

## Delaware

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State-reported APR: Year One

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## Delaware's Race to the Top Annual Performance Report

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Year One Budget

Download Delaware's State-reported Year One Annual Performance Report

The Delaware State-reported Year One Annual Performance Report will be posted here when available.

Download Delaware's Year One Statespecific Summary Report

The Delaware Year One State-specific Summary report will be posted here when available.

Download Year One State-reported Annual Performance Report for All Race to the Top Grantees

The Year One State-reported Annual Performance Report for all Race to the Top Grantees will be posted here when available.

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#### Introduction

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This PDF compiles Delaware's Year One Race to the Top Annual Performance Report (APR) from <u>www.rtt-apr.us</u> as of January 20, 2012. To learn more about the APR, including definitions and terms used, please visit <u>http://www.rtt-apr.us/about-apr</u>. Supporting files provided by the State in its APR are included at the end of this PDF. Please visit <u>www.rtt-apr.us</u> for an accessible version of the content contained in this PDF.



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## Comprehensive Approach to Education Reform

## State-reported information

State-reported APR: Year One

**Question:** Describe the State's progress in implementing a comprehensive and coherent approach to education reform from the time of application through June 30, 2011. In particular, highlight key accomplishments over the reporting period in the four reform areas: standards and assessments, data systems to support instruction, great teachers and leaders, and turning around lowest-achieving schools. States are also encouraged to describe examples of LEAs' progress in the four reform areas.

## Delaware's State-reported Progress in Comprehensive Education Reform

### State-reported response: Overview:

With its Race to the Top win last year, Delaware embraced a unique opportunity, and responsibility, to dramatically improve student outcomes for all students in the state. Race to the Top is not just another grant program; rather, it has become the catalyst for comprehensive and sustainable statewide reform.

#### **Major Activities and Strategies:**

Delaware's education plan was created with the input of more than 150 educators, parents and community members in the summer of 2009. The plan aligns well with the four federal Race to the Top assurances. While the plan is described under each assurance below, it is the integration of the assurances that will allow the state to fundamentally improve education across the state by 2014. Delaware already has completed several key activities that will accelerate the state's progress towards the Education Plan's objectives. As part of the state's commitment to Race to the Top (RTTT), the Delaware Department of Education created 41 comprehensive delivery plans that will serve as operational plans for all of the major strategies in the state's RTTT application: http://www2.ed.gov/programs/racetothetop/state-scope-of-work/delaware.pdf.

STANDARDS AND ASSESSMENTS: IMPLEMENT RIGOROUS COLLEGE- AND CAREER-READY STANDARDS AND LINK WITH HIGH-QUALITY FORMATIVE AND SUMMATIVE ASSESSMENTS (SOW AREAS 1, 2).

Progress to-date:

- Adopted the Common Core Standards for math and English Language Arts (Sept. 2010): http://www.doe.k12.de.us/news/2010/0916.shtml)
- Developed and trained 9,000 teachers in Common Core Standards-Component 1 (2010). Developed and trained 350 trainers of teachers in Common Core Standards-Component 2: http://www.doe.k12.de.us/infosuites/staff/ci/de\_prit\_comstandards.shtml.
- Engaged 150 stakeholders in setting new interim standards for proficiency (Spring 2010). State

Board of Education adopted higher proficiency standards (Sept. 2010).

- Launched online adaptive Delaware Comprehensive Assessment System (DCAS) to measure student progress in a timely and reliable manner to inform instruction (Oct. 2010): http://www.doe.k12.de.us/news/2010/1011.shtml.
- Selected the SAT for statewide college readiness exam (Jan. 2011): http://www.doe.k12.de.us /news/2011/0125.shtml). Administered SAT® to 11th graders (April 2011): http://www.doe.k12.de.us/news/2011/0411b.shtml.
- Designed new Advanced Placement (AP) Summer Institute to train 360 teachers in core AP courses beginning in Summer 2011: http://www.doe.k12.de.us/infosuites/staff/IE/files /APSIRegFlyer2011v2.pdf

DATA SYSTEMS TO SUPPORT INSTRUCTION: IMPROVE ACCESS TO, AND USE OF THE STATE'S ROBUST LONGITUDINAL DATA SYSTEM (SOW AREAS 3, 4).

- Selected Wireless Generation as vendor for data coaches and began pilot in 7 LEAs (March 2011): http://www.doe.k12.de.us/news/2011/0225.shtml.
- Engaged leaders from every district and charter school regarding local, end-user needs; issued a Request for Information (RFI) that resulted in 24 responses to shape Request for Proposal (RFP) and 22 demonstrations from RFI respondents; issued RFP for the longitudinal data system and performance management dashboards (both Dec. 2010), and received 10 responses to the longitudinal data system RFP.

GREAT TEACHERS AND LEADERS: ENSURE EQUITABLE DISTRIBUTION OF EFFECTIVE TEACHERS AND PRINCIPALS (SOW AREAS 7, 8) AND PROVIDE EFFECTIVE SUPPORT TO TEACHERS AND LEADERS (SOW AREAS 10, 11).

- Engaging more than 300 educators to develop student growth measures in 30 content areas in accordance with new state regulation 106A: http://www.doe.k12.de.us/csa/dpasii/student\_growth /default.shtml.
- Launched STEM residency program at the University of Delaware and placed 8 residents in schools for 2010/11 school year. Planning for an additional 15 residents for 2011-12 school year.
- Created pathways for first cohort of Teach for America to continue working in education throughout the state.
- Teach for America announced that it will recognize Delaware as an official region beginning in the 2011-12 school year, and has hired a Delaware-based executive director.
- Selected The New Teacher Project as another teacher preparation pathway to teaching that will serve high-need schools throughout the entire state.
- Selected the Delaware Academy of School Leadership (DASL) to provide development coaches who will coach principals and support the state's evaluation system (May 2011): http://www.doe.k12.de.us/news/2011/0512.shtml.
- Partnering with DASL to help principals focus their time on instructional leadership using the SAM (School Administration Managers) model (May 2011): http://www.doe.k12.de.us/news/2011 /0526.shtml.
- Piloted data caches in six districts and one charter school within 90 minutes/week for common planning time/professional learning communities in spring 2011. Will begin statewide implementation with 29 data coaches in 2011-12.
- Funding the Vision Network to provide comprehensive professional development to more than 25 schools statewide. The Vision Network is hosted by the University of Delaware and supported by DDOE, participating districts and charters and the Delaware Business Roundtable.
- Collecting educator evaluation (DPAS II) outcomes data from all districts and charter schools.
- Launched Delaware Teaching Fellows (July 2011): http://www.doe.k12.de.us/news/2011 /0719.shtml.

TURNING AROUND THE LOWEST-ACHIEVING SCHOOLS: FOLLOW NEW STATE REGULATIONS, WHICH PROVIDE GREATER SUPPORT AND ACCOUNTABILITY TO SCHOOLS AND ENSURE THAT THE STATE AND DISTRICT COLLABORATIVELY INTERVENE IN FAILING SCHOOLS (SOW AREA 12).

Progress to-date:

- Instituted Partnership Zone for lowest-achieving schools and selected first four schools (Aug. 2010): http://www.doe.k12.de.us/news/2010/0831.shtml.
- Worked with selected districts and charter school to provide support and technical assistance in the development of strong reform plans.

- Provided districts and charters the opportunity to visit model schools/programs to inform the development of their plans.
- Provided special technical assistance workshops to Partnership Zone schools with the National Center for Time & Learning, to aid the critical portion of schools' reform plan development regarding the best use of extra school time.
- Provided special technical assistance to LEAs with Partnership Zones schools to develop RFPs regarding solicitation of Lead Partners.

DISTRICT SUPPORT PROGRAM: DESIGN AND INSTITUTE A NINE-MONTH PROFESSIONAL DEVELOPMENT PROGRAM TO PROVIDE DISTRICTS WITH BOTH CONTENT AND SKILLS TO AID IN THE REVISION OF THEIR RTTT PLANS FOR YEARS 2-4 AND BUILD THEIR IMPLEMENTATION CAPACITY: http://www.doe.k12.de.us/rttt/lea\_pages/support\_programs.shtml.

Progress to-date:

- Repurposed monthly superintendents' meetings to focus on plans and professional development rather than administrivia.
- Hosted county workshops every two months for local planning teams to learn about best practices for district reform related to the four assurances.
- Partnered with the US Educational Delivery Institute to craft the curriculum for and present at Support Program meetings and workshops.
- Developed a plan template, rubric, and sample completed plan components.
- Organized visits to high-performing schools out-of-state for district personnel and other stakeholders, to observe "best practices" and incorporate them into their reform plans.
- Assigned dedicated facilitators to all districts to support them through the planning process.
- Funded all 19 districts' Race to the Top plans for years two-four http://www.doe.k12.de.us /news/2011/0622.shtml all plans and overviews available at: http://www.doe.k12.de.us /news/2011/0629.shtml.

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# Delaware

## local Educational Agency (LEA) Participation

LEAs participating in Delaware's Race to the Top plan

The name and NCES ID for each participating LEA

Number of participating LEAs committed to implementing Delaware's plan in each of the reform areas

Collapse All

State-reported information

### LEAs participating in Delaware's Race to the Top plan

	Statewide (#)	Participating LEAs (#) as indicated in the application	Participating LEAs (#) as of June 30, 2011	Involved LEAs (#) as of June 30, 2011
LEAs	39	38	38	0
Schools	208	206	207	0
K-12 Students	127,777	123,805	127,556	0
Students in poverty	63,169	51,960	63,022	0
Teachers	9,528		9,490	0
Principals	447		447	0
View Table Key				

**Question:** Provide a brief explanation of any change in the number of participating LEAs from figure provided in the application.

State-reported response: No response provided.

#### Additional information provided by the State:

Participating LEAs include all districts and charters in the state with the exception of charters opened after the 2009-10 school year. Students in poverty refers to students receiving Free or Reduced Lunch.

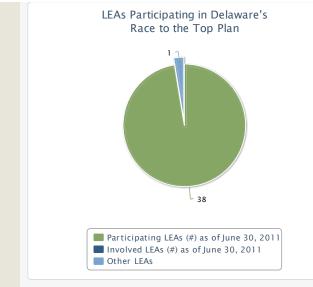
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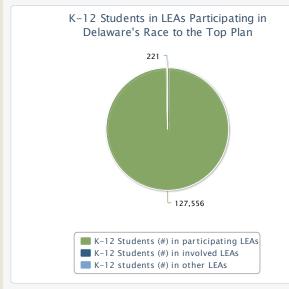
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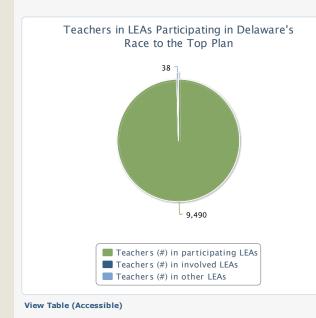


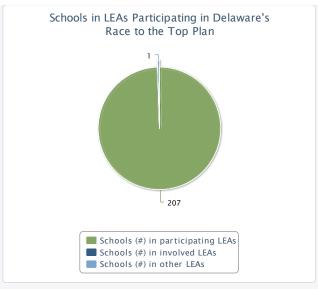


Click to see the name and NCES ID for each participating LEA

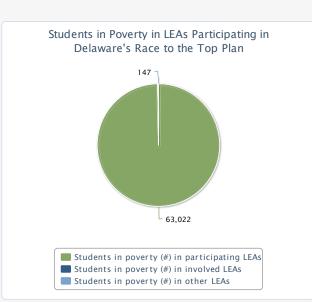




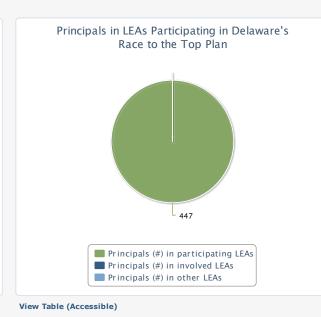




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State's Definition
Payroll/Human Resources Statewide Technology positions that contain the word "Teacher" in the position description, and are not any of the following: Principals, Para-Educators, Substitutes, Specialists, Administrators or Instructional Support.
Employment positions defined as Principals in DEEDS (the Delaware Educator Data System). This includes the following positions: Principal, Elementary Principal, Middle Principal, Secondary Assistant Principal, Elementary (Assoc.) Assistant Principal, Middle (Assoc.) Assistant Principal, Secondary (Assoc.)

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## The name and NCES ID for each participating LEA

LEA	NCES ID
ACADEMY OF DOVER CHARTER SCHOOL	1000017
APPOQUINIMINK SCHOOL DISTRICT	1000080
BRANDYWINE SCHOOL DISTRICT	1001240
CAESAR RODNEY SCHOOL DISTRICT	1000180
CAMPUS COMMUNITY CHARTER SCHOOL	1000007
CAPE HENLOPEN SCHOOL DISTRICT	1000170
CAPITAL SCHOOL DISTRICT	1000190
CHARTER SCHOOL OF WILMINGTON	1000004
CHRISTINA SCHOOL DISTRICT	1000200
COLONIAL SCHOOL DISTRICT	1000230
DELAWARE COLLEGE PREPARATORY ACADEMY	1000047
DELAWARE MILITARY ACADEMY	1000016
DELMAR SCHOOL DISTRICT	1000270
View Table Key	

LEA	NCES ID
DEPT. OF SVS. FOR CHILDREN YOUTH & THEIR FAMILIES	1000022
EAST SIDE CHARTER SCHOOL	1000006
EDISON (THOMAS A.) CHARTER SCHOOL	1000010
FAMILY FOUNDATIONS ACADEMY	1000024
INDIAN RIVER SCHOOL DISTRICT	1000680
KUUMBA ACADEMY CHARTER SCHOOL	1000014
LAKE FOREST SCHOOL DISTRICT	1000790
LAUREL SCHOOL DISTRICT	1000810
MILFORD SCHOOL DISTRICT	1001080
MOT CHARTER SCHOOL	1000019
MOYER (MAURICE J.) ACADEMY	1000023
NEW CASTLE COUNTY VOTECH SCHOOL DISTRICT	1001280
NEWARK CHARTER SCHOOL	1000015
View Table Key	

## State-reported information

LEA	NCES ID
ODYSSEY CHARTER SCHOOL	1000026
PENCADER BUSINESS AND FINANCE CHARTER SCHOOL	1000025
POLYTECH SCHOOL DISTRICT	1000750
POSITIVE OUTCOMES CHARTER SCHOOL	1000005
PRESTIGE ACADEMY	1000048
PROVIDENCE CREEK ACADEMY CHARTER SCHOOL	1000018
RED CLAY CONSOLIDATED SCHOOL DISTRICT	1001300
SEAFORD SCHOOL DISTRICT	1001530
SMYRNA SCHOOL DISTRICT	1001620
SUSSEX ACADEMY OF ARTS AND SCIENCES	1000011
SUSSEX TECHNICAL SCHOOL DISTRICT	1001680
WOODBRIDGE SCHOOL DISTRICT	1001850
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## Participating LEAs committed to implementing Delaware's plan in each of the reform areas

State-reported information				
Elements of State Reform Plans	Number of participating LEAs (#) in this subcriterion as of June 30, 2011		Percentage of LEAs participating in this	
	Conditional Participating LEAs	Total Participating LEAs	subcriteron (%)	
B. Standards and Assessments				
(B)(3) Supporting the transition to enhanced standards and high-quality assessments	0	38	100	
C. Data Systems to Support Instruction				
(C)(3) Using data to improve instruction:				
(i) Use of local instructional improvement systems	0	38	100	
(ii) Professional development on use of data	0	38	100	
(iii) Availability and accessibility of data to researchers	0	38	100	
D. Great Teachers and Leaders				

(D)(2) Improving teacher and principal effectiveness based on performance:			
(i) Measure student growth	0	38	100
(ii) Design and implement evaluation systems	0	38	100
(iii) Conduct annual evaluations	0	38	100
(iv)(a) Use evaluations to inform professional development	0	38	100
(iv)(b) Use evaluations to inform compensation, promotion and retention	0	38	100
(iv)(c) Use evaluations to inform tenure and/or full certification	0	38	100
(iv)(d) Use evaluations to inform removal	0	38	100
(D)(3) Ensuring equitable distribution of effective teachers and principals:			
(i) High-poverty and/or high-minority schools	0	38	100
(ii) Hard-to-staff subjects and specialty areas	0	38	100
(D)(5) Providing effective support to teachers and principals:			
(i) Quality professional development	0	38	100
(ii) Measure effectiveness of professional development	0	38	100
E. Turning Around the Lowest-Achieving Schools			
(E)(2) Turning around the lowest-achieving schools	0	38	100
View Table Key			

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## Table Key

< n	indicates data has been suppressed because of a small count or, for NAEP data, indicates reporting standards not met; sample size insufficient to permit a reliable estimate.
	indicates data are not provided.
N/A	indicates not applicable (e.g., the State did not specify a target in its approved plan, or the element is not applicable this year).

