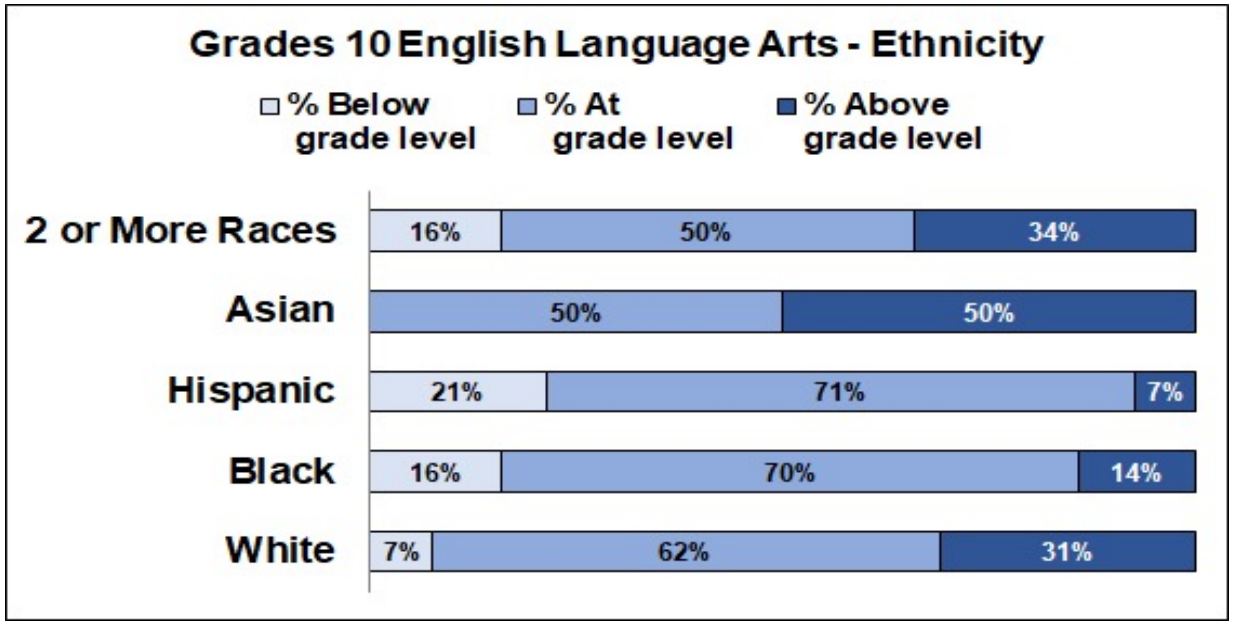
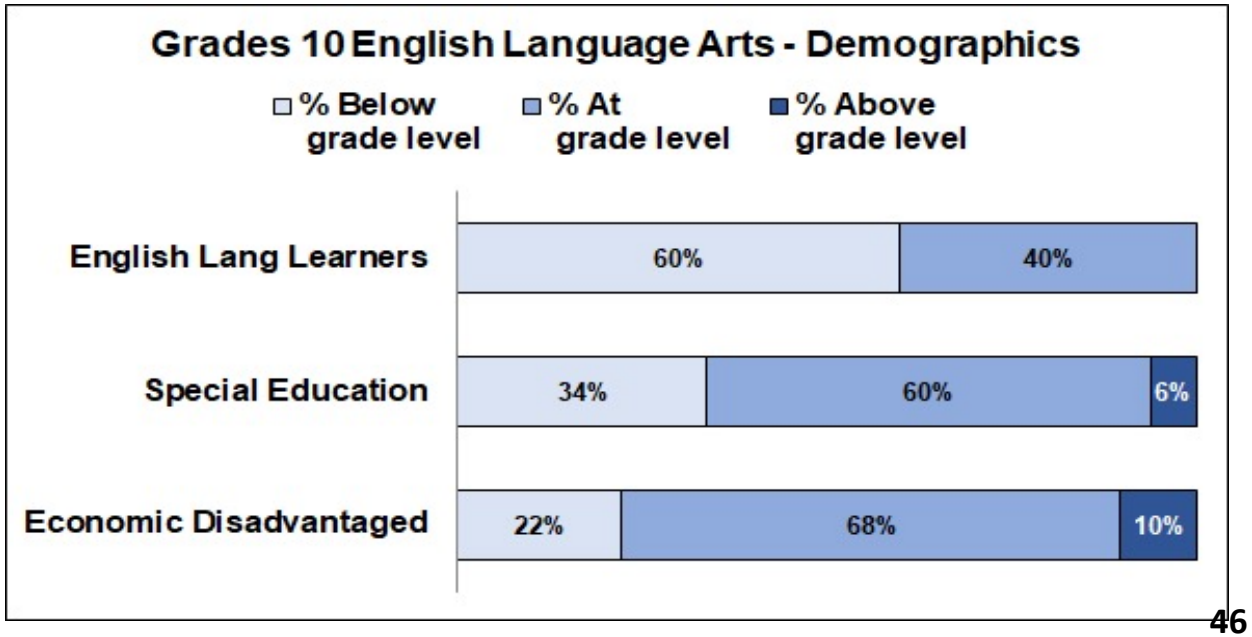
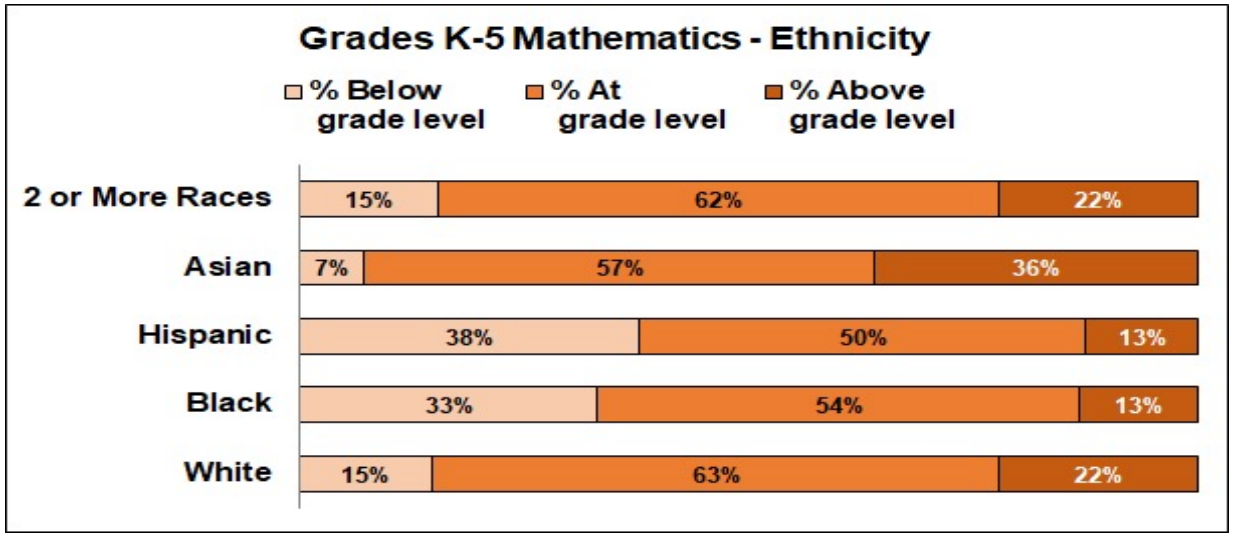


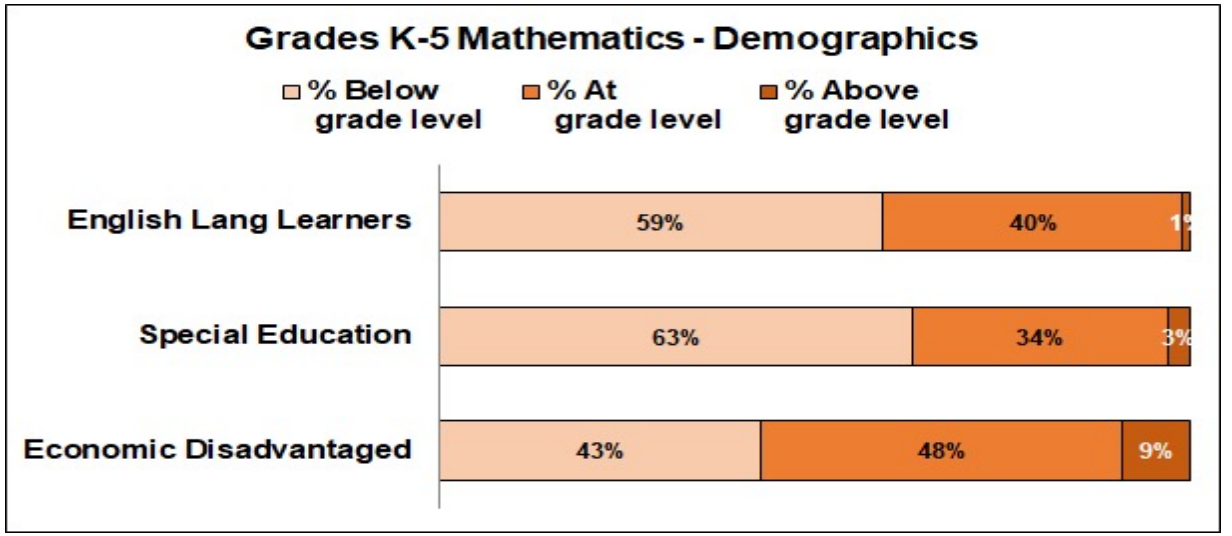


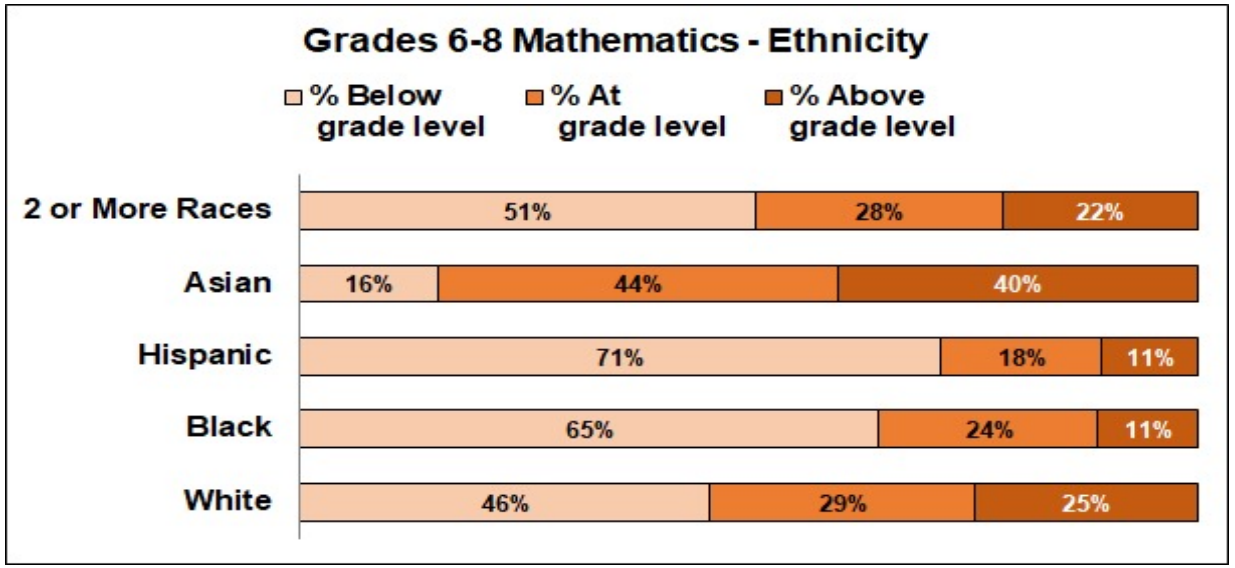


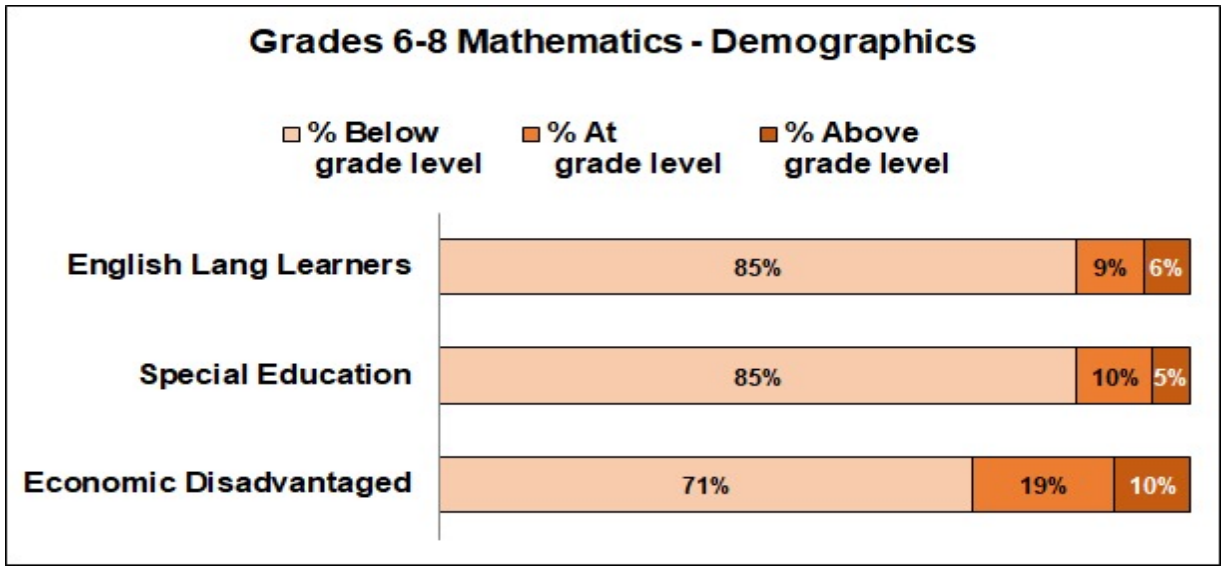