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#### Local Educational Agency (LEA) Participation

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## State-reported APR: Year One



Actual: 2010-2011

Target from Delaware's approved plan: 2013-2014

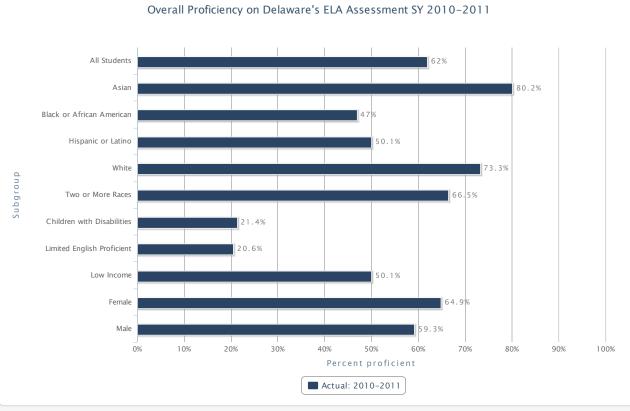
Student proficiency on Delaware's ELA assessment SY 2010-2011. Preliminary data reported as of December 1, 2011.	Baseline: SY 2009-2010	Actual: SY 2010-2011	Target from Delaware's approved plan: SY 2013-2014
Grade 3	75.3%	62.8%	100%
Grade 4	74.5%	60.5%	N/A
Grade 5	79.4%	64.9%	N/A
Grade 6	73%	62.2%	N/A
Grade 7	82.1%	59.1%	N/A
Grade 8	77.1%	61.2%	100%
Grade 10	63.9%	63.4%	100%
View Table Key			

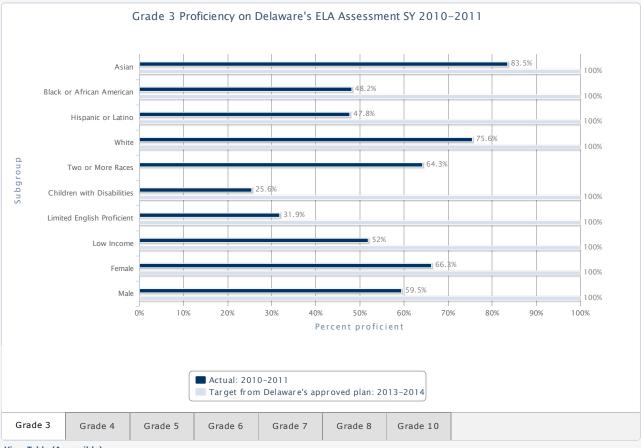
#### Additional information provided by the State:

Scores of individual students or student groups reported for the DSTP and DCAS are not directly comparable due to (1) structural differences in the format and nature of the assessments (e.g., adaptive versus fixed form assessments); (2) absence of score-score comparisons for students at the same grade who took the two assessments in the same time frame under the same high-stakes circumstances; and (3) significant differences in the performance level cut scores and bands approved by the State Board of Education for each assessment.

**NOTE:** Over the past three years, the Department has transitioned from five to seven racial and ethnic groups used for reporting data, including English language arts and mathematics proficiency results. Therefore, racial and ethnic data reported for SY 2009-2010 may not be directly comparable to racial and ethnic data reported for SY 2010-2011.

Close





Preliminary Overall Proficiency SY 2010-2011		
Category	Actual: SY 2010-2011	Target from Delaware's approved plan: SY 2013-2014
All Students	62%	N/A
American Indian or Alaska Native	64.7%	N/A
Asian	80.2%	N/A
Black or African American	47%	N/A
Hispanic or Latino	50.1%	N/A
Native Hawaiian or Other Pacific Islander	68.2%	N/A
White	73.3%	N/A
Two or More Races	66.5%	N/A
Children with Disabilities	21.4%	N/A
Limited English Proficient	20.6%	N/A
Low Income	50.1%	N/A
Female	64.9%	N/A
Male	59.3%	N/A
View Table Key		

Overall Proficiency SY 2009-2010		
Category	Baseline: SY 2009-2010	
All Students	75.1%	
American Indian or Alaska Native	82.1%	
Asian or Pacific Islander	88.3%	
Black, non-Hispanic	63.1%	
Hispanic	66.9%	
White, non-Hispanic	83.7%	
Children with Disabilities	38.6%	
Limited English Proficient	39.5%	
Low Income	65%	
Female	79.1%	
Male	71.2%	
View Table Key		

Preliminary Grade 3 Proficiency SY 2010-2011		
Category	Actual: SY 2010-2011	Target from Delaware's approved plan: SY 2013-2014
American Indian or Alaska Native	<n< th=""><th>100%</th></n<>	100%

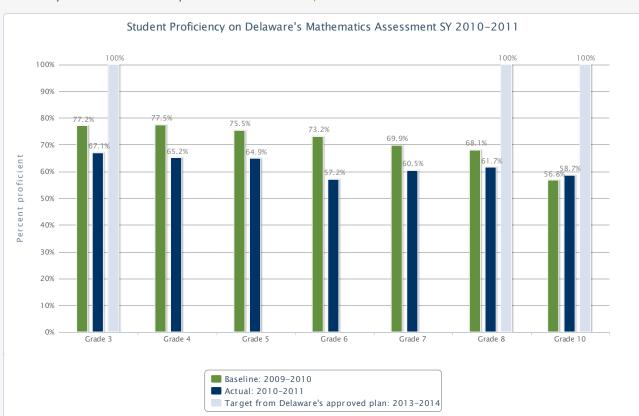
Grade 3 Proficiency SY 2009-2010				
Category Baseline: SY 2009-20				
American Indian or Alaska Native	<n< th=""></n<>			

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## **Mathematics assessment results**

State-reported information



Results of Delaware's Mathematics assessment under the Elementary and Secondary Education Act (ESEA) Preliminary SY 2010-2011 data reported as of: December 1, 2011

View Table (Accessible)

Student proficiency on Delaware's mathematics assessment SY 2010-2011. Preliminary data reported as of December 1, 2011.	Baseline: SY 2009-2010	Actual: SY 2010-2011	Target from Delaware's approved plan: SY 2013-2014
Grade 3	77.2%	67.1%	100%
Grade 4	77.5%	65.2%	N/A
Grade 5	75.5%	64.9%	N/A
Grade 6	73.2%	57.2%	N/A
Grade 7	69.9%	60.5%	N/A
Grade 8	68.1%	61.7%	100%
Grade 10	56.8%	58.7%	100%
View Table Key			

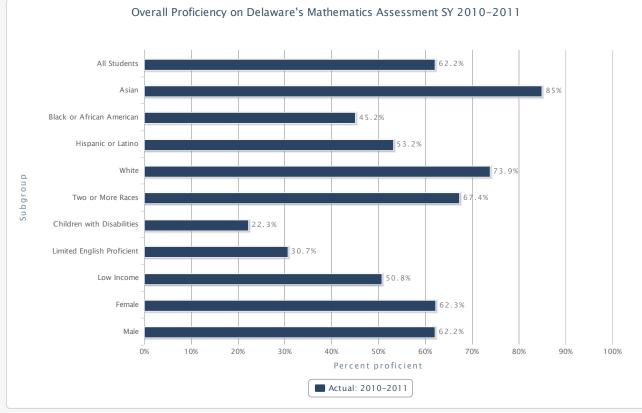
### Additional information provided by the State:

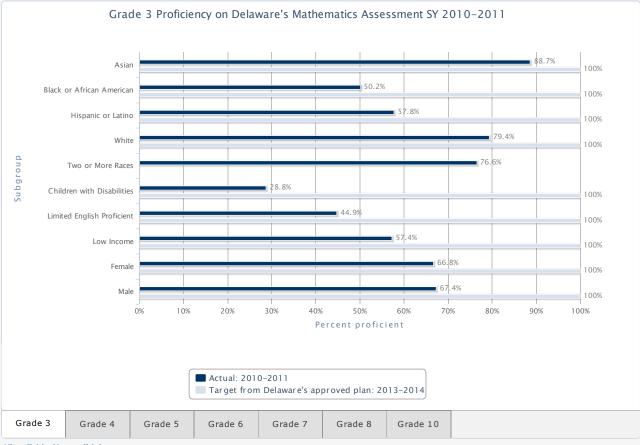
Scores of individual students or student groups reported for the DSTP and DCAS are not directly comparable due to (1)

structural differences in the format and nature of the assessments (e.g., adaptive versus fixed form assessments); (2) absence of score-score comparisons for students at the same grade who took the two assessments in the same time frame under the same high-stakes circumstances; and (3) significant differences in the performance level cut scores and bands approved by the State Board of Education for each assessment.

Close

**NOTE:** Over the past three years, the Department has transitioned from five to seven racial and ethnic groups used for reporting data, including English language arts and mathematics proficiency results. Therefore, racial and ethnic data reported for SY 2009-2010 may not be directly comparable to racial and ethnic data reported for SY 2010-2011.





Preliminary Overall Proficiency SY 2010-2011					
Category	Actual: SY 2010-2011	Target from Delaware's approved plan: SY 2013-2014			
All Students	62.2%	N/A			
American Indian or Alaska Native	64.8%	N/A			
Asian	85%	N/A			
Black or African American	45.2%	N/A			
Hispanic or Latino	53.2%	N/A			
Native Hawaiian or Other Pacific Islander	60%	N/A			
White	73.9%	N/A			
Two or More Races	67.4%	N/A			
Children with Disabilities	22.3%	N/A			
Limited English Proficient	30.7%	N/A			
Low Income	50.8%	N/A			
Female	62.3%	N/A			
Male	62.2%	N/A			
View Table Key					

Overall Proficiency SY 2009-2010						
Category	Baseline: SY 2009-2010					
All Students	71.3%					
American Indian or Alaska Native	75.2%					
Asian or Pacific Islander	89.2%					
Black, non-Hispanic	55.8%					
Hispanic	64.8%					
White, non-Hispanic	81.5%					
Children with Disabilities	36.7%					
Limited English Proficient	45.1%					
Low Income	60.6%					
Female	71.4%					
Male	71.1%					
View Table Key						

Preliminary Grade 3 Proficiency SY 2010-2011						
Category	Actual: SY 2010-2011	Target from Delaware's approved plan: SY 2013-2014				
American Indian or Alaska Native	<n< th=""><th>100%</th></n<>	100%				

Grade 3 Proficiency SY 2009-2010				
Category	Baseline: SY 2009-2010			
American Indian or Alaska Native	<n< th=""></n<>			

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## Table Key

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	indicates data are not provided.
N/A	indicates not applicable (e.g., the State did not specify a target in its approved plan, or the element is not applicable this year).

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#### Student Outcomes Data: State Assessment Results

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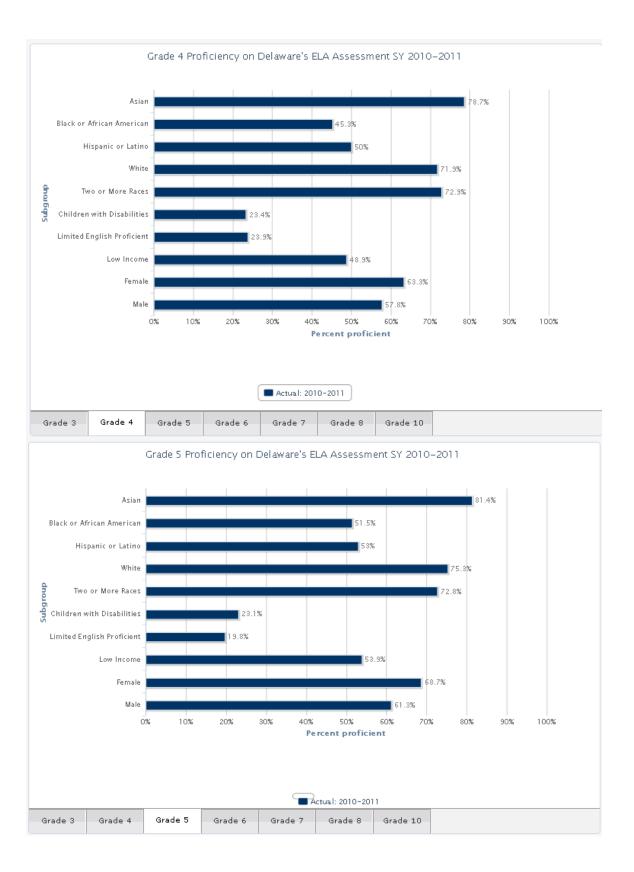
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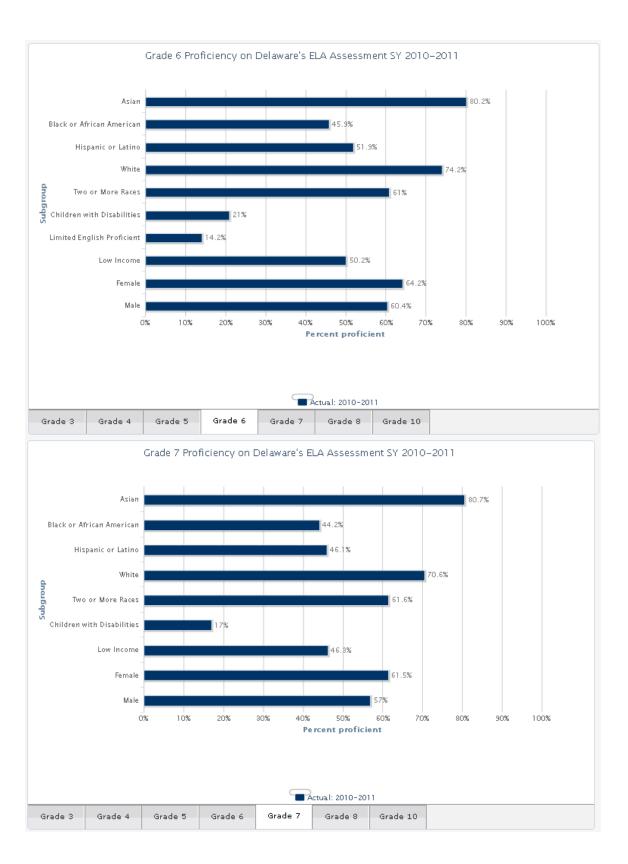
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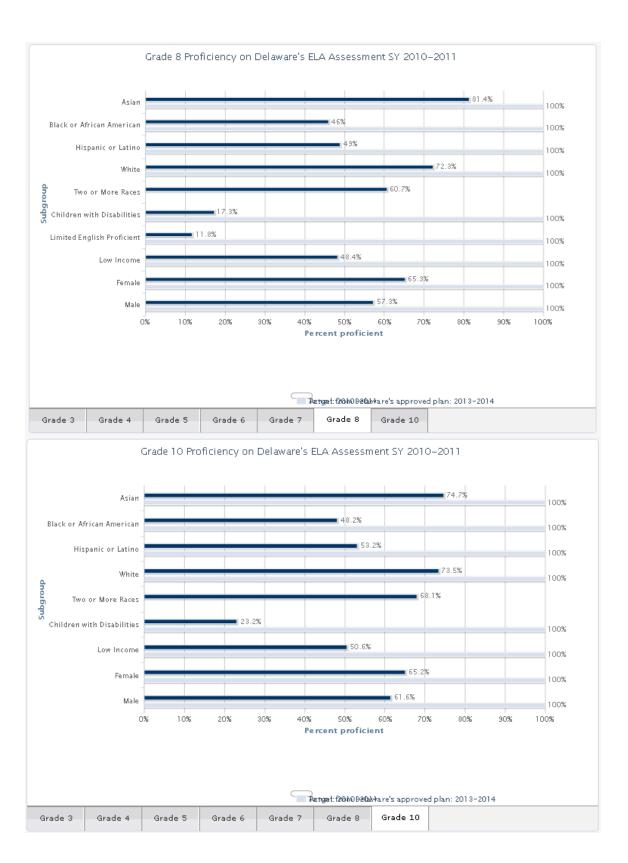
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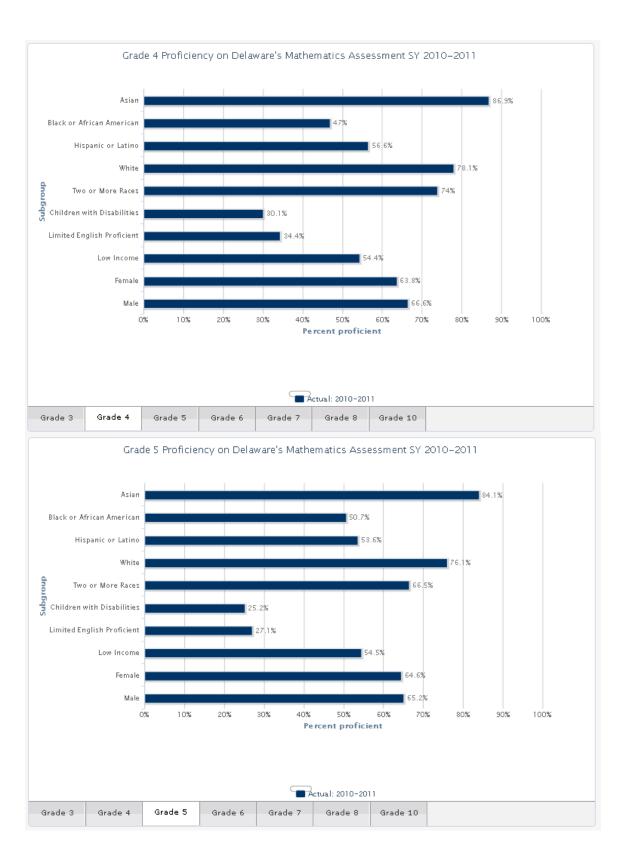
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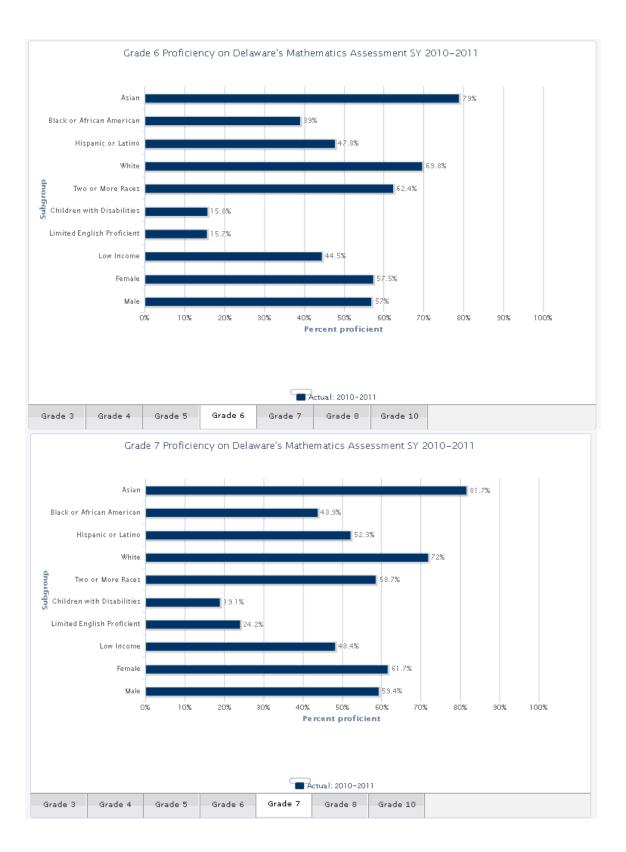
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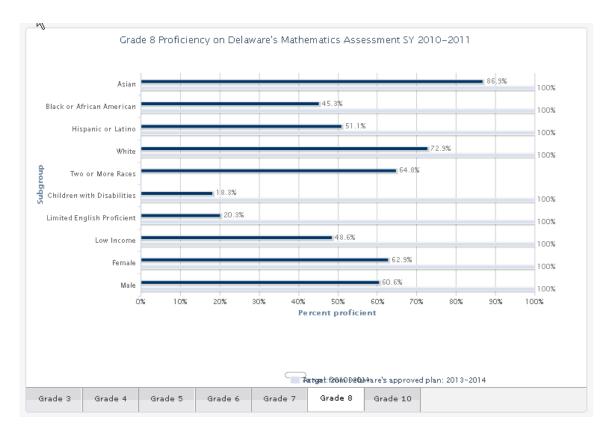