MATH: Performance by Ethnicity & Demographic



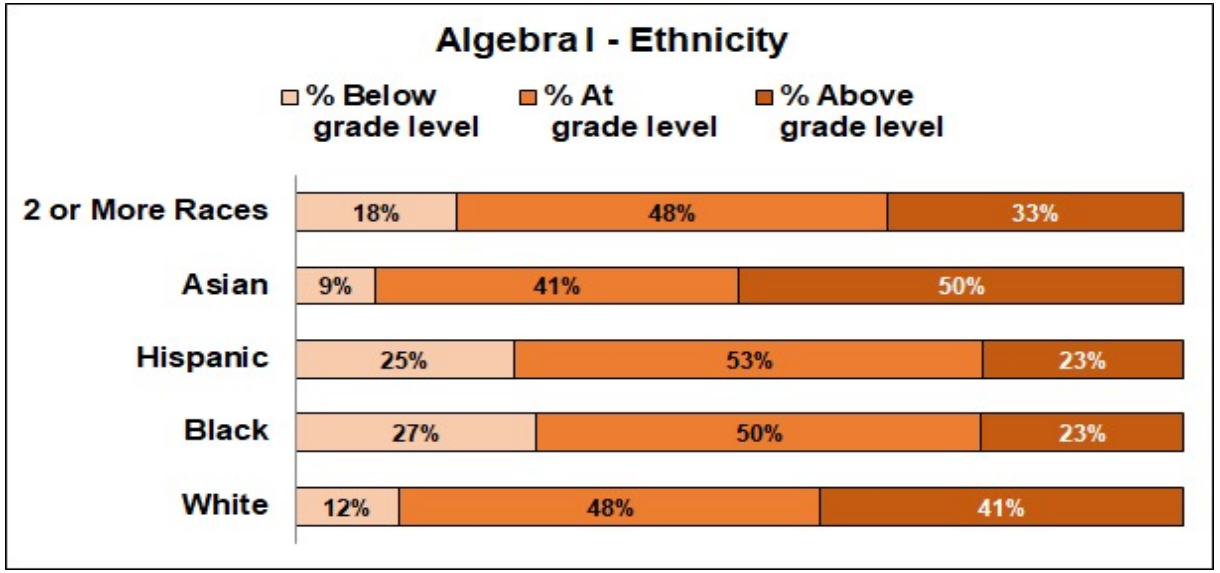


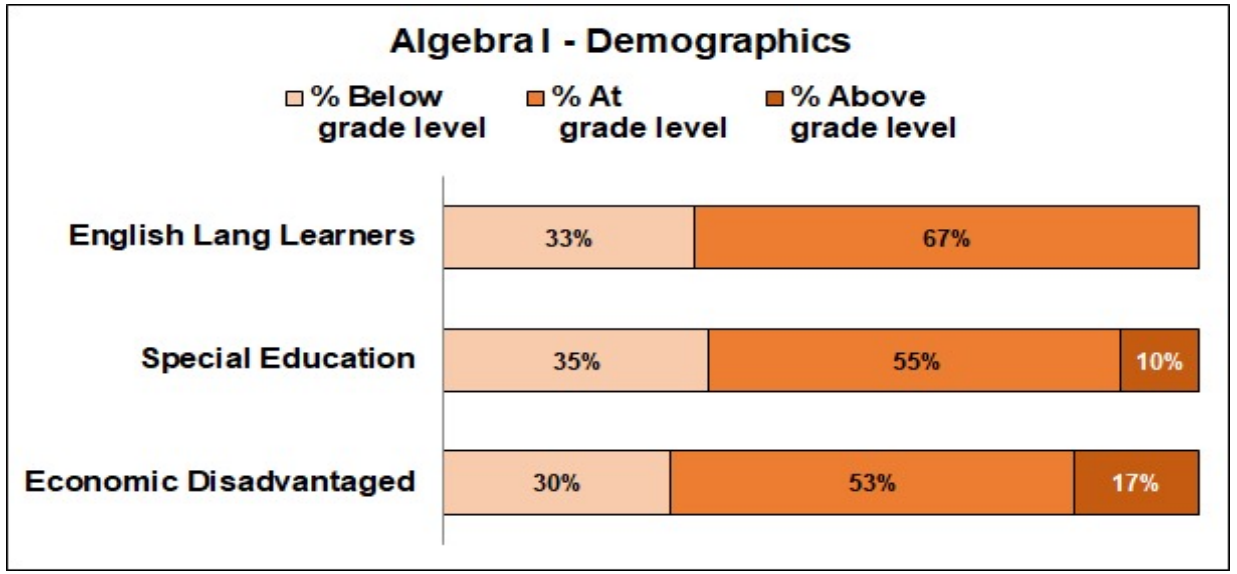