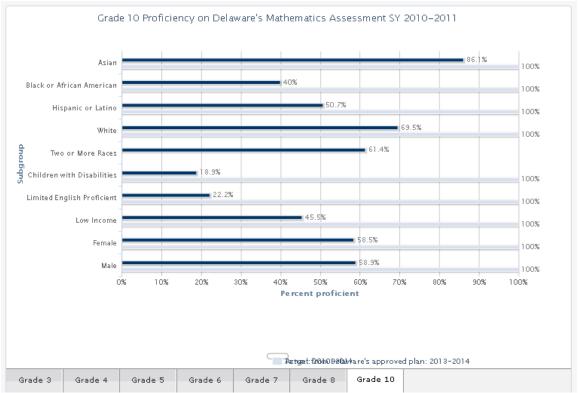














# Delaware

State-reported APR: Year One

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Student Outcomes Data: NAEP Results

NAEP reading results

NAEP mathematics results

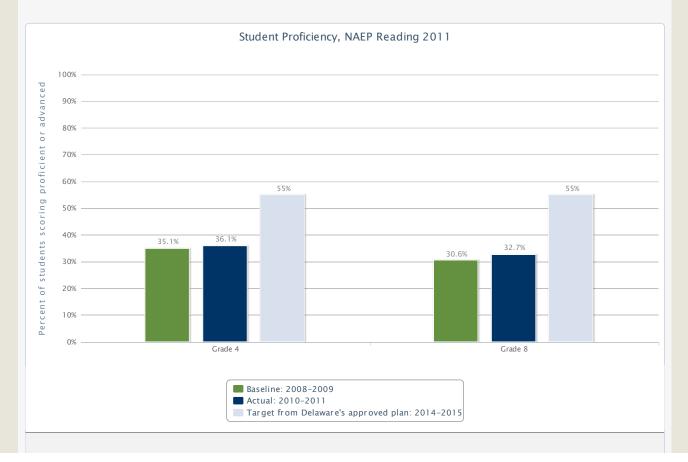
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**NAEP** reading results

Department-reported information

**NOTE:** NAEP is administered once every two years. The two most recent years are SY 2008-2009 and SY 2010-2011. NAEP reading results are provided by the Department of Education's Institute of Education Sciences. To learn more about the NAEP data, please visit http://nces.ed.gov/nationsreportcard/.

Delaware's approved Race to the Top plan included targets for NAEP results based on percentages, not based on students' average scale scores.



## NOTE:

## Percentages:

The percentage of Delaware's grade 4 students who were at or above Proficient in reading in 2011 was not significantly different than in 2009.

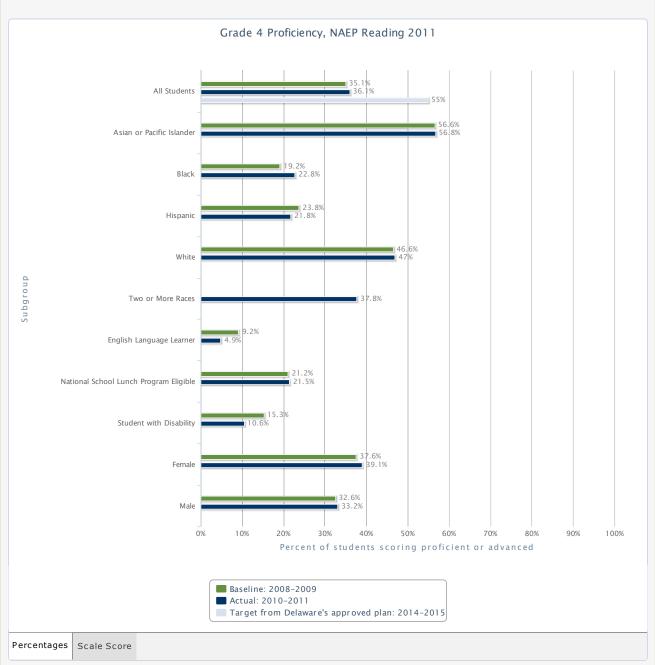
The percentage of Delaware's grade 8 students who were at or above Proficient in reading in 2011 was not significantly different than in 2009.

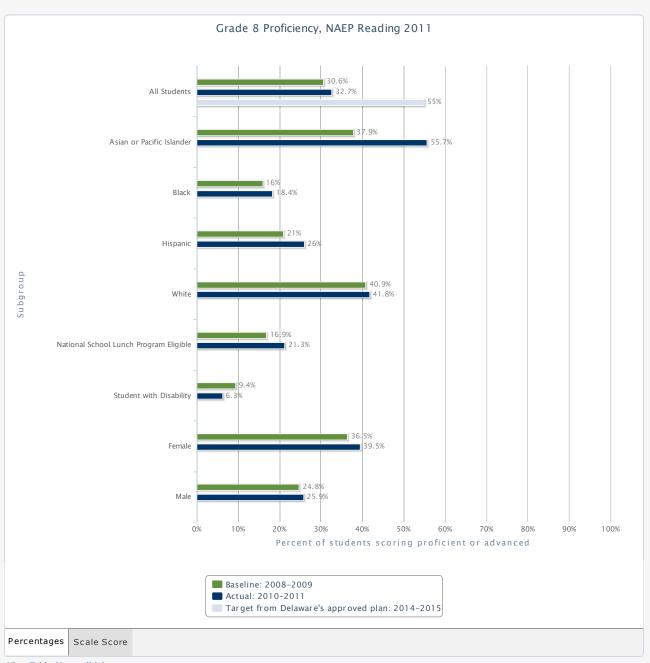
Scale Score:

Delaware's grade 4 reading score was not significantly different in 2011 than in 2009. Delaware's grade 8 reading score was not significantly different in 2011 than in 2009.

Close

Student proficiency on NAEP reading	Baseline (percentage): SY 2008-2009	Actual (percentage): SY 2010-2011	Target from Delaware's approved plan (percentage): SY 2014-2015	Baseline (scale score): SY 2008-2009	Actual (scale score): SY 2010-2011
Grade 4	35.1%	36.1%	55%	225.5	225.1
Grade 8	30.6%	32.7%	55%	265	265.8
View Table Key					





Grade 4 Proficiency					
Subgroup	Baseline (percentage): SY 2008-2009	Actual (percentage): SY 2010-2011	Target from Delaware's approved plan (percentage): SY 2014-2015	Baseline (scale score): SY 2008-2009	Actual (scale score): SY 2010-2011
American Indian/Alaska Native	<n< th=""><th><n< th=""><th>N/A</th><th>&lt; n</th><th><n< th=""></n<></th></n<></th></n<>	<n< th=""><th>N/A</th><th>&lt; n</th><th><n< th=""></n<></th></n<>	N/A	< n	<n< th=""></n<>
Asian/Pacific Islander	56.6%	56.8%	N/A	241.9	240.1
Black	19.2%	22.8%	N/A	213	214.6
Hispanic	23.8%	21.8%	N/A	216.2	213.5
White	46.6%	47%	N/A	234.7	233.9
Two or More Races	< n	37.8%	N/A	<n< th=""><th>226.8</th></n<>	226.8
English Language Learner	9.2%	4.9%	N/A	203.3	193.2
National School Lunch Program Eligible	21.2%	21.5%	N/A	214.5	213.6

Student with Disability	15.3%	10.6%	N/A	202.2	192.9
Female	37.6%	39.1%	N/A	228.2	227.8
Male	32.6%	33.2%	N/A	222.9	222.5

View Table Key

Grade 8 Proficiency					
Subgroup	Baseline (percentage): SY 2008-2009	Actual (percentage): SY 2010-2011	Target from Delaware's approved plan (percentage): SY 2014-2015	Baseline (scale score): SY 2008-2009	Actual (scale score): SY 2010-2011
American Indian/Alaska Native	<n< td=""><td><n< td=""><td>N/A</td><td><n< td=""><td><n< td=""></n<></td></n<></td></n<></td></n<>	<n< td=""><td>N/A</td><td><n< td=""><td><n< td=""></n<></td></n<></td></n<>	N/A	<n< td=""><td><n< td=""></n<></td></n<>	<n< td=""></n<>
Asian/Pacific Islander	37.9%	55.7%	N/A	272.1	284.6
Black	16%	18.4%	N/A	253.7	254.2
Hispanic	21%	26%	N/A	256.5	259.3
White	40.9%	41.8%	N/A	273	273.4
Two or More Races	<n< td=""><td><n< td=""><td>N/A</td><td><n< td=""><td><n< td=""></n<></td></n<></td></n<></td></n<>	<n< td=""><td>N/A</td><td><n< td=""><td><n< td=""></n<></td></n<></td></n<>	N/A	<n< td=""><td><n< td=""></n<></td></n<>	<n< td=""></n<>
English Language Learner	<n< td=""><td><n< td=""><td>N/A</td><td><n< td=""><td><n< td=""></n<></td></n<></td></n<></td></n<>	<n< td=""><td>N/A</td><td><n< td=""><td><n< td=""></n<></td></n<></td></n<>	N/A	<n< td=""><td><n< td=""></n<></td></n<>	<n< td=""></n<>
National School Lunch Program Eligible	16.9%	21.3%	N/A	253.4	256.1
Student with Disability	9.4%	6.3%	N/A	240.8	231
Female	36.5%	39.5%	N/A	269.9	271.3
Male	24.8%	25.9%	N/A	260.1	260.5
View Table Key					

View Table Key

Close Subgroup Graphs

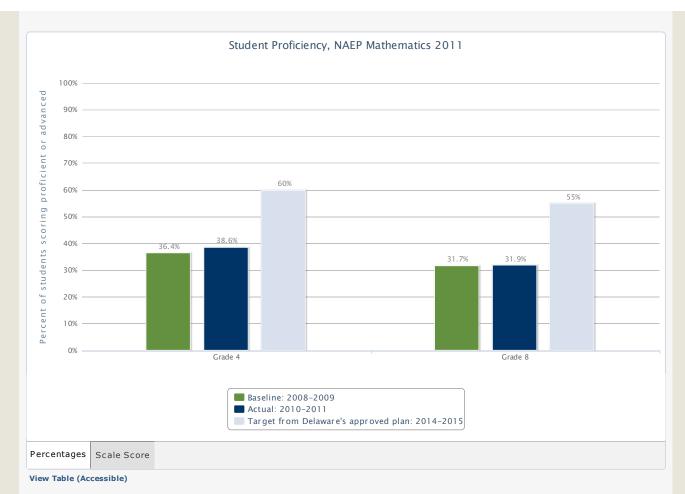
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#### **NAEP** mathematics results

Department-reported information

**NOTE:** NAEP is administered once every two years. The two most recent years are SY 2008-2009 and SY 2010-2011. NAEP mathematics results are provided by the Department of Education's Institute of Education Sciences. To learn more about the NAEP data, please visit http://nces.ed.gov/nationsreportcard/.

Delaware's approved Race to the Top plan included targets for NAEP results based on percentages, not based on students' average scale scores.



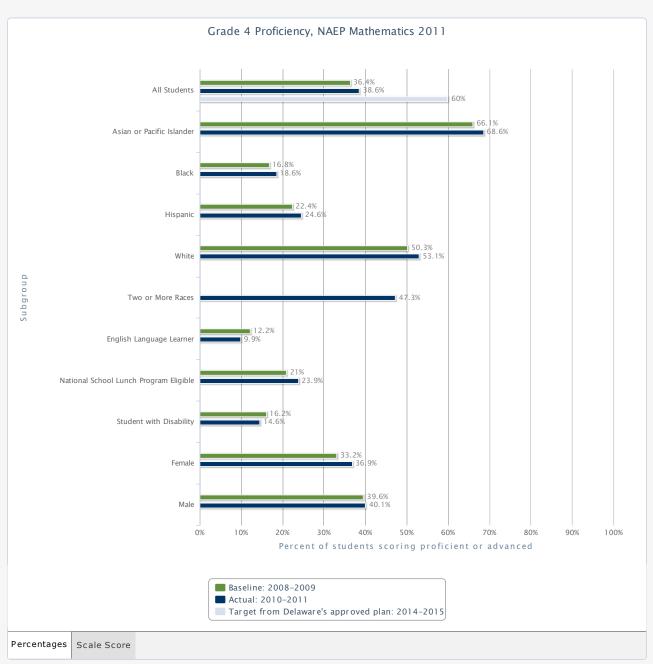
#### NOTE:

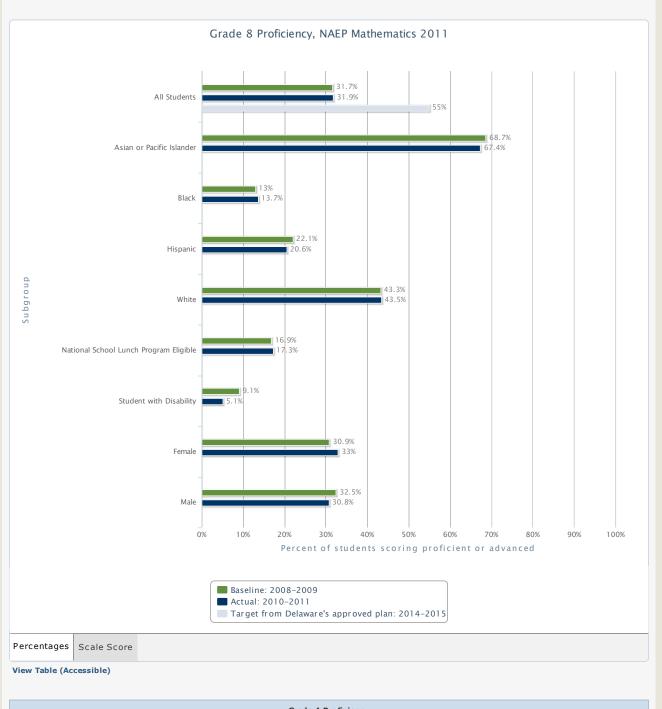
#### Percentages:

The percentage of Delaware's grade 4 students who were at or above Proficient in mathematics in 2011 was not significantly different than in 2009.

#### Expand to See More

Student proficiency on NAEP mathematics	Baseline (percentage): SY 2008-2009	Actual (percentage): SY 2010-2011	- Target from Delaware's approved plan (percentage): SY 2014-2015	Baseline (scale score): SY 2008-2009	Actual (scale score): SY 2010-2011
Grade 4	36.4%	38.6%	60%	239.5	240.4
Grade 8	31.7%	31.9%	55%	283.8	282.8
View Table Key					





Grade 4 Proficiency					
Subgroup	Baseline (percentage): SY 2008-2009	Actual (percentage): SY 2010-2011	Target from Delaware's approved plan (percentage): SY 2014-2015	Baseline (scale score): SY 2008-2009	Actual (scale score): SY 2010-2011
American Indian/Alaska Native	<n< th=""><th><n< th=""><th>N/A</th><th><n< th=""><th><n< th=""></n<></th></n<></th></n<></th></n<>	<n< th=""><th>N/A</th><th><n< th=""><th><n< th=""></n<></th></n<></th></n<>	N/A	<n< th=""><th><n< th=""></n<></th></n<>	<n< th=""></n<>
Asian/Pacific Islander	66.1%	68.6%	N/A	258.1	262.4
Black	16.8%	18.6%	N/A	225.9	227
Hispanic	22.4%	24.6%	N/A	231.2	231
White	50.3%	53.1%	N/A	248.9	249.8
Two or More Races	<n< th=""><th>47.3%</th><th>N/A</th><th><n< th=""><th>249.2</th></n<></th></n<>	47.3%	N/A	<n< th=""><th>249.2</th></n<>	249.2
English Language Learner	12.2%	9.9%	N/A	222.3	214.4
National School Lunch Program Eligible	21%	23.9%	N/A	229	230.8

Student with Disability	16.2%	14.6%	N/A	220.3	218.1
Female	33.2%	36.9%	N/A	237.8	239.4
Male	39.6%	40.1%	N/A	241.2	241.3

View Table Key

Grade 8 Proficiency					
Subgroup	Baseline (percentage): SY 2008-2009	Actual (percentage): SY 2010-2011	Target from Delaware's approved plan (percentage): SY 2014-2015	Baseline (scale score): SY 2008-2009	Actual (scale score): SY 2010-2011
American Indian/Alaska Native	<n< td=""><td><n< td=""><td>N/A</td><td><n< td=""><td><n< td=""></n<></td></n<></td></n<></td></n<>	<n< td=""><td>N/A</td><td><n< td=""><td><n< td=""></n<></td></n<></td></n<>	N/A	<n< td=""><td><n< td=""></n<></td></n<>	<n< td=""></n<>
Asian/Pacific Islander	68.7%	67.4%	N/A	312.5	311.2
Black	13%	13.7%	N/A	267.1	265.6
Hispanic	22.1%	20.6%	N/A	277.6	274.2
White	43.3%	43.5%	N/A	294	293.6
Two or More Races	<n< td=""><td><n< td=""><td>N/A</td><td><n< td=""><td><n< td=""></n<></td></n<></td></n<></td></n<>	<n< td=""><td>N/A</td><td><n< td=""><td><n< td=""></n<></td></n<></td></n<>	N/A	<n< td=""><td><n< td=""></n<></td></n<>	<n< td=""></n<>
English Language Learner	<n< td=""><td><n< td=""><td>N/A</td><td><n< td=""><td><n< td=""></n<></td></n<></td></n<></td></n<>	<n< td=""><td>N/A</td><td><n< td=""><td><n< td=""></n<></td></n<></td></n<>	N/A	<n< td=""><td><n< td=""></n<></td></n<>	<n< td=""></n<>
National School Lunch Program Eligible	16.9%	17.3%	N/A	271	269.7
Student with Disability	9.1%	5.1%	N/A	255.8	244.3
Female	30.9%	33%	N/A	283.4	283.7
Male	32.5%	30.8%	N/A	284.2	281.9
View Table Key					

View Table Key

#### Close Subgroup Graphs

#### Back to the Top

## Table Key

< n	indicates data has been suppressed because of a small count or, for NAEP data, indicates reporting standards not met; sample size insufficient to permit a reliable estimate.
	indicates data are not provided.
N/A	indicates not applicable (e.g., the State did not specify a target in its approved plan, or the element is not applicable this year).

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## Student Outcomes Data: NAEP Results

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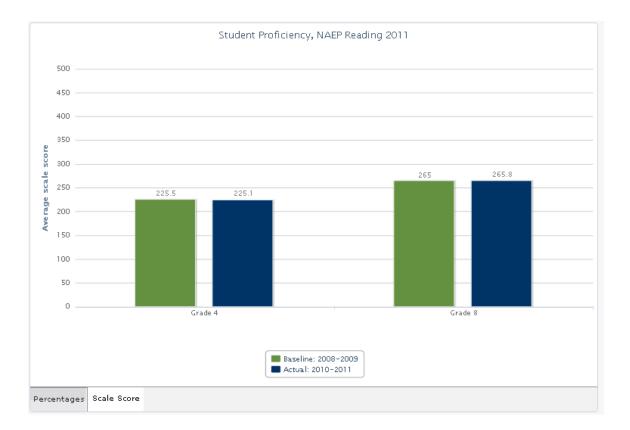
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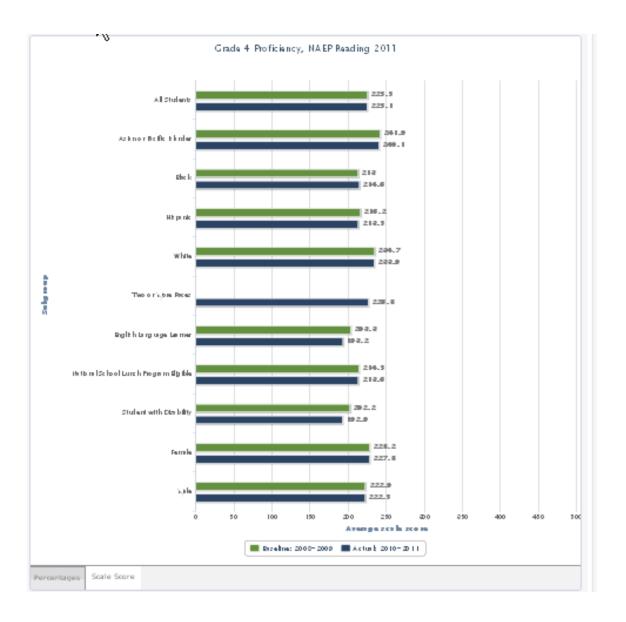
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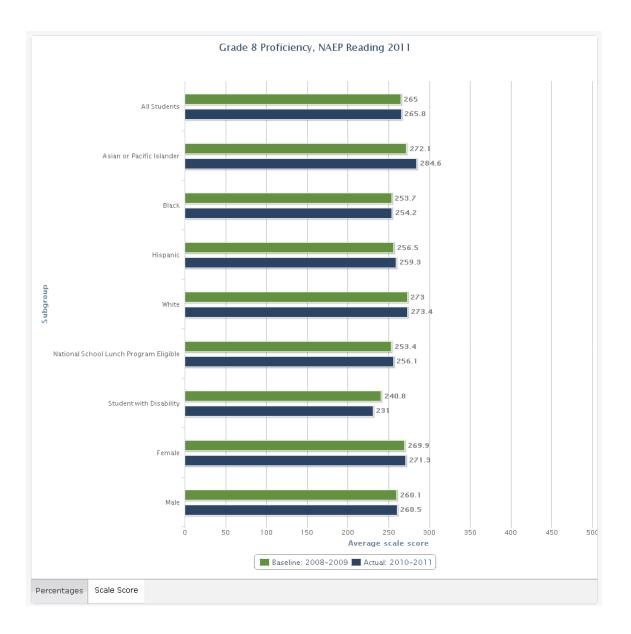
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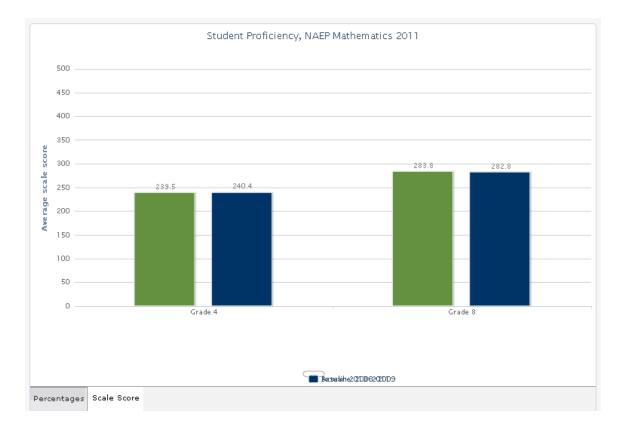
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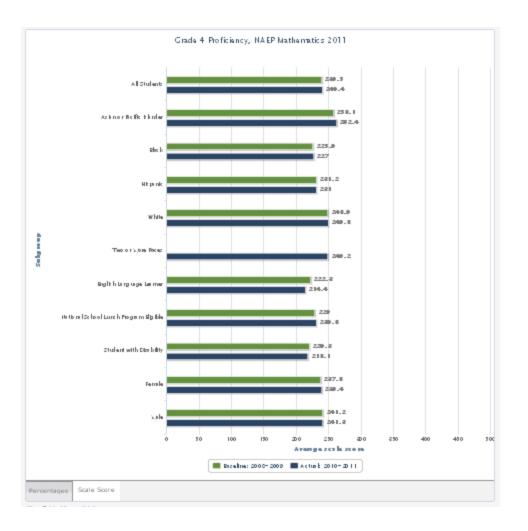
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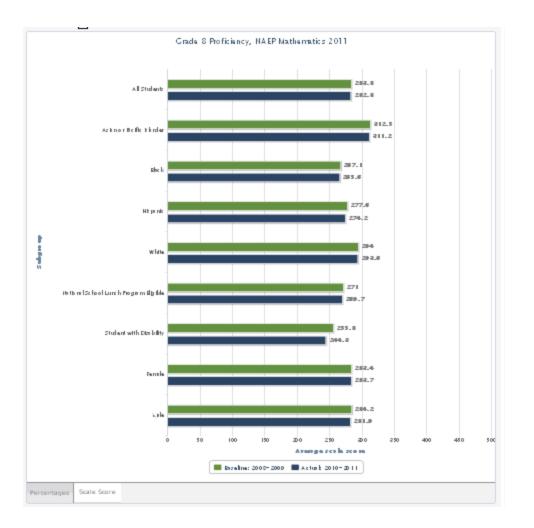














State-reported APR: Year One

Standard Version

Accessible Version

Results in closing the achievement gap on Delaware's ELA assessment	
Results in closing the achievement gap on Delaware's mathematics assessment	
Results in closing the achievement gap on NAEP reading	
Results in closing the achievement gap on NAEP mathematics	
	Collapse All
Results in closing the achievement gap on Delaware's ELA assessment	

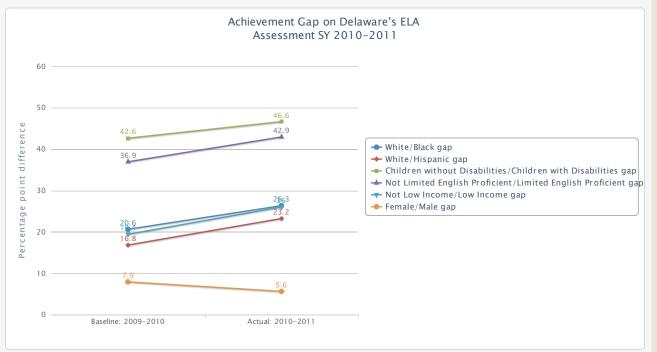
State-reported information

Preliminary SY 2010-2011 data reported as of: December 1, 2011

NOTE: Numbers in the graph represent the gap in a school year between two subgroups on the State's ELA assessment.

Achievement gaps were calculated by subtracting the percent of students scoring proficient in the lower-performing subgroup from the percent of students scoring proficient in the higher-performing subgroup to get the percentage point difference between the proficiency of the two subgroups.

If the achievement gap narrowed between two subgroups, the line will slope downward. If the achievement gap increased between two subgroups, the line will slope upward.



**NOTE:** To better view a specific achievement gap measure in the graph, click a name in the legend to hide that line. Click on the name in the legend again to have the line reappear in the graph.

Achievement gap as measured by percentage point difference on Delaware's ELA assessment SY 2010-2011. Preliminary data. Preliminary data reported as of December 1, 2011	Baseline: SY 2009-2010	Actual: SY 2010-2011	Target from Delaware's approved plan: SY 2010-2011
White/Black gap	20.6	26.3	N/A
White/Hispanic gap	16.8	23.2	N/A
Children without Disabilities/Children with Disabilities gap	42.6	46.6	N/A
Not Limited English Proficient/Limited English Proficient gap	36.9	42.9	N/A
Not Low Income/Low Income gap	19.4	26	N/A
Female/Male gap	7.9	5.6	N/A
View Table Key			

#### Additional information provided by the State:

Scores of individual students or student groups reported for the DSTP and DCAS are not directly comparable due to (1) structural differences in the format and nature of the assessments (e.g., adaptive versus fixed form assessments); (2) absence of score-score comparisons for students at the same grade who took the two assessments in the same time frame under the same high-stakes circumstances; and (3) significant differences in the performance level cut scores and bands approved by the State Board of Education for each assessment.

#### Close

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#### Results in closing the achievement gap on Delaware's mathematics assessment

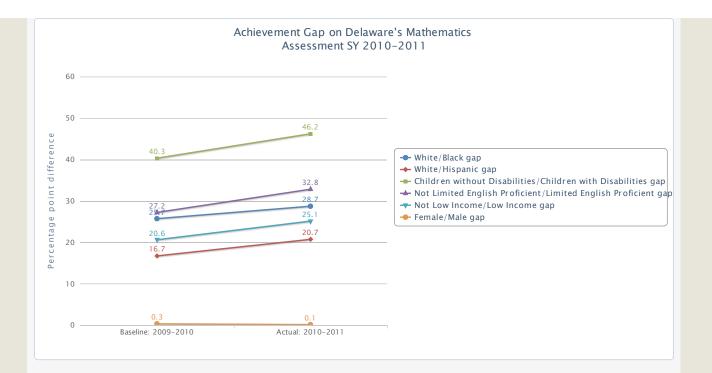
State-reported information

Preliminary SY 2010-2011 data reported as of: December 1, 2011

**NOTE:** Numbers in the graph represent the gap in a school year between two subgroups on the State's mathematics assessment.

Achievement gaps were calculated by subtracting the percent of students scoring proficient in the lower-performing subgroup from the percent of students scoring proficient in the higher-performing subgroup to get the percentage point difference between the proficiency of the two subgroups.

If the achievement gap narrowed between two subgroups, the line will slope downward. If the achievement gap increased between two subgroups, the line will slope upward.



#### View Table (Accessible)

**NOTE:** To better view a specific achievement gap measure in the graph, click a name in the legend to hide that line. Click on the name in the legend again to have the line reappear in the graph.