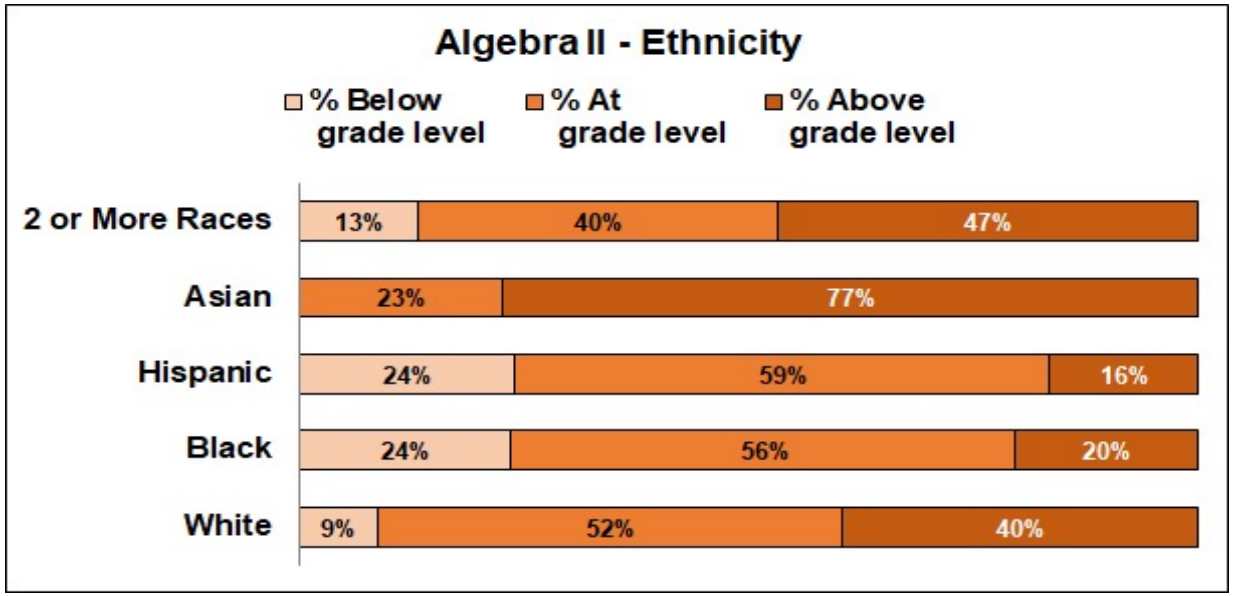


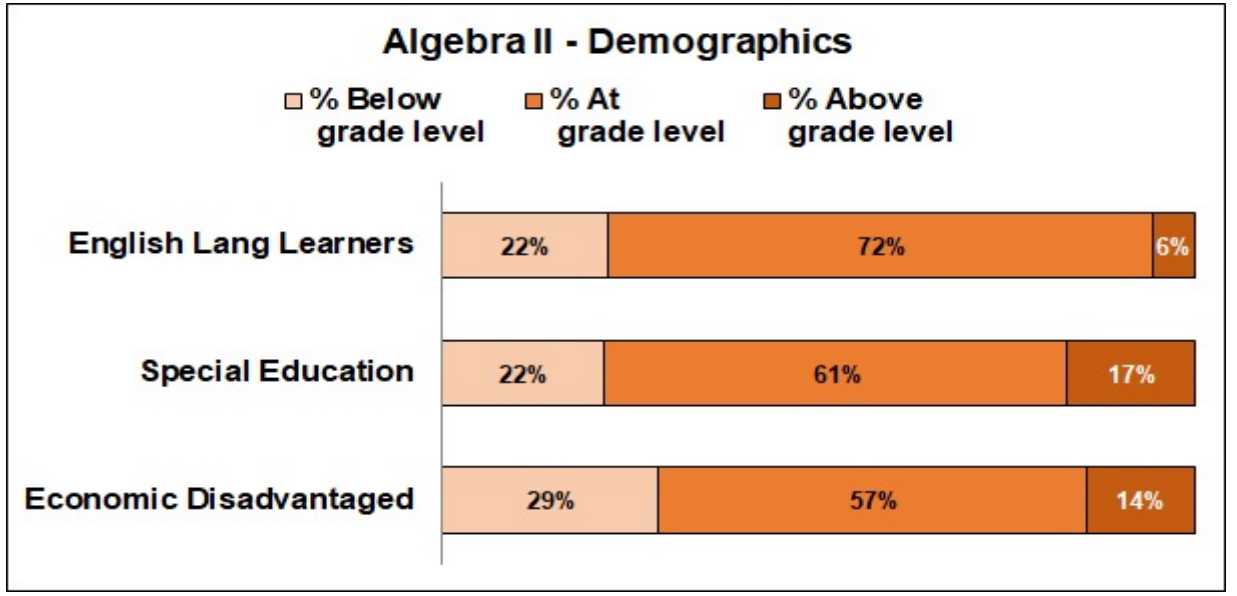
NOTE: Grade 6-8, iReady November Administration