Achievement gap as measured by percentage point difference on Delaware's mathematics assessment SY 2010-2011. Preliminary data. Preliminary data reported as of December 1, 2011	Baseline: SY 2009-2010	Actual: SY 2010-2011	Target from Delaware's approved plan: SY 2010-2011
White/Black gap	25.7	28.7	N/A
White/Hispanic gap	16.7	20.7	N/A
Children without Disabilities/Children with Disabilities gap	40.3	46.2	N/A
Not Limited English Proficient/Limited English Proficient gap	27.2	32.8	N/A
Not Low Income/Low Income gap	20.6	25.1	N/A
Female/Male gap	0.3	0.1	N/A
View Table Key			

#### Additional information provided by the State:

Scores of individual students or student groups reported for the DSTP and DCAS are not directly comparable due to (1) structural differences in the format and nature of the assessments (e.g., adaptive versus fixed form assessments); (2) absence of score-score comparisons for students at the same grade who took the two assessments in the same time frame under the same high-stakes circumstances; and (3) significant differences in the performance level cut scores and bands approved by the State Board of Education for each assessment.

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#### Results in closing the achievement gap on NAEP reading

Department-reported information

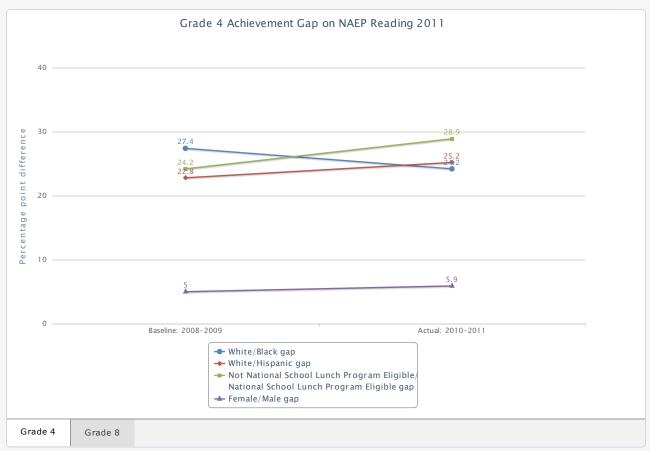
NOTE: NAEP is administered once every two years. The two most recent years are SY 2008-2009 and SY 2010-2011.

Delaware's NAEP reading results as provided by the Department of Education's Institute of Education Sciences. To learn more about the NAEP data, please visit http://nces.ed.gov/nationsreportcard/.

Numbers in the graph represent the gap in a school year between two subgroups on NAEP reading.

Achievement gaps were calculated by subtracting the percent of students scoring proficient or advanced in the lowerperforming subgroup from the percent of students scoring proficient or advanced in the higher-performing subgroup to get the percentage point difference between the proficiency of the two subgroups.

If the achievement gap narrowed between two subgroups, the line will slope downward. If the achievement gap increased between two subgroups, the line will slope upward.



View Table (Accessible)

**NOTE:** To better view a specific achievement gap measure in the graph, click a name in the legend to hide that line. Click on the name in the legend again to have the line reappear in the graph.

Grade 4 Achievement Gap			
Achievement gap as measured by percentage point difference on NAEP reading	Baseline: SY 2008-2009	Actual: SY 2010-2011	Target from Delaware's approved plan: SY 2010-2011
White/Black gap	27.4	24.2	N/A
White/Hispanic gap	22.8	25.2	N/A
Not National School Lunch Program Eligible/National School Lunch Program Eligible gap	24.2	28.9	N/A
Female/Male gap	5	5.9	N/A
View Table Key		^	

Grade 8 Achievement Gap			
Achievement gap as measured by percentage point difference on NAEP reading	Baseline: SY 2008-2009	Actual: SY 2010-2011	Target from Delaware's approved plan: SY 2010-2011

White/Black gap	24.9	23.4	N/A
White/Hispanic gap	19.9	15.8	N/A
Not National School Lunch Program Eligible/National School Lunch Program Eligible gap	22.1	20.1	N/A
Female/Male gap	11.7	13.6	N/A
View Table Key			

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#### Results in closing the achievement gap on NAEP mathematics

Department-reported information

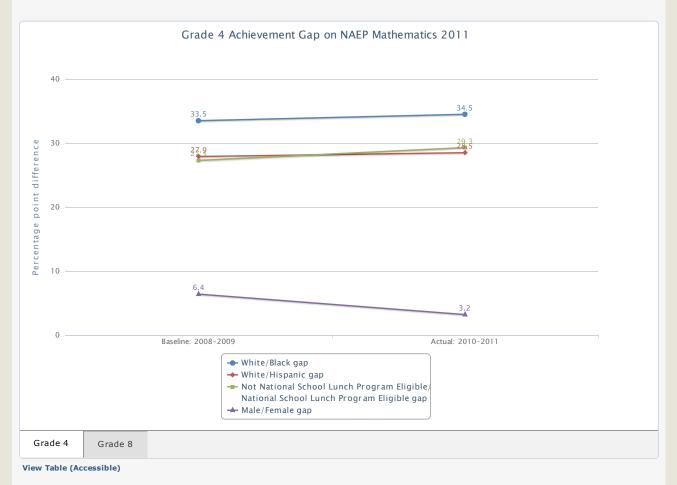
NOTE: NAEP is administered once every two years. The two most recent years are SY 2008-2009 and SY 2010-2011.

Delaware's NAEP mathematics results as provided by the Department of Education's Institute of Education Sciences. To learn more about the NAEP data, please visit http://nces.ed.gov/nationsreportcard/.

Numbers in the graph represent the gap in a school year between two subgroups on NAEP mathematics.

Achievement gaps were calculated by subtracting the percent of students scoring proficient or advanced in the lowerperforming subgroup from the percent of students scoring proficient or advanced in the higher-performing subgroup to get the percentage point difference between the proficiency of the two subgroups.

If the achievement gap narrowed between two subgroups, the line will slope downward. If the achievement gap increased between two subgroups, the line will slope upward.



NOTE: To better view a specific achievement gap measure in the graph, click a name in the legend to hide that line. Click

Grade 4 Achievement Gap			
Achievement gap as measured by percentage point difference on NAEP mathematics	Baseline: SY 2008-2009	Actual: SY 2010-2011	Target from Delaware's approved plan: SY 2010-2011
White/Black gap	33.5	34.5	N/A
White/Hispanic gap	27.9	28.5	N/A
Not National School Lunch Program Eligible/National School Lunch Program Eligible gap	27.3	29.3	N/A
Male/Female gap	6.4	3.2	N/A
View Table Key			

Grade 8 Achievement Gap			
Achievement gap as measured by percentage point difference on NAEP mathematics	Baseline: SY 2008-2009	Actual: SY 2010-2011	Target from Delaware's approved plan: SY 2010-2011
White/Black gap	30.3	29.8	N/A
White/Hispanic gap	21.2	22.9	N/A
Not National School Lunch Program Eligible/National School Lunch Program Eligible gap	23.9	25.7	N/A
Male/Female gap	1.6	-2.2	N/A
View Table Key			

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## Table Key

< n	indicates data has been suppressed because of a small count or, for NAEP data, indicates reporting standards not met; sample size insufficient to permit a reliable estimate.
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N/A	indicates not applicable (e.g., the State did not specify a target in its approved plan, or the element is not applicable this year).

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## Student Outcomes Data: Closing Achievement Gaps

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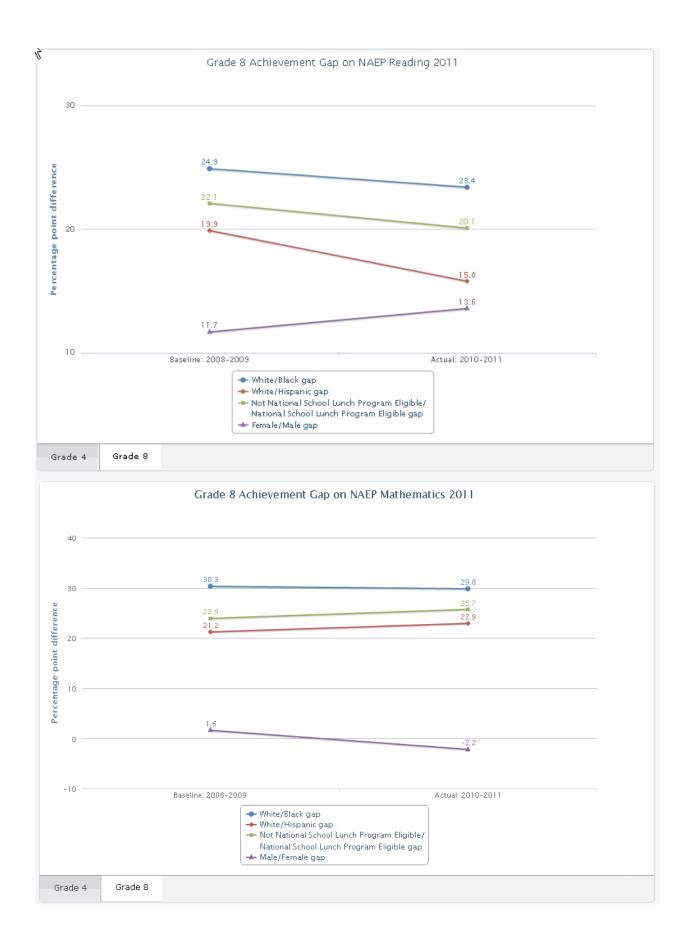
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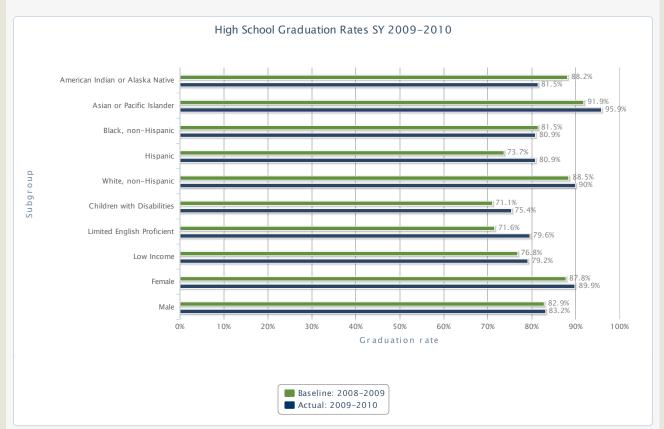
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## State-reported APR: Year One Delaware Standard Version Accessible Version High school graduation rates College enrollment rates College course completion rates Collapse All **High school graduation rates** State-reported information Preliminary SY 2009-2010 data reported as of: December 1, 2011 High School Graduation Rates SY 2009-2010 100% 90% 87% 86.6% 85.3% 80% 70% Graduation rate 60% 50% 40% 30% 20% 10% 0% 2008-2009 2009-2010 2013-2014 School year Baseline: 2008-2009 Actual: 2009-2010 Target from Delaware's approved plan: 2013–2014 View Table (Accessible)

Preliminary high school graduation rates reported as of December 1, 2011	Baseline: SY 2008-2009	Actual: SY 2009-2010	Target from Delaware's approved plan: SY 2013-2014
All Students	85.3%	86.6%	87%
View Table Key			



#### View Table (Accessible)

Preliminary High School Graduation Rates			
Subgroup	Baseline: SY 2008-2009	Actual: SY 2009-2010	Target from Delaware's approved plan: SY 2009-2010
American Indian or Alaska Native	88.2%	81.5%	N/A
Asian or Pacific Islander	91.9%	95.9%	N/A
Black, non-Hispanic	81.5%	80.9%	N/A
Hispanic	73.7%	80.9%	N/A
White, non-Hispanic	88.5%	90%	N/A
Children with Disabilities	71.1%	75.4%	N/A
Limited English Proficient	71.6%	79.6%	N/A
Low Income	76.8%	79.2%	N/A
Female	87.8%	89.9%	N/A
Male	82.9%	83.2%	N/A
View Table Key			

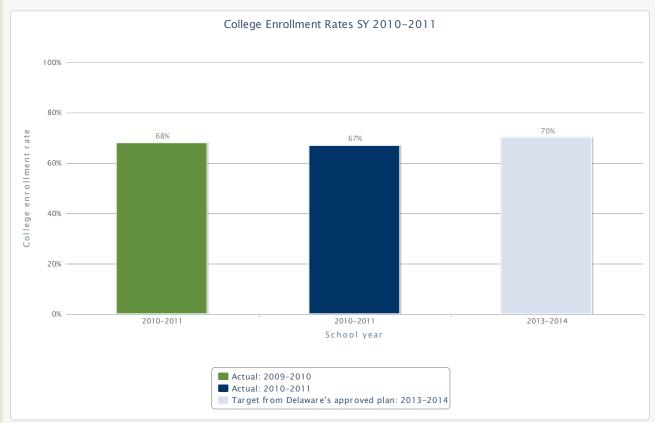
Close Subgroup Graph

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State-reported information

## Preliminary SY 2009-2010 data reported as of: December 1, 2011

**NOTE:** The Department provided guidance to States regarding the reporting period for college enrollment. For example, for SY 2009-2010, a State would report on the students who graduated from high school in SY 2007-2008 and enrolled in an institution of higher education (IHE) within 16 months of graduation.

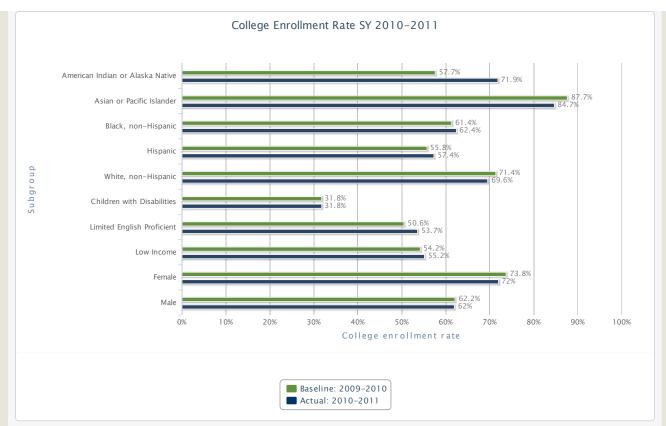


View Table (Accessible)

Preliminary college enrollment rates reported as of December 1, 2011	Baseline: SY 2009-2010	Actual: SY 2010-2011	Target from Delaware's approved plan: SY 2010-2011
All Students	68%	67%	70%
View Table Key			

#### Additional information provided by the State:

2c) College enrollment - The most recent years for which disaggregated in-state and out-of-state college enrollment data is available are 2007-2008 (2008 graduates) and 2008-2009 (2009 graduates). Availability of data for 2009-2010 (2010 graduates) is targeted for November, 2011.



View Table (Accessible)

Preliminary College Enrollment Rates				
Subgroup	Baseline: SY 2009-2010	Actual: SY 2010-2011	Target from Delaware's approved plan: SY 2013-2014	
American Indian or Alaska Native	57.7	71.9	N/A	
Asian or Pacific Islander	87.7	84.7	N/A	
Black, non-Hispanic	61.4	62.4	N/A	
Hispanic	55.8	57.4	N/A	
White, non-Hispanic	71.4	69.6	N/A	
Children with Disabilities	31.8	31.8	N/A	
Limited English Proficient	50.6	53.7	N/A	
Low Income	54.2	55.2	N/A	
Female	73.8	72	N/A	
Male	62.2	62	N/A	
View Table Key				

Close Subgroup Graph

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#### **College course completion rates**

State-reported information

**NOTE:** The Department provided guidance to States regarding the reporting period for college course completion. For example, for SY 2009-2010, a State would report on the students who graduated from high school in SY 2005-2006, enroll

in an institution of higher education (IHE) within 16 months of graduation, and complete at least one year's worth of college credit (applicable to a degree) within two years of enrollment in the IHE.

Delaware did not provide college course completion data.

#### Additional information provided by the State:

The data necessary to fully meet the definition of college course completion is currently not available. Delaware is working towards collecting the necessary data.

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## Table Key

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N/A	indicates not applicable (e.g., the State did not specify a target in its approved plan, or the element is not applicable this year).

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#### Student Outcomes Data: Graduation Rates and Postsecondary Data

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## College and Career-Ready Standards and Assessments

Supporting the transition to college and career-ready standards and high-quality assessments

Standards and assessments: Optional measures

Collapse All

Supporting the transition to college and career-ready standards and high-quality assessments

State-reported information

#### NOTE: The Department does not expect States to begin implementing such assessments until school year 2014-2015.

**Question:** Has the State implemented any common, high-quality assessments aligned to college and career-ready standards in SY 2010-2011? If so, please indicate what assessment and for which grades. **State-reported response:** No

#### Additional information provided by the State:

Delaware introduced the Delaware Comprehensive Assessment System (DCAS) at the beginning of the 2010-2011 school year, with assessments in Grades 3-10, based on a test blueprint aligned to existing Delaware prioritized Content Standards in English Language Arts-Reading, Mathematics, Science and Social Studies. DDOE commissioned Achieve Inc. to conduct an alignment study comparing the above Delaware Standards to the Common Core Standards in ELA-Reading and Mathematics in Spring 2010. That alignment study found matches of 100% in ELA-Reading and 79% in Mathematics. Subsequently, two key events occurred. First, The Delaware State Board of Education formally adopted the Common Core Standards verbatim to replace the previous DE Content Standards in ELA-Reading and Mathematics. Secondly, DDOE, working in cooperation with its assessment vendor- American Institutes of Research- has undertaken comprehensive item development plans with the goal of populating the DCAS item pool and all grades 3-10 tests in ELA-Reading and Mathematics with Common Core aligned test items by 2014-2015. We believe that the DCAS currently assesses roughly 25%-40% of college and career ready standards.

DCAS End of Course Assessments in English II, Algebra I, Integrated Mathematics I, Biology, and US History, will enter operational test schedule beginning in January 2012. The specifications document is attached below.

In addition, DDOE implemented a requirement that all grade 11 students in Delaware public schools participate in the SAT assessment annually. In our planning discussions with the College Board-publishers of the SAT- we have reviewed the linking studies that demonstrate that the SAT is aligned to college and career ready standards.

Close

## State-reported APR: Year One

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## Standards and assessments: Optional measures

#### State-reported information

Performance measure	Race to the Top plan subcriterion	Baseline: SY 2009-2010	Actual: SY 2010-2011	Target from Delaware's approved plan: SY 2010-2011
Teacher Sessions Offered	(B)(3)	0	7	N/A
Teachers trained on new assessments	(B)(3)	0	79	100
Courses taught using new assessment system	(B)(3)	0	N/A	80
Percentage of teachers in testable subjects using DCAS as the technology-base for their IIS	(B)(3)	0	N/A	80
Administrators and specialists trained on new assessments	(B)(3)	0	295	N/A
Students receiving PSAT and SAT by end of SY 2010-11	(B)(3)	0	95	100
View Table Key				

## Additional information provided by the State:

The PSAT administration for all 10th grade students will be held in the Fall 2011.

IIS implementation will begin statewide in Fall 2011.

#### Back to the Top

## Table Key

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State-reported APR: Year One

Data Systems to Support Instruction

Fully implementing a statewide longitudinal data system

Data systems to support instruction: Optional measures

Collapse All

## Fully implementing a statewide longitudinal data system

America COMPETES elements	State included this element as of June 30, 2011	Optional explanatory comment provided by the State
<ol> <li>A unique statewide student identifier that does not permit a student to be individually identified by users of the system</li> </ol>	Yes	We have had a statewide unique identifier since 1983 in our Delaware Student Information System (DELSIS)
(2) Student-level enrollment, demographic, and program participation information	Yes	Maintained in DELSIS
(3) Student-level information about the points at which students exit, transfer in, transfer out, drop out, or complete P-16 education programs	Yes	Maintained in DELSIS
(4) The capacity to communicate with higher education data systems	Yes	We store data in our P-20 data system.
(5) A State data audit system assessing data quality, validity, and reliability	Yes	We run an application called the Integrated Student Data Updating system. This system provides for student-level data auditing, quality control, and daily updating. Records that don't pass our quality control are forwarded to individual schools in the form of kicker lists for correction.
(6) Yearly test records of individual students with respect to assessments	Yes	We have Delaware Student Testing System data summarized at http://dstp.doe.k12.de.us/DSTPmart9/default.aspx, this data is for the years 1998 through 2010. Last year Delaware transitioned to the Delaware Comprehensive Assessment System (DCAS)which is summarized at http://dstp.doe.k12.de.us/DCASOR/default.aspx
(7) Information on students not tested by grade and subject	Yes	Tracked as part of our DSTP/DCAS testing services.
(8) A teacher identifier system with the ability to match teachers to students	Yes	We have a statewide teacher licensure system which is linked to our statewide student information system. This drives our HQT reporting as well as linking our students to teachers.
(9) Student-level transcript information, including information on courses completed and grades earned	Yes	Individual student transcript information is maintained as part of our student information system.
(10) Student-level college readiness test scores	Yes	Annually we link AP test scores as well as SAT test scores statewide. Last year we started testing all 11th grade students on the SAT by the College Board.
(11) Information regarding the extent to which students transition successfully from secondary school to postsecondary education, including whether students enroll in remedial coursework	Yes	We utilize the National Student Clearinghouse to determine out-of-state college enrollment. Most of our in-state college data acquired directly from our in-state IHEs and matched to our student records.
(12) Other information determined necessary to address alignment and adequate preparation for success in postsecondary education	Yes	We get course grade, credit and remedial data about our students from the data file we receive from our in-state IHEs. Plus we utilize NSC to determine persistence for our out-of-state students.

#### State-reported information

## Data systems to support instruction: Optional measures

State-reported information				d information
Performance measure	Race to the Top plan subcriterion	Baseline: SY 2009-2010	Actual: SY 2010-2011	Target from Delaware's approved plan: SY 2010-2011
Number of Educational Dashboard Portal visits	(C)(2)	N/A	N/A	N/A
Final State Operating Model	(C)(3)	0	4	2
Number of data coaches deployed	(C)(3)	5	5	5
29 Coaches in Schools	(C)(3)	5	28	29
Feedback Survey of Teachers & Principals	(C)(3)	0	57	35
Full Launch Data Coach Deployment	(C)(3)	5	28	29
Number of stakeholders providing feedback on the Educational Dashboard Portal	(C)(2)	N/A	N/A	N/A
Training Program defined and created	(C)(3)	0	100	100
Number of unique Educational Dashboard Portal Users (1 or more login per year)	(C)(2)	N/A	N/A	N/A
Coach placement report for all 29 coaches	(C)(3)	0	96.5	100
Training Program Completed	(C)(3)	0	100	100
View Table Key				

## Additional information provided by the State:

The March 15, 2011 amendment moved the delivery date for the Educational Dashboard Portal to March 2012. Although initial measures will be available starting in April 2012, the associated performance measures are for the 2013-14 school year.

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## Table Key

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Data Systems to Support Instruction

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State-reported APR: Year One



Providing high-quality pathways for aspiring teachers and principals

State-reported information

**Question:** In narrative form, describe any changes to legal, statutory, or regulatory provisions made since the submission of the Race to the Top application that allow alternative routes to certification for teachers and principals.

State-reported response: Two new alternative routes to certification for teachers and principals were established in year one of RTTT.

The first, the creation of Delaware Leadership Project (DLP), an alternative-route to certification program (modeled after New York City Leadership Academy) for principals seeking to lead high-need schools. It was established under Professional Standards Board (PSB) regulation 1591 relating to certification program pathways for principals/assistant principals. This regulation was interpreted by DDOE legal counsel to empower the PSB to review and approve an alternative program such as DLP. As a result of these deliberations and two-year pilot approval for Delaware Leadership Project, the PSB is now embarking upon a re-writing of regulation 1591, which has the potential to fully reform the current principal preparation landscape (to require clinical experience, e.g.). The DDOE's Teacher & Leader Effectiveness Unit is closely monitoring the progress of DLP and reports quarterly to the PSB per the pilot approval conditions.

The second, Delaware Teaching Fellows (in partnership with Wilmington University), was established under current state code outlining the current provisions for alternative-routes to teacher certification. Similar to Teach For America-DE, Delaware Teaching Fellows is operated by a national vendor (The New Teacher Project) and has a proven track-record for recruitment, selection, and pre-service training. The first year cohort is 22 aspiring teachers, 13 of whom have recently secured full-time positions and will begin coursework at Wilmington University this fall.

Relatedly, the Department has also proposed substantive changes to departmental regulation #290, which governs the "Approval of Educator Preparation Programs." The amendment, which would add section 9.0, to existing regulation would allow for non-traditional certification coursework providers (non-profits, regional labs, LEAs) to provide courses of study that lead to certification by the SEA. The amendment regulation will allow DDOE to initiate and RFP process, which could create additional teacher certification pathways.

Question: Report the number of programs that currently provide alternative routes to certification.

Category	Prior year: SY 2009-2010	Most recent year: SY 2010-2011	
Number of alternative certification programs for teachers	5	6	
Number of alternative certification programs for principals	0	1	
View Table Key			



 Principals Completing Alternative Certification

 0.05

 0.04

 0.03

 0.02

 0.01

 0

 2008-2009

 2009-2010

 School year

Question: Report the number of teachers and principals who completed an alternative routes to certification in the State.

#### View Table (Accessible)

View Table (Accessible)

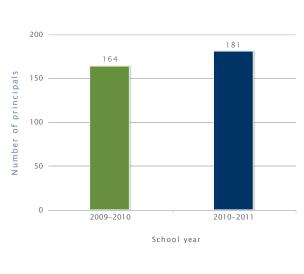
Category	Prior year: SY 2008-2009	Most recent year: SY 2009-2010
Number of teachers who have completed alternative certifications	85	81
Number of principals who have completed alternative certifications	0	0
View Table Key		

#### Additional information provided by the State:

Of the 7 programs, 6 programs certify teachers and 1 program certifies principals. No programs currently certify both teachers and principals.

Question: Report on the number of teachers and principals who were newly certified statewide.





Principals Newly Certified Statewide

View Table (Accessible)

View Table (Accessible)

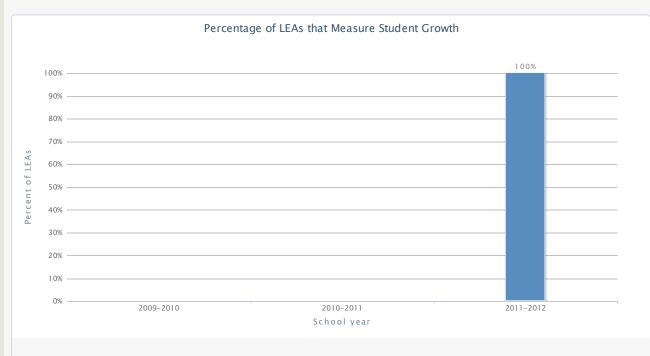
Category	Prior year: SY 2009-2010	Most recent year: SY 2010-2011
Teachers	1,151	1,466
Principals	164	181
View Table Key		

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## Improving teacher and principal effectiveness based on performance

State-reported information

**Question:** Report on the number of participating LEAs that measure student growth.



#### View Table (Accessible)

## **NOTE:** Based on State's approved Race to the Top plans, the Department does not expect that grantee States will implement qualifying evaluation systems prior to SY 2011-2012.

Performance measure	Baseline: SY 2009-2010	Actual: SY 2010-2011	Target from Delaware's approved plan: SY 2010-2011	Target from Delaware's approved plan: SY 2011-2012
Percentage of participating LEAs that measure student growth (as defined in the Race to the Top application)	0%	0%	N/A	100%
View Table Key				

Performance measure	Baseline: SY 2009-2010	Actual: SY 2010-2011	Target from Delaware's approved plan: SY 2010-2011
Percentage of participating LEAs with qualifying evaluation systems for teachers	100%	0%	100%
Percentage of participating LEAs with qualifying evaluation systems for principals	100%	0%	100%
Percentage of participating LEAs with qualifying evaluation systems that are used to inform:			
Teacher and principal development	100%	0%	100%
Teacher and principal compensation	5%	0%	5%
Teacher and principal promotion	100%	0%	N/A
Retention of effective teachers and principals	100%	0%	N/A
<ul> <li>Granting of tenure and/or full certification (where applicable) to teachers and principals</li> </ul>	100%	0%	100%
Removal of ineffective tenured and untenured teachers and principals	100%	0%	N/A
View Table Key			

Performance measure	Baseline: SY 2009-2010		Actual: SY 2010-2011		Target from Delaware's approved plan: SY 2010-2011	
	Teachers	Principals	Teachers	Principals	Teachers	Principals
Percentage of teachers and principals in participating LEAs with qualifying evaluation systems	N/A	N/A	0%	0%	N/A	N/A
Percentage of teachers and principals in participating LEAs with qualifying evaluation systems who were evaluated as effective or better in the prior academic year	N/A	N/A	0%	0%	N/A	N/A
Percentage of teachers and principals in participating LEAs with qualifying evaluation systems who were evaluated as ineffective in the prior academic year	N/A	N/A	0%	0%	N/A	N/A
Percentage of teachers and principals in participating LEAs with qualifying evaluation systems whose evaluations were used to inform compensation decisions in the prior academic year	N/A	N/A	0%	0%	N/A	N/A
Percentage of teachers and principals in participating LEAs with qualifying evaluation systems who were evaluated as effective or better and were retained in the prior academic year	N/A	N/A	0%	0%	N/A	N/A
Percentage of teachers in participating LEAs with qualifying evaluation systems who were eligible for tenure in the prior academic year	N/A	N/A	0%	0%	N/A	N/A
Percentage of teachers in participating LEAs with qualifying evaluation systems whose evaluations were used to inform tenure decisions in the prior academic year	N/A	N/A	0%	0%	N/A	N/A
Percentage of teachers and principals in participating LEAs who were removed for being ineffective in the prior academic year	N/A	N/A	N/A	N/A	N/A	N/A
View Table Key			-			

## Additional information provided by the State:

DDOE is beginning the first year of measuring student growth (as defined by USDOE) in 2011-12.

As the DDOE undertook the task of completing the Race to the Top Annual Performance Review, the Department identified a need to clarify the performance measures in section "D" of its original Race to the Top plan relating to qualifying evaluation systems.

Specifically, the Department observed that the baselines for the percentage of qualifying evaluation systems were determined based on a definition of "qualifying" that does not align with the federal definition. Delaware cited in its original Race to the Top application that all LEAs used a "qualifying" evaluation system, as the statewide evaluation system did in fact include multiple summative ratings and components, and included "Student Improvement" as one of the five components. However, "Student Improvement," as previously defined in Delaware, does not meet the USDOE's definition of "Student Growth," in that student improvement measures were not previously required to be rigorous and comparable across classrooms. As such, the statewide system was not in fact "qualifying."

Per discussions with USDOE and the additional information above, DDOE has clarified its original baseline to reflect that the previous statewide evaluation system did not meet the "qualifying criteria" as defined by USDOE - although the system included student achievement, it did not include "student growth" as defined by USDOE. DPAS II will measure "student growth" beginning in the 2011-12 school year.

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#### Back to the Top

#### Ensuring equitable distribution of effective teachers and principals

State-reported information

**NOTE:** Based on States' approved Race to the Top plans, the Department does not expect the grantee States will implement qualifying evaluation systems prior to SY 2011-2012

Performance measure	Baseline: SY 2009-2010	Actual: SY 2010-2011	Target from Delaware's approved plan: SY 2010-2011
Percentage of teachers in schools that are high-poverty, high-minority, or both (as defined in this notice) who are highly effective (as defined in the application)	0%	N/A	5%
Percentage of teachers in schools that are low-poverty, low-minority, or both (as defined in the application) who are highly effective (as defined in the application)	N/A	N/A	25%
Percentage of teachers in schools that are high-poverty, high-minority, or both (as defined in the application) who are effective or better (as defined in the application)	N/A	N/A	N/A
Percentage of teachers in schools that are low-poverty, low-minority, or both (as defined in the application) who are effective or better (as defined in the application)	0%	N/A	N/A
Percentage of teachers in schools that are high-poverty, high-minority, or both (as defined in the application) who are ineffective	0%	N/A	N/A
Percentage of teachers in schools that are low-poverty, low-minority, or both (as defined in the application) who are ineffective	0%	N/A	5%
Percentage of principals in schools that are high-poverty, high-minority, or both (as defined in the application) who are highly effective (as defined in the application)	0%	N/A	5%
Percentage of principals in schools that are low-poverty, low-minority or both (as defined in the application) who are highly effective (as defined in the application)	0%	N/A	25%
Percentage of principals in schools that are high-poverty, high-minority, or both (as defined in the application) who are effective or better (as defined in the application)	N/A	N/A	N/A
Percentage of principals in schools that are low-poverty, low-minority, or both (as defined in the application) who are effective or better (as defined in the application)	N/A	N/A	N/A
Percentage of principals in schools that are high-poverty, high-minority, or both (as defined in the application) who are ineffective	0%	N/A	25%
Percentage of principals in schools that are low-poverty, low-minority, or both (as defined in the application) who are ineffective	0%	N/A	5%

Percentage of mathematics teachers who were evaluated as effective or better	0%	N/A	60%
Percentage of science teachers who were evaluated as effective or better	0%	N/A	60%
Percentage of special education teachers who were evaluated as effective or better	0%	N/A	60%
Percentage of teachers in language instructional programs who were evaluated as effective or better	0%	N/A	60%
View Table Key			

Term	State's Definition
Mathematics teachers         DEEDS (the Delaware Educator Data System) has General Core Subject Areas which are assigned to each PHRST (Payroll/Human Resources Statewide Technology) position. These are similar to the NCLB core subjects but allow groupin related areas - for example, the general core subject area of "Science" groups the NCLB areas of General Science, Integ Science, Earth Science and Physical Science. The same is true with Foreign Languages, which includes Japanese, Chinese Greek, Latin, etc. Mathematics positions are identified in a similar fashion.	
Science teachers	DEEDS (the Delaware Educator Data System) has General Core Subject Areas which are assigned to each PHRST (Payroll/Human Resources Statewide Technology) position. These are similar to the NCLB core subjects but allow grouping of related areas - for example, the general core subject area of "Science" groups the NCLB areas of General Science, Integrated Science, Earth Science and Physical Science. The same is true with Foreign Languages, which includes Japanese, Chinese, Greek, Latin, etc. Mathematics positions are identified in a similar fashion.
Special education teachers	DDOE searched for PHRST position descriptions containing either 'except' or 'gift'. This found the positions for Gifted and Talented and Exceptional Child.
Teachers in language instruction educational programs	DDOE searched PHRST for positions containing ESL in the PHRST description. This count does NOT include those listed as teaching the handicapped, blind, autistic or hearing impaired. It only includes those positions that are listed as for the gifted or exceptional child.