MATH: Performance by Ethnicity & Demographic









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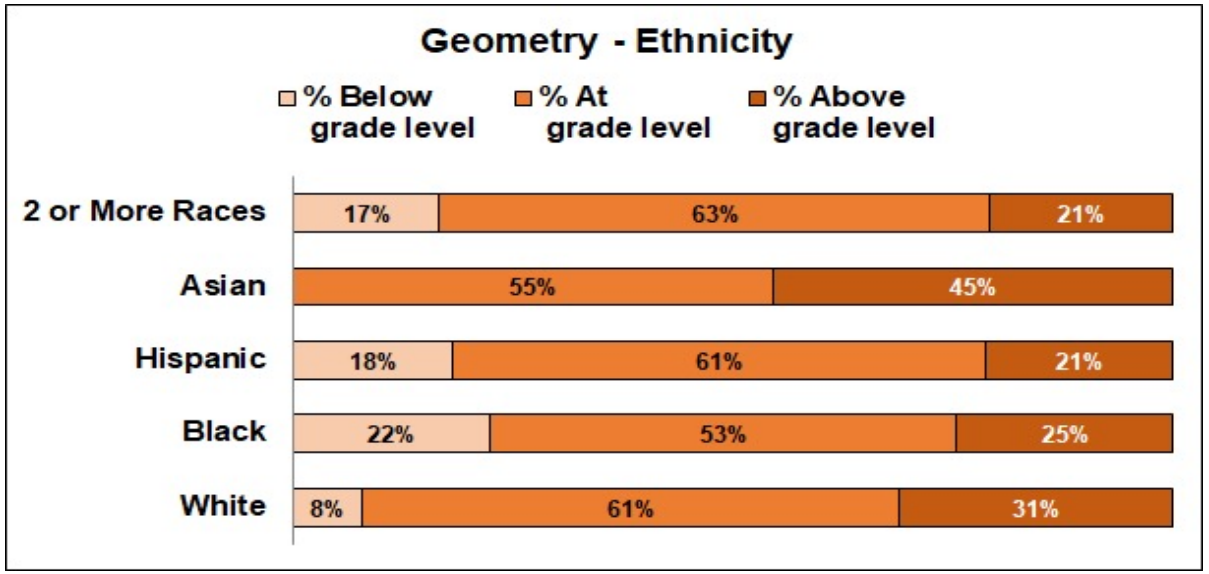
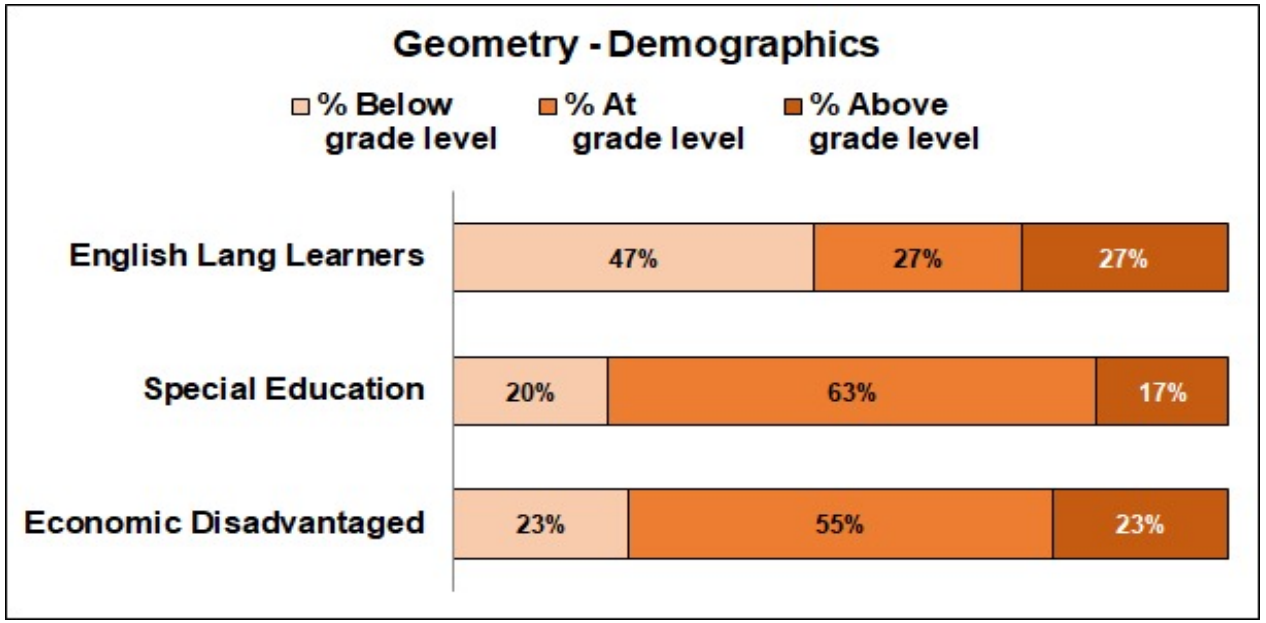




English Language Learners

SY 2021-2022 | ESL: Felix Plata, K-12

English Language Learners (ESL): Assessing Student Learning

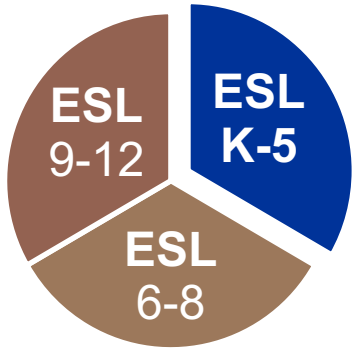
Student Learning Data Review	Findings
• End of Unit Assessments • Formative and Summative Assessments	ESL Standard Analysis and Mapping Identifying Student Learning Gaps

Performance Definitions for the Levels of English Language Proficiency Grades K-12

At the given level of English language proficiency, English language learners will process, understand, produce, or use:

6 Reaching	• specialized or technical language reflective of the content areas at grade level • a variety of sentence lengths of varying linguistic complexity in extended oral or written discourse as required by the specified grade level • oral or written communication in English comparable to English-proficient peers
5 Bridging	• specialized or technical language of the content areas • a variety of sentence lengths of varying linguistic complexity in extended oral or written discourse, including stories, essays, or reports • oral or written language approaching comparability to that of English-proficient peers when presented with grade-level material
4 Expanding	• specific and some technical language of the content areas • a variety of sentence lengths of varying linguistic complexity in oral discourse or multiple, related sentences, or paragraphs • oral or written language with minimal phonological, syntactic, or semantic errors that do not impede the overall meaning of the communication when presented with oral or written connected discourse with sensory, graphic, or interactive support
3 Developing	• general and some specific language of the content areas • expanded sentences in oral interaction or written paragraphs • oral or written language with phonological, syntactic, or semantic errors that may impede the communication, but retain much of its meaning, when presented with oral or written, narrative, or expository descriptions with sensory, graphic, or interactive support
2 Beginning	• general language related to the content areas • phrases or short sentences • oral or written language with phonological, syntactic, or semantic errors that often impede the meaning of the communication when presented with one- to multiple-step commands, directions, questions, or a series of statements with sensory, graphic, or interactive support
1 Entering	• pictorial or graphic representation of the language of the content areas • words, phrases, or chunks of language when presented with one-step commands, directions, WH-, choice, or yes/no questions, or statements with sensory, graphic, or interactive support • oral language with phonological, syntactic, or semantic errors that often impede meaning when presented with basic oral commands, direct questions, or simple statements with sensory, graphic, or interactive support

ESL: Proficiency Levels K-5



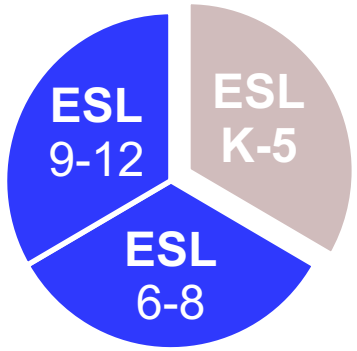
Growth (November > April)

Of the 165 Students:

- 3% Growth - 2 proficiency levels
- 61.8% Growth - 1 proficiency level
- 33.9% Maintained proficiency level
- .01% Decreased 1 proficiency level

April 2021					
Grade	L1	L2	L3	L4	L5
K	3	7	6	11	7
1		10	13	12	2
2	1	3	8	10	8
3	1	1	3	10	13
4	2	1	4	1	17
5		1	3	1	6
Total	**4.2%**	**13.9%**	**22.4%**	**27.3%**	**32.1%**

ESL: Proficiency Levels K-5



Growth (November > April)

Of the 110 Students:

- 3.6% Growth - 2 or more proficiency levels
- 62.5% Growth - 1 proficiency level
- 31.3% Maintained proficiency level
- .9% Decreased 1 proficiency level

April 2021					
Grade	**L1**	**L2**	**L3**	**L4**	**L5**
6	1	3	2	4	14
7	1	1	6	2	5
8	1		7	3	4
9		3	2	2	3
10	1	1	4	5	4
11		1	3	4	9
12		2	1	3	8
Total	**9.3%**	**5.3%**	**29.3%**	**33.3%**	**30.7%**

ESL Assessing Student Learning: Standards Analysis and General Findings

GRADE 1 Data Review:

- End of Unit assessment data
- Formative data
- Major and Minor Assessment Data
- ESL Standard Analysis and Mapping

General Findings

ELLs across most grade level clusters and proficiency levels **demonstrated challenges** in:

1. **EXPRESSIVE** domains of **SPEAKING** and **WRITING**.