View Table Key

### Additional information provided by the State:

Please see the previous note regarding Delaware's "qualifying" evaluation system.

These top two numbers were pulled from live payroll. We do not have a snapshot for the 2010-2011 school year, but other than retirements, everyone is on a 12 month pay cycle.

The statewide tracking system was introduced during the 2010-2011 school year. Not every district used the system in its initial year. Some districts reported from existing systems that did not record the ratings for every educator. Effective 2011-2012, every Delaware district and charter will be using and recording evaluations in the statewide system.

The state's definitions for the terms above are based on the queries used in the state educator database.

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#### Improving the effectiveness of teacher and principal preparation programs

#### State-reported information

Performance measure	Baseline: SY 2009-2010	Actual: SY 2010-2011	Target from Delaware's approved plan: SY 2010-2011
Number of teacher preparation programs in the State for which the public can access data on the achievement and growth (as defined in the Race to the Top application) of the graduates' students	N/A	0	N/A
Number of principal preparation programs in the State for which the public can access data on the achievement and growth (as defined in the Race to the Top application) of the graduates' students	N/A	0	N/A
Total number of teacher preparation programs in the State	4	5	N/A
Total number of principal preparation programs in the State	3	4	N/A
Percentage of teacher preparation programs in the State for which the public can access data on the achievement and growth (as defined in the Race to the Top application) of the graduates' students	0	0	0

Percentage of principal preparation programs in the State for which the public can access data on the achievement and growth (as defined in the Race to the Top application) of the graduates' students	0	0	0
Number of teachers prepared by each credentialing program in the State for which the information (as described in the criterion) is publicly reported	N/A	0	N/A
Number of principals prepared by each credentialing program in the State for which the information (as described in the criterion) is publicly reported	N/A	0	N/A
Number of teachers in the State whose data are aggregated to produce publicly available reports on the State's credentialing programs	N/A	0	N/A
Number of principals in the State whose data are aggregated to produce publicly available reports on the State's credentialing programs	N/A	0	N/A
View Table Key			

#### Additional information provided by the State:

Total number of teacher preparation programs: The state currently has four colleges/universities providing teacher preparation programs, but has recently added Delaware Teaching Fellows under RTTT. While this pathway is a partnership with one of those four universities, the criteria for successful program completion includes factors such as principal evaluation and student growth (as defined by The New Teacher Project, the lead partner). Thus, herein we constitute it as a new teacher preparation program. Total number of principal preparation programs: See (D)(1). Though established only recently, Delaware Leadership Project is a stand-alone alternative-route to principal preparation. Thus, herein we consider it as a new principal preparation program.

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## Great teachers and leaders: Optional measures

State-reported information

Performance measure	Race to the Top plan subcriterion	Baseline: SY 2009-2010	Actual: SY 2010-2011	Target from Delaware's approved plan: SY 2010-2011
Novice and High-Need principals complete intensive leadership training	(D)(5)	0	N/A	N/A
All participating districts can show a coherent approach to professional development	(D)(5)	0	N/A	N/A
View Table Key			·	

#### Additional information provided by the State:

Optional Deliverables/Measures Identified in Delivery plan Comprehensive PD - Vision Network 1. Signed Contract finalizing contract, expected to be signed and executed by September 1, 2011 2. Hiring of ED and Liaison - Vision Network ED hired by Rodel Foundation and on loan to University of Delaware for one year 3. White-paper of recommendations to Sec of Ed - recommendations submitted and strategic plan for 2011-2012 developed School Administration Managers (SAMs) 1. LEA Data from field collected and stored - DASL evaluated data from existing SAMs project and collected additional survey information from LEAs 2. Completed SOW - completed 3. Survey Identifies Schools/Individuals for service (28) - completed 4. Training Modules to TLEU for review - completed 5. All Schools/Participants Confirmed - (via LEA RTTT Plans) - completed 6. 2-Week Training Period Completed - completed School Leadership Coaches 1. Release of RFP to public - completed 2. Receipt of RFP response from 2-3 potential vendors - completed 3. Agreed-upon SOW - Signed Vendor contract - started but incomplete 4. Hiring of 4 coaches by vendor - not started 5. Identification of 20 schools; Matching of Principal and Coach - started but incomplete PD Certification System 1. Completed evaluation reportcompleted 2. recommendations for changes- completed 3. revisions to components I-IV- completed The professional development plans will be approved at the end of the consolidated application approval process. LEAs are being asked to make revisions and clarifications as appropriate. The data collection and tracking system should be functional in September 2011. LEAs will be trained in September 2011. There have been some small delays due to technical issues. However all 2011-2012 data will be cantured

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#### Great Teachers and Leaders

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## State-reported APR: Year One

Delaware Standard Version Accessible Version Schools that initiated one of the four school intervention models in SY 2010-2011 Changes to Delaware's legal, statutory, or regulatory authority to intervene in Delaware's persistently lowest-achieving schools and in LEAs that are in improvement or corrective action status Turning around the lowest-achieving schools: Additional information Collapse All Schools that initiated one of the four school intervention models in SY 2010-2011 State-reported information School Intervention Models Initiated in Delaware in SY 2010-2011 Schools (#) initiating transformation model Schools (#) initiating turnaround model Schools (#) initiating school closure model Schools (#) initiating restart model View Table (Accessible) | School Intervention Models Definition

Click to see list of schools for which one of the four school intervention models was initiated in SY 2010-2011

Performance measure	Baseline: SY 2009-2010	Actual: SY 2010-2011	Target from Delaware's approved plan: SY 2010-2011
The number of schools for which one of the four school intervention models will be initiated	0	0	0
View Table Key			

**Question:** For each school for which one of the four school intervention models was initiated (that is, school(s) in the first year of implementation) in SY 2010-2011, list the school name and the respective school ID. For each of those schools,

indicate the LEA with which it is affiliated and that LEA's NCES ID number. Lastly, indicate which of the four school intervention models was initiated.

School name	School ID	LEA	NCES ID	School intervention model initiated in SY 2010-2011
N/A	N/A	N/A	N/A	N/A
View Table Key				

#### Additional information provided by the State:

The school intervention models for the state's Partnership Zone schools will be initiated in SY 2011-12, as the schools were selected and their implementation plans developed in SY 2010-11. Partnership Zone work in 2010-11 included the following:

- Selected first four schools (Aug. 2010)

- Worked with selected districts and charter school to provide support and technical assistance in the development of strong reform plans

- Provided districts and charters the opportunity to visit model schools/programs to inform the development of their plans

- Provided special technical assistance workshops w/ National Center for Time & Learning for Partnership Zone schools to aid the critical portion regarding best use of extra school time their reform plan development

- Provided special technical assistance to develop RFP with districts and charter school regarding solicitation of Lead Partner for Partnership Zone schools

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Changes to Delaware's legal, statutory, or regulatory authority to intervene in Delaware's persistently lowest-achieving schools and in LEAs that are in improvement or corrective action status

State-reported information

**Question:** Report any changes, from the time of application through June 30, 2011, in the State's legal, statutory, or regulatory authority to intervene in the State's persistently lowest-achieving schools and in LEAs that are in improvement or corrective action status.

State-reported response: N/A

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Turning around the lowest-achieving schools: Additional information

State-reported information

Additional information provided by the State:

N/A

## Table Key

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## Turning Around the Lowest-Achieving Schools

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## Education Funding and Charter School

#### Making education funding a priority

Ensuring successful conditions for high-performing charter schools and other innovative schools

Collapse All

## Making education funding a priority

**Question:** Describe in narrative form any changes from the time of application through June 30, 2011, to State policies that relate to equitable funding (a) between high-need LEAs and other LEAs, and (b) within LEAs, between high-poverty schools and other schools.

State-reported response: No changes have been implemented to these policies.

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## Ensuring successful conditions for high-performing charter schools and other innovative schools

#### State-reported information

State-reported information

**Question:** Describe in narrative form any changes, from the time of application through June 30, 2011, in the extent to which the State has a charter school law that does not prohibit or effectively inhibit increasing the number of high-performing charter schools in the State, measured by the percentage of total schools in the State that are allowed to be charter schools or otherwise restrict student enrollment in charter schools.

**State-reported response:** House Bill 205 was passed by the most recent General Assembly and makes changes to the laws around charter school authorization. Please see a copy of the legislation and a fact sheet attached. HB 205 was signed on 08/19/2011.

**Question:** Describe in narrative form any changes, from the time of application through June 30, 2011, in the extent to which the State has laws, statutes, regulations, or guidelines regarding how charter school authorizers approve, monitor,

hold accountable, reauthorize, and close charter schools; in particular, whether authorizers require that student achievement be one significant factor, among others, in authorization or renewal; encourage charter schools that serve student populations that are similar to local district student populations, especially relative to high-need students and have closed or not renewed ineffective charter schools.

**State-reported response:** House Bill 205 was passed by the most recent General Assembly and makes changes to the laws around charter school authorization. Please see a copy of the legislation and a fact sheet attached. HB 205 was signed on 08/19/2011.

**Question:** Describe in narrative form any changes, from the time of application through June 30, 2011, in the extent to which the State's charter schools receive equitable funding compared to traditional public schools, and a commensurate share of local, State, and Federal revenues.

State-reported response: No changes have been made.

**Question:** Describe in narrative form any changes, from the time of application through June 30, 2011, in the extent to which the State provides charter schools with funding for facilities (for leasing facilities, purchasing facilities, or making tenant improvements), assistance with facilities acquisition, access to public facilities, the ability to share in bonds and mill levies, or other supports; and the extent to which the State does not impose any facility-related requirements on charter schools that are stricter than those applied to traditional public schools.

State-reported response: No changes have been made.

**Question:** Describe in narrative form any changes, from the time of application through June 30, 2011, in the extent to which the State enables LEAs to operate innovative, autonomous public schools other than charter schools.

State-reported response: No changes have been made.

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#### Table Key

< n	indicates data has been suppressed because of a small count or, for NAEP data, indicates reporting standards not met; sample size insufficient to permit a reliable estimate.
	indicates data are not provided.
N/A	indicates not applicable (e.g., the State did not specify a target in its approved plan, or the element is not applicable this year).

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## Emphasis on Science, Technology, Engineering, and Mathematics (STEM) Page 10 of 12

STEM performance measures

STEM performance measures: Additional information

Progress in implementing a high-quality STEM plan (Optional)

Collapse All

## STEM performance measures

State-reported information

Question: Provide at least two performance measures to report on the State's progress in STEM.

Performance measure	Baseline		End of the Year Target		
	SY 2009-2010	SY 2010-2011	SY 2011-2012	SY 2012-2013	SY 2013-2014
STEM Council Meetings	0	3	0	0	0
High school STEM courses implemented	1	4	0	0	0
STEM "Elementary is Engineering" module piloted in each grade level for K-5	0	1	0	0	0
View Table Key					

View Table Key

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## STEM performance measures: Additional information

State-reported information

## Additional information provided by the State:

No response provided.

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Progress in implementing a high-quality STEM plan (Optional)

State-reported information

**Question:** Describe the State's progress in implementing, consistent with its approved application, a high-quality plan to address the need to (i) offer a rigorous course of study in mathematics, the sciences, technology, and engineering; (ii) cooperate with industry experts, museums, universities, research centers, or other STEM-capable community partners to prepare and assist teachers in integrating STEM content across grades and disciplines, in promoting effective and relevant instruction, and in offering applied learning opportunities for students; and (iii) prepare more students for advanced study and careers in the sciences, technology, engineering, and mathematics, including by addressing the needs of underrepresented groups and of women and girls in the areas of science, technology, engineering, and mathematics.

**State-reported response:** (ii) Through RTTT, the state has partnered with the University of Delaware in creating a STEM Residency program. This initiative, which includes the recruitment, selection, pre-service training, and one-year residency placements for an annual cohort of developing teachers, has identified 19 new science and math teachers to date. The program actively recruits candidates with strong content and/or professional backgrounds in STEM disciplines.

The first cohort of eight teachers completed their residency year in the New Castle County Vo-Tech (NCCVT)school district. Seven have secured full-time teaching placements in schools that have been traditionally hard-to-staff. Eleven new residents have completed their summer coursework and will begin their residency year this fall.

#### Close

#### Back to the Top

#### Table Key

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	indicates data are not provided.	
N/A indicates not applicable (e.g., the State did not specify a target in its approved plan, or the element is not applithin year).		

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## Emphasis on Science, Technology, Engineering, and Mathematics (STEM) Page 10 of 12

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## Progress Updates on Invitational Priorities

Innovations for improving early learning outcomes (Optional) Expansion and adaption of statewide longitudinal data systems (Optional) P-20 coordination, vertical and horizontal alignment (Optional) School-level conditions for reform, innovation, and learning (Optional)

Additional optional performance measures (Optional)

## Innovations for improving early learning outcomes (Optional)

State-reported information

### NOTE: Reporting in this section is optional.

**Question:** Describe the State's progress in implementing, consistent with its approved application, practices, strategies, or programs to improve educational outcomes for high-need students who are young children (pre-kindergarten through third grade) by enhancing the quality of preschool programs. Describe the State's progress specifically in implementing practices that (i) improve school readiness (including social, emotional, and cognitive); and (ii) improve the transition between preschool and kindergarten.

**State-reported response:** The State has completed a comprehensive revision of the early learning guidelines for children ages birth to kindergarten entry. The Early Learning Foundations: Infants and Toddlers and the Early Learning Foundations: Preschool have been revised. The Preschool Foundations cover seven different school readiness domains: Language/Literacy, Social/Emotional , Math, Science, Approaches to Learning, Creative Arts and Physical Health. The Infant and Toddler Foundations cover four domains: Social/Emotional, Language and Literacy, Discovery and Physical Development and Health. The revision reflected work involving two key elements. The first element was to ensure that each of the learning indicators in both guidelines had a research or evidence base to support the learning targets. The second element was to ensure the Foundations were aligned to the kindergarten grade level expectations and the Common Core. A comprehensive analysis was completed by a national early learning content expert, demonstrating a high level of alignment of the Foundations to later developmental expectations of kindergarten children. The alignment of the Foundations with kindergarten expectations will enhance the likelihood that children will be able to make a smooth transition from preschool to kindergarten.

Over the past three years the State has invested substantial resources and effort in developing a quality rating and improvement system, identified as Delaware Stars for Early Success. Delaware Stars is currently involved with over 180 early care and education programs throughout the state, working with individually licensed sites to provide technical assistance and support to programs to strengthen the quality of the services provided to young children and their families. Approximately 40 programs were able to raise their level of quality within the past year. Beginning in July of 2011 the Delaware General Assembly appropriated \$13,000,000 to support the implementation of a tiered reimbursement system linked to quality. This reflects a substantial investment by the State into the quality rating and improvement process and will enable the state to provide quality early learning experiences to approximately 5,000 additional children.