2. **INTERPRETIVE** domain of **Reading**

Level 1-2 Areas of Focus:
•Create coherent texts (spoken, written, multimodal) using phrases or short sentences to represent ideas with an intended purpose (to describe, narrate, share opinion). •Connect ideas across a whole text through few frequently used cohesive devices (repetition: The tiger… The tiger…). •Elaborate or condense ideas through simple elaboration (familiar single nouns). •Extend or enhance meanings through sentence fragments (grow taller). •Create precise meanings through everyday, cross-disciplinary, and disciplinary language with few frequently used words and phrases with emerging precision (lunch time, clean up my desk).
Level 1-2 Areas of Strength:
•Understand how coherent texts (spoken, written, multimodal) are created around topics (all about pandas) with short sentences. •Understand how ideas are connected across a whole text through repetitive chunks of meaning across a text (Brown bear, brown bear, what do you see?) •Understand how ideas are elaborated or condensed through frequently used multiword noun groups (big tall dinosaurs). •Understand how meanings are extended or enhanced through chunks of language (turtles swimming). •Understand how precise meanings are created through everyday, cross-disciplinary, and technical language through frequently used words and phrases in familiar contexts and topics (Would you like to share…?).

ESL Assessing Student Learning: Standards Analysis

	To Address in Spring 2021	Needs Explicit Teaching	Needs Reinforcement	Needs Review	To Address in 2021-2022
WIDA Standards Link: WIDA-ELD-Standards-Framework-2020.pdf					
Standard 1: Social and Instructional Language					
Standard Reference Code: ELD-SI.K-3.Narrate					
Language Expectations (Language Functions with Sample Language Features)					
Multilingual learners wil share ideas about one's own and others' lived experiences and previous learning	X	X			X
Multilingual learners wil connect stories with images and representations to add meaning.					X
Multilingual learners wil ask questions about what others have shared.	X	X			X
Multilingual learners will recount and restate ideas.					X
Multilingual learners will discuss how stories might end or next steps.	X	X			X
Standard Reference Code: ELD-SI.K-3.Inform					
Language Expectations (Language Functions with Sample Language Features)					
Multilingual learners will define and classify objects or concepts.	X				
Multilingual learners will describe characteristics, patterns, or behavior.					
Multilingual learners will describe parts and wholes.	X				X
Multilingual learners will sort, clarify, and summarize ideas.					
Multilingual learners will summarize information from interaction with others and from learning experiences.					X
Standard 2: Language for Language Arts					
Standard Reference Code: ELD-LA.1.Narrate.Interpretive					
Language Expectations (Language Functions with Sample Language Features)					
Multilingual learners will interpret language arts narratives by identifying a central message from key details	X	X			X
Multilingual learners will interpret language arts narratives by identifying how character attributes and actions contribute to an event					X
Multilingual learners will interpret language arts narratives by Identifying words and phrases that suggest feelings or appeal to the senses					X
Standard Reference Code: ELD-LA.1.Narrate.Expressive					
Language Expectations (Language Functions with Sample Language Features)					
Multilingual learners will construct language arts narratives that orient audience to story through pictures, words, title, statements or common story expressions (Once upon a time) to introduce context					X
Multilingual learners will construct language arts narratives that orient audience to story through noun groups to state who or what the story is about (the white swans, Joey's big family)	X	X			

- Reviewed Curriculum and Student data to identify learning gaps in comparison to NEW standards.

- Developing strategies to address gaps in:
  - Instruction
    - Students who are struggling were scheduled for additional small group instruction with in the ESL period or with in the week (K-5)
    - Grades K-5 students were recommended to attend the After School Community Program for extra support
    - Grades 6-8- students were scheduled to attend the Middle School after school academic support program.
    - Grades 9-12- Students were scheduled to attend individual or small group office hours.
  - Curriculum
    - Identified priority skills and standards needed to teach in the compacted curriculum.
    - Analyzed assessment data to identify priority skills and standards to be scaffolded into the curriculum.
  - Programming
    - Summer program for K-8 and 6-12 ELLs.
    - Summer work assignments.
    - Extended day programs in grades K-8.
    - Full implementation of iReady and Fast ForWord reading programs for reading intervention in the 2020-2021 school year.

ESL Additional Strategies to Address Student Learning Loss

ESL Strategies Current Year

- ELLs who require greater levels of support were scheduled for additional targeted small-group instruction within the week (K-5) or within the ESL period (6-12).
- Grades K-5 ELLs were recommended to attend the *After School Community Program* for extra support.
- Grades 6-8 ELLs were scheduled to attend the *Middle School After School Academic Support program* to receive small-group language and content area support from content area certified teachers.
- Grades 9-12- ELLs were scheduled to attend individual or small group office hours before or after their scheduled synchronous instruction and Fridays.

ESL Additional Strategies to Address Student Learning Loss

ESL Strategies Current Year

50 ELLs identified by teachers, counselors or administrators as having experienced academic learning loss and/or require greater levels of social-emotional support, or with attendance **were referred to the ELL Family Resource Coordinator (EFRC)**. The **EFRC provided over 100 clinical hours supporting** these students and families with:

- Case Management- Connecting students and families with outside general and mental health professionals.
- General Support- Food support, connecting to daycare, navigating community resources, facilitating parent/teacher communication, etc..
- Individual Support- Meeting with individual students providing academic strategies, support, and guidance.
- Consultation- Collaborating with school personnel and third party resources to support the students and families.

In addition, the ESL Supervisor, the EFRC, and the ELL Family Resource Committee organized and/or supported the following events for Multilingual Families:

- Bilingual Parent Advisory Meetings
- Multilingual Q & A with the Superintendent: November 2020
- Remote Learning Manual Review: December 2020
- Strategies for Remote Learning and Hybrid Transition: January 2021
- Powerschool Orientation: April 2021
- Motivating Children and Summer Opportunities Workshop: 5/19 @6pm
- Rosetta Stone and Public Library Session: June date TBD
- COVID Vaccinations coordinated by the West Orange City Council.

ESL Strategies to Address Student Learning Loss / Acceleration

ESL Strategies 2021-2022

Pre-Assessments

- To identify and target specific curricular Language expectations to plan explicit instruction.
- Fast ForWord (grades K-5) and iReady (grades 6-12) to target explicit reading intervention.

ESL Curriculum & Instructional Practices

- Embed data findings, prerequisite skills, scaffolds into ESL curriculum / intervention strategies
- Incorporate identified Language expectations to inform accelerated language learning targets.
- Design interventions based on findings
- Systematic use of iReady (6-12) and Fast ForWord (K-5) to target ESL reading intervention
- Scheduling skill/standard based intervention time with-in the ESL weekly schedule

Special Education

SY 2021-2022 | Special Education: Dawn Ribeiro

Special Education: Additional Strategies to Address Learning Gaps / Acceleration

Reading intervention is provided at the elementary level and at Edison and Roosevelt for general and special education students.

Special education students receiving targeted instruction based on areas identified in their IEP such as reading and language arts.

Remote learning did impede special education students from receiving all services. Specialized programs were identified as most needed for in person instruction and transitioned to in person instruction beginning mid October.

Resources being utilized:

- FUNdations
- Learning Ally
- Newsela
- CommonLit
- Orton Gillingham/ Multi Sensory Reading
- Small Group Instruction
- 1:1 Instruction / Office Hours for remediation and review

Special Education: Additional Strategies to Address Learning Gaps / Acceleration

Implemented Strategies

Child Study Team case managers have identified students with disabilities of concern:

- Academic concerns
- Social/emotional/mental health concerns
- Attendance Concerns

Special Education

Child Study Team

- Review of Interventions
- Parent meetings to address the individualized concerns and needs of students (identify strategies/supports/interventions)
- Modification of work
- Consideration of school-based counseling
- Referral to outside resources

Ongoing Strategies & Assessments

- Child Study Team case managers, in conjunction with teachers, will continue to monitor students once they return to school on a full-time basis.
- Students will be assessed on their present levels of academic achievement and functional performance in-person; teachers will have the ability to provide direct instruction and continue to assess students when they are in-person full-time
- Child Study Team case managers will continue to consult with teachers, related service providers, and parents/guardians to assess student progress and determine if a meeting is warranted to discuss additional educational services.

Has the pandemic impacted student achievement?

Is that impact disproportionate by race, socio-economics, and student disability?

Assessing Student Learning Loss

Racial & Demographic Disparities in a Pandemic

What does the Research Say?

Reopening Schools: Strategies for Addressing Learning Loss*

1. Identify missed learning standards and content that are prerequisites to future learning
2. Create a *different* schedule for the first few months of the school year with longer blocks for addressing missed learning standards and content that are prerequisites for future learning
3. Create 6-week catch-up courses to address specific critical missed standards and content
4. Build daily extra help and direct instruction intervention time into schedules for kids who need it across elementary, middle & high schools
5. Integrate: Acceleration programs, high intensity tutoring, extended school day / school year, after-school and Saturday programs

ELA: Addressing Student Learning Gaps Across Student Groups

Core texts and novels in the 6-12 curriculum were audited to ensure an inclusive and rich reading experience for all students. A committee of teachers audited commonly read novels in the areas of publication date, genre, author (race, gender, religion), themes, etc. and analyzed data in correlation to our student population. To follow suit, all mentor texts in the K-5 curriculum are currently undergoing the same audit process.

Teachers are currently using the audit data, student feedback, various articles, information from organizations and recommendations from media specialists to research and review more contemporary and inclusive texts to infuse into the curriculum as well as consider texts that are no longer relevant or appropriate to read (WOHS ELA Feb 2020 PD).

More texts of various genres, authors of color and books centered around Learning for Justice Social Justice Standards of identity, justice, diversity and action have been and continue to be implemented as mentor texts and whole class novels. ELA 6-12 new texts added this year are here.

ELA: Addressing Student Learning Gaps Across Student Groups

Four part Social Justice PD (April-May 2021) for all media and reading specialists and ELA 6-12 general and special education teachers. Approaches to some of our new texts through a social justice lens are provided.
Key points:

- Session 1: Zooming Out- Using a sociological lens to see the social context impacting situations in text and the world rather than viewing from an individualistic approach that can result in binary, right/left arguments and impede progress towards equity.
- Session 2: From Diversity to Social Justice- Diversity does not, on its own, address social inequality. Social justice education means teaching in a way that works to dismantle social inequality. A social justice lens can be applied to any subject and informs our educational practices, policies, and norms. Filtering decisions through this lens does not provide simple answers, but it does provide us with the tools to operate with proactive intentions vs. defensive reactions.
- Sessions 3 & 4: Practical Applications- 1) Teachers will learn how to be prepared for and navigate book challenges through the lens of social justice education 2) Draft the creation of social justice themed ELA units and how media specialists can support that work. Secondary ELA curriculum will be revised next year, each unit will center around a social justice theme.

ELA K-12 has also further developed (in partnership with Social Studies department and media specialists) curated lists of resources and lessons for monthly celebrations and recognitions.

- ELA 6-12 Resources, District Resources
- K-5 ELA/ Social Studies/ Media Specialists shared resources via email that supported monthly celebrations
  - Grade level titles w/ aligned activities
  - Virtual Book Rooms

Social Studies Diversity, Equity & Access Training

Implicit Bias and NJ Amistad training for all elementary staff (10/12)

- Provided by Dr. Karla Manning-The Equity Leadership Group LLC
  - Addressing implicit bias within the classroom
- Provided by Dr. Leslie Wilson-Montclair State University
  - Teaching history through a different lens

Implicit Bias training for all

- **Middle school staff (12/18)**
- **High school staff (12/11)**
  - Provided by Dr. Karla Manning-The Equity Leadership Group
    - Addressing implicit bias within the classroom

NJ Amistad training for

- **Middle school social studies teachers (11/13)**
- **High school social studies teachers (12/15)**
  - Provided by Dr. Leslie Wilson-Montclair State University
    - Teaching history through different perspectives

NJ Amistad Training for all social studies teachers 6-12 (4/12)

- Dr. Khalfani of the Africana Institute at Essex County College
  - Classroom materials/strategies for classroom implementation in congruence with the NJ Amistad mandate

LGBQTIA mandate training for high school social studies teachers (2/22)

- Provided by Garden State Equality
- Infusing LGBQTIA materials within social studies lessons.

Summer Learning Acceleration

ESSER II Grant

Summer Learning Acceleration

Program	In Person	Description	
Integrated Acceleration Academics, Grades 1-5		Builds knowledge, addresses personal learning losses, enriches student opportunities with out-of-school activities in both ELA and Math	August 2nd – 26th
Grades 4 & 5 Tutorials		Small group scaffolded instruction with a focus on specific identified learning gaps in ELA and Math using supplemental resources such as LLI, Number Worlds, i-Ready Systems, etc.	August 2nd – 26th
Book Club 4-6, 7-8		Part of Summer Enrichment Program. Students will share their love of reading by engaging in a student-led book club with your peers.	June 28th – July 23rd
ELA 6 Academic Support		Strengthen Reading Comprehension/ Build Reading Foundational Skills	August 2nd – 26th
Math Summer Support, 6-12		Summer tutoring and instruction will be provided for 6-12 math courses for students to address identified key prerequisite concepts and skills.	Various sessions July 6th – August 26th
Career Education, 6-9		Do you know what career you want to pursue? It's never too early to plan for your future. Join us for an exploration of the career pathways you can experience as a student in WOHS.	July 12th – July 15th
Social Emotional Learning Elementary, Middle, High School		The Social Emotional Learning Program seeks to create a culture of social and emotional learning, dedicating lessons focused on building SEL skills, self-awareness, social awareness, responsible decision-making, self-management, and relationship skills.	June 28th – July 23rd
Mountaineer Auto Shop Club		Planning a Summer Oil Change and Maintenance Fundraiser where students in the club gain valuable hands-on experiences with conducting oil changes, tire rotation, maintenance checks and more.	Saturday, June 26th Saturday, August 28th
Summer Career Ed Camp		To introduce Middle School students to the Career Pathways and CTE programs at WOHS via lab experiences.	July 12-15, 2021

English as a Second Language
Summer School & ESL Reinforcement

West Orange Public Schools
West Orange, New Jersey

June 28 to July 23, 2021

Students Entering Grades 1 - 3

West Orange Public Schools
West Orange, New Jersey

June 28 to July 23, 2021

Students Entering Grades 4 - 9

ESL Reinforcement (Virtual) Summer 2021:
Wednesdays, July 21-August 25 (6 days)
Grades 6-12

- This virtual program will support English Language Learners (ELLs) in successfully completing their summer ESL assignments and support them with iReady assignments to develop their reading skills. It will also afford students opportunities to engage in small group academic conversations with ESL teachers and their peers in preparation for September classes.
- Attendance in the program will allow students to receive full credit for the ESL summer assignment that will be collected and graded in their ESL classes in September.
- Please complete a registration form for each child.
- If you have any questions please email Felix Plata at fplata@westorangeschools.org, or call 973 669 5400 x31571.
- Please complete the ESL Summer Reinforcement Program 2021 registration form by May 17th. Students and parents will be notified by Monday, May 31st.

Summer Schedule:

Wednesdays, July 21 - August 25th.

1 hour time slots*: 9:00am - 10:00am; 10:00am-11:00am; 11:00am-12:00pm **OR** 12:00pm-1:00pm

*1 hour time slot per student.

West Orange Middle Schools
Summer Institute 6-7

The Middle School Summer Institute will provide academic support for current 6th and 7th grade students to address learning loss in ELA, Math, Science, and Social Studies. Summer coursework is specifically designed to support students who have failed two or more courses and prepare them for transition to the next grade level.

Grades 6 & 7

- **ELA**
- **Math**
- **Science**
- **Social Studies**
- **Organizational Skills**

June 28th – July 29th

- **5 week program**
- **9am – 11:55am**

- Grade 6: Edison Middle School
- Grade 7: Roosevelt Middle School

West Orange High School
Summer Institute: Credit Recovery, Step Up & Educere

West Orange High School
Summer Institute 2021
July 26th – July 28th

- Algebra 1
- Algebra 2
- Geometry & Analysis
- English 9
- English 10
- English 11
- English 12
- World History
- U.S. History I
- U.S. History II
- Biology
- Chemistry
- Earth Science

STEP UP! Be a Leader, Make a Difference!

Educere THE SMART COURSE™

Language Arts	
Course Name	Credit
English 09 (Introduction to Literature)	Full
English 10 (Literature)	Full
English 11 (American Literature)	Full
English 12 (World Literature)	Full

Math	
Course Name	Credit
Algebra I	Full
Algebra II	Full
College Math (Math Topics)	Full
Geometry	Full

Physical Education/Health	
Course Name	Credit
Health 09 (Health - Intro to Nutrition and Wellness)	Quarter
Health 10 (Drivers Ed - NJ)	Half
Health 11 (Health and Wellness Principles)	Quarter
Health 12 (Health - Personal Wellness and CPR)	Quarter
Physical Education 09	Full
Physical Education 10	Full
Physical Education 11	Full
Physical Education 12	Full

Science	
Course Name	Credit
Anatomy & Physiology	Full
Biology	Full
Chemistry	Full
Earth Science	Full
Physics	Full

Social Studies	
Course Name	Credit
Modern World History (1500 to present)	Full
US History I (to 1900)	Full
US History II (1900 - present)	Full

World Languages	
Course Name	Credit
Chinese I	Full
Chinese II	Full
French I	Full
French II	Full
French III	Full
Italian I	Full
Italian II	Full
Italian III	Full
Spanish I	Full
Spanish II	Full
Spanish III	Full

Electives	
Course Name	Credit
Art Studies	Full

2021 Summer Enrichment Program & Engineering Explorations

ENGINEERING EXPLORATIONS

Future Multilingual Engineers Scholarship

Engineering Explorations is offering scholarship awards for free or reduced tuition to students that meet the below criteria for Summer 2021.

Engineering Explorations STEM Day Camp located at West Orange High School offers 4 innovative STEM courses (Foundations of STEM, Engineering Design, 3D Prototyping, and Robotics). Students participating in Engineering Explorations day camp will be exposed to various disciplines of engineering in a fun and exciting environment. They will be taught STEM principles within innovative hands-on projects. Students will get to enjoy the summer weather each day during their "technology recess" where they will get to fly quad-copter drones, drive RC cars, play vintage video games, and examine the latest technologies such as virtual reality.

www.engineeringexplorations.com

Eligibility Criteria

- Students must be enrolled in ESL courses at any of the West Orange Public Schools.
- Students must be 8 – 14 years old.
- Students must be able to attend the 1-3 weeks of camp which runs from July 26th to August 13th (8:30 am - 2 pm).
- Students must submit an application (no more than 150 words) responding to:
  - How would this scholarship benefit you?
  - Why are you interested in STEM?
  - Responses must be emailed to engineeringexplorationscamp@gmail.com with the subject line Future Multilingual Engineers Scholarship.
  - Application responses can be in preferred language (any language).

Scholarship award winners will be announced by May 31st

Thank you!