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#### Expansion and adaption of statewide longitudinal data systems (Optional)

State-reported information

#### **NOTE:** Reporting in this section is optional.

**Question:** Describe the State's progress expanding, consistent with its approved application, statewide longitudinal data systems to include or integrate data from special education programs, English language learner programs, early childhood programs, at-risk and dropout prevention programs, and school climate and culture programs, as well as information on student mobility, human resources (i.e., information on teachers, principals, and other staff), school finance, student health, postsecondary education, and other relevant areas, with the purpose of connecting and coordinating all parts of the system to allow important questions related to policy, practice, or overall effectiveness to be asked, answered, and incorporated into effective continuous improvement practices. In addition, describe the State's progress in working together with other States to adapt one State's statewide longitudinal data system so that it may be used, in whole or in part, by one or more other States, rather than having each State build or continue building such systems independently."

**State-reported response:** Expansion of Delaware's longitudinal data system is a key component of Assurance Area (C)(2) under Race to the Top and a prerequisite for the development of our Educational Dashboard Portals. Through this initiative, Delaware is creating a single, integrated warehouse of longitudinal data intended to become a "birth to work" repository of information, which is engineered to answer questions related to policy, practice and effectiveness and support data-driven decision making in the classroom through a series of performance management dashboards. Phase I development of the warehouse was completed in July 2011 and Delaware currently in the process of migrating Delaware's existing longitudinal data to the new warehouse structure. The first use of warehouse data will be to support a dashboard focused on the needs of teachers in the classroom. 2012 and 2013 will see the expansion of LDS warehouse to additional early learning, human service, and higher education data sets.

Rather than reinvent the wheel, Delaware is using the Ed-Fi framework as the basis of the warehouse expansion effort (http://www.ed-fi.org/). Funded by the Michael and Susan Dell foundation and developed in Texas as part of the Texas Student Data System (TSDS), the Ed-Fi framework is allowing Delaware to "go further, faster" by leveraging the work and experience of Texas. Delaware is also serving on the Ed-Fi advisory council for the purpose of promoting the standard and extending Ed-Fi benefits to other states and districts around the country.

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## P-20 coordination, vertical and horizontal alignment (Optional)

State-reported information

#### **NOTE:** Reporting in this section is optional.

**Question:** Describe the State's progress addressing, consistent with the approved application, how early childhood programs, K-12 schools, postsecondary institutions, workforce development organizations, and other State agencies and community partners (e.g., child welfare, juvenile justice, and criminal justice agencies) will coordinate to improve all parts of the education system and create a more seamless preschool-through-graduate school (P-20) route for students. Vertical alignment across P-20 is particularly critical at each point where a transition occurs (e.g., between early childhood and K-12, or between K-12 and postsecondary/careers) to ensure that students exiting one level are prepared for success, without remediation, in the next. Horizontal alignment, that is, coordination of services across schools, State agencies, and community partners, is also important in ensuring that high-need students (as defined in the Race to the Top application) have access to the broad array of opportunities and services they need and that are beyond the capacity of a school itself to provide.

**State-reported response:** The Delaware P-20 Council established the Early Childhood Data Network (ECDN), whose goal is to create a cross-agency network of existing data systems. The ECDN will be able to track longitudinal data to determine whether children birth to age 5 are on track to succeed in school and beyond based on specific school readiness indicators that cover children from birth through third grade.

House Bill 213 was passed by the Delaware General Assembly on July 1, 2011 to provide for the development of regulations that govern data collection, analysis, use and reporting across diverse state and agencies and education sectors. The bill also provided for the expansion of the P-20 Council to be more representative of the preschool through career education pipeline in Delaware. New members of the Delaware P-20 Council include the Secretary of the Department of Labor, Secretary of the Department of Services for Children, Youth and their Families, Secretary of the Department of Health and Social Services, Chief of the Delaware Chief School Officers Association, President of the Delaware State Education and the President of the Delaware Charter School Network.

In taking responsibility for interagency data governance the P-20 Council will be better equipped to focus on ensuring that longitudinal data is shared across agencies that will inform issues of vertical alignment and transition points throughout the state's education pipeline. As interagency datasets housing student-level data are expected to be housed at DE DOE, House Bill 213 provides the department to develop regulations that govern data collection, analysis, use and reporting in consultation with the Delaware P-20 Council and the Interagency Resource Management Committee (IRMC) and with the consent of the State Board of Education that are in compliance with applicable federal and state privacy laws. In addition, the legislation provides for written agreements (MOUs) to be developed between agencies to facilitate the sharing and use of data education data.

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#### School-level conditions for reform, innovation, and learning (Optional)

State-reported information

#### NOTE: Reporting in this section is optional.

**Question:** Describe progress consistent with the State's approved application, of participating LEAs creating the conditions for reform and innovation as well as the conditions for learning by providing schools with flexibility and autonomy in such areas as—

(i) Selecting staff;

(ii) Implementing new structures and formats for the school day or year that result in increased learning time (as defined in the Race to the Top application);

(iii) Controlling the school's budget;

(iv) Awarding credit to students based on student performance instead of instructional time;

(v) Providing comprehensive services to high-need students (as defined in the Race to the Top application) (e.g., by mentors and other caring adults; through local partnerships with community-based organizations, nonprofit organizations, and other providers);

(vi) Creating school climates and cultures that remove obstacles to, and actively support, student engagement and achievement; and

(vii) Implementing strategies to effectively engage families and communities in supporting the academic success of their students.

State-reported response: No response provided.

#### Additional optional performance measures (Optional)

#### State-reported information

Performance measure	Race to the Top plan subcriterion	Baseline: SY 2009-2010	Actual: SY 2010-2011	Target from Delaware's approved plan: SY 2010-2011
Percentage of teachers and principals who are rated "effective"	(D)(2)	N/A	N/A	N/A
Number of teachers and principals receiving retention bonuses	(D)(3)	N/A	N/A	N/A
Amount of money available for retention bonuses	(D)(3)	N/A	N/A	N/A
College retention rate	(A)(1)(iii)	N/A	N/A	N/A
Number of new principals selected for the next school year	(D)(3)	N/A	N/A	N/A
Percentage of students meeting standards on the State's math exam	(A)(1)(iii)	N/A	62	49
Percentage of respondents citing significant improvements in teaching and learning conditions	(D)(3)	N/A	N/A	10
Attrition rate of highly effective teachers	(D)(3)	N/A	N/A	N/A
Number of users of central hiring website	(D)(3)	N/A	5,002	250
Turnaround schools making AYP	(E)(2)	N/A	N/A	N/A
Graduation rate	(A)(1)(iii)	N/A	N/A	85.5
Percentage of teachers and principals who are rated "ineffective"	(D)(2)	N/A	N/A	N/A
Number of new teachers selected for the next school year	(D)(3)	N/A	N/A	N/A
College enrollment rate	(A)(1)(iii)	N/A	N/A	N/A
Average spread between proportion of highly effective teachers in low-poverty/low-minority vs. high poverty/high-minority schools	(D)(3)	N/A	N/A	N/A
Increase in applications to Delaware programs and positions (expected impact from marketing campaign)	(D)(3)	N/A	48	10
Percentage of students meeting standards on the State's reading exam	(A)(1)(iii)	N/A	61	50
Percentage of teachers and principals who are rated "needs improvement"	(D)(2)	N/A	N/A	N/A
Percentage of programs applying for preparation expansion grant	(D)(4)	N/A	N/A	N/A
Percentage of teachers and principals who are rated "highly effective"	(D)(2)	N/A	N/A	N/A
Amount of money distributed in expansion grants to the most effective teacher preparation programs	(D)(4)	N/A	N/A	N/A
View Table Key				

#### Additional information provided by the State:

Please see below for an explanation of each measure for which the actual data is "N/A".

Percentage of teachers and principals who are rated "highly effective" - The state's evaluation changes, including the "highly effective" rating, will go into effect in the 2011-12 school year. Per the state's RTTT application, the previous data provided was a very rough estimate of the existing workforce rather than a reflection of actual percentages.

Percentage of teachers and principals who are rated "effective" - The state's evaluation changes will go into effect in the 2011-12 school year (with further changes in effect in the 2012-13 school year). Per the state's RTTT application, the previous data provided was a very rough estimate of the existing workforce rather than a reflection of actual percentages.

Percentage of teachers and principals who are rated "needs improvement" - The state's evaluation changes will go into effect in the 2011-12 school year (with further changes in effect in the 2012-13 school year). Per the state's RTTT application, the previous data provided was a very rough estimate of the existing workforce rather than a reflection of

actual percentages.

Percentage of teachers and principals who are rated "ineffective" - The state's evaluation changes will go into effect in the 2011-12 school year (with further changes in effect in the 2012-13 school year). Per the state's RTTT application, the previous data provided was a very rough estimate of the existing workforce rather than a reflection of actual percentages.

Number of new teachers selected for the next school year - The data for the 2011-12 school year is not available, and it is unclear what data was referenced such that the 2010-11 target is "0".

Number of new principals selected for the next school year - The data for the 2011-12 school year is not available, and it is unclear what data was referenced such that the 2010-11 target is "0".

Average spread between proportion of highly effective teachers in low-poverty/low-minority vs. high poverty/high-minority schools - - The state's evaluation changes will go into effect in the 2011-12 school year (with further changes in effect in the 2012-13 school year). Per the state's RTTT application, the previous data provided was a very rough estimate of the existing workforce rather than a reflection of actual percentages.

Number of teachers and principals receiving retention bonuses - Per the state's RTTT application, the retention bonus program will begin at the end of SY 2011-12.

Amount of money available for retention bonuses - Per the state's RTTT application, the retention bonus program will begin at the end of SY 2011-12.

Attrition rate of highly effective teachers - The state's evaluation changes, including the "highly effective" rating, will go into effect in the 2011-12 school year. Per the state's RTTT application, the previous data provided was a very rough estimate of the existing workforce rather than a reflection of actual percentages.

The number of schools for which one of the four school intervention models will be initiated each year - Number reflects the number of schools for which one of the four school intervention models will be initiated in the 2011-12 SY; in 2012-13, the number will be "6".

Turnaround schools making AYP - Turnaround school plans will begin implementation in SY 2011-12; as such, the data for the number of turnaround schools making AYP is N/A.

Percentage of programs applying for preparation expansion grant - Per the RTTT application, the preparation expansion grant is not set to begin until Summer 2012.

Amount of money distributed in expansion grants to the most effective teacher preparation programs - Per the RTTT application, the preparation expansion grant is not set to begin until Summer 2012.

College enrollment rate - The state did not set interim targets for the college enrollment rate; a working group has convened to set these targets in the Fall of 2011. 2010-11 data will be available in the 2011-12 school year.

College retention rate - The state did not set interim targets for the college enrollment rate; a working group has

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#### Table Key

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N/A	indicates not applicable (e.g., the State did not specify a target in its approved plan, or the element is not applicable this year).	



### Delaware

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Summary expenditure table

**Obligations (Optional)** 

Project-level expenditure tables

Collapse All

Summary expenditure table

State-reported information

project-level budget tables in the State's approved budget as of June 30, 2011				
Expenditure Categories	Project Year 1			
1. Personnel	619,442.44			
2. Fringe Benefits	221,267.33			
3. Travel	8,351.22			
4. Equipment	0.00			
5. Supplies	58,495.89			
6. Contractual	3,330,155.44			
7. Training Stipends	0.00			
8. Other	0.00			
9. Total Direct Costs (lines 1-8)	4,237,712.32			
10. Indirect Costs	97,973.43			
11. Funding for Involved LEAs	0.00			
12. Supplemental Funding for Participating LEAs	0.00			
13. Total Costs (lines 9–12)	4,335,685.75			
14. Funding Subgranted to Participating LEAs (50% of Total Grant)	6,627,240.38			
15. Total Expenditure (lines 13-14)	10,962,926.13			
View Table Key				

Question: Report the actual expenditure totals for each of the categories listed in the summary budget table and

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#### **NOTE:** Reporting in this section is optional.

**Question:** To provide additional context for the spending activity on the Race to the Top grant, grantees may include additional budgetary information, such as figures for funds obligated in addition to funds expended or descriptive text.

**State-reported response:** The projects have been edited to reflect the project budgets, as approved and amended by USED. Some projects (such as the Longitudinal Data System) have implementation plans that are more detailed than the project budget and the expenditures are all captured under one project. Additionally, some implementation plans are not be funded with Race to the Top dollars and therefore are not captured here.

The teacher recruitment portal and RTT communications projects, while budgeted in year 1 have experienced minor delays in implementation (although planning efforts are underway) and will now begin in year 2.

The following projects show little or no expenditure data but all of the project funds have been encumbered but no payments had been issued during the time frame for this report:

- AP Summer Institute
- Development Coaches

The following projects do not show expenditure data because there were no funds budgeted in year one of implementation:

- Teacher Prep Grants
- School Leadership Coaches (a small amount was spent releasing an RFP but the start of the project was delayed)
- Talent Transfer Initiative
- Talent Retention
- Academic Achievement Awards

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#### **Project-level expenditure tables**

	State-reported information
Project Name	Associated With Criteria
Using Formative Assessments to Inform Instruction	(B)
STEM strategy	(B)
Middle school prep and college readiness	(B)
AP Summer Institute	(B)
Longitudinal Data System	(C)
School Administration Managers	(D)
RTT Communications-Family	(D)
Teacher Prep Improvement Grants	(D)
Data Coaches	(D)
Talent Retention	(D)
Teacher recruitment portal	(D)

Alternate Routes to Certification	(D)
School leadership coaches	(D)
Schoolwide Comprehensive Professional Development Mode	(D)
Teacher and Leader Effectiveness Unit	(D)
STEM Residency	(D)
Academic Achievement Awards	(D)
Development Coaches	(D)
Talent Transfer Initiative	(D)
PZ School Implementation	(E)
Establish Delivery Unit	(E)(1), (E)(2)
Turnaround Office	(E)(1), (E)(2)
View Table Key	

**Question:** Report the actual expenditure totals for each of the categories listed in the summary budget table and project-level budget tables in the State's approved budget as of June 30, 2011

Project Name: Using Formative Assessments to Inform Instruction Associated With Criteria: (B)					
Expenditure Categories Project Year					
1. Personnel	48,757.45				
2. Fringe Benefits	16,215.29				
3. Travel	0.00				
4. Equipment	0.00				
5. Supplies	0.00				
6. Contractual	17,200.00				
7. Training Stipends	0.00				
8. Other	0.00				
9. Total Direct Costs (lines 1–8)	82,172.74				
10. Indirect Costs	7,231.00				
11. Funding for Involved LEAs 0					
12. Supplemental Funding for Participating LEAs	0.00				
13. Total Costs (lines 9–12)	89,403.74				
View Table Key					

Project Name: STEM strategy Associated With Criteria: (B)				
Expenditure Categories Projection				
1. Personnel	0.00			
2. Fringe Benefits	0.00			
3. Travel	0.00			
4. Equipment	0.00			
5. Supplies	117.24			
6. Contractual	0.00			
7. Training Stipends	0.00			
8. Other	0.00			
9. Total Direct Costs (lines 1-8)	117.24			
10. Indirect Costs	10.32			
11. Funding for Involved LEAs	0.00			
12. Supplemental Funding for Participating LEAs	0.00			
13. Total Costs (lines 9–12)	127.56			
View Table Key				

Project Name: Middle school prep and college readiness Associated With Criteria: (B)					
Expenditure Categories Project Year 1					
1. Personnel	0.00				
2. Fringe Benefits	0.00				
3. Travel	0.00				
4. Equipment	0.00				
5. Supplies	0.00				
6. Contractual	392,325.02				
7. Training Stipends	0.00				
8. Other	0.00				

Project Name: AP Summer Institute Associated With Criteria: (B)				
Expenditure Categories Project Year				
1. Personnel	0.00			
2. Fringe Benefits	0.00			
3. Travel	0.00			
4. Equipment	0.00			
5. Supplies	0.00			
6. Contractual	0.00			
7. Training Stipends	0.00			
8. Other	0.00			

9. Total Direct Costs (lines 1–8)	392,325.02	9. Total Direct Costs (lines 1–8)	0.00
10. Indirect Costs	0.00	10. Indirect Costs	0.00
11. Funding for Involved LEAs	0.00	11. Funding for Involved LEAs	0.00
12. Supplemental Funding for Participating LEAs	0.00	12. Supplemental Funding for Participating LEAs	0.00
13. Total Costs (lines 9–12)	392,325.02	13. Total Costs (lines 9–12)	0.00
View Table Key		View Table Key	

#### Additional information provided by the State for project: AP Summer Institute

This project shows little or no expenditure data but all of the project funds have been encumbered but no payments had been issued during the time frame for this report.

Project Name: Longitudinal Data System Associated With Criteria: (C)				
Expenditure Categories	Project Year 1			
1. Personnel	0.00			
2. Fringe Benefits	0.00			
3. Travel	0.00			
4. Equipment	0.00			
5. Supplies	3,999.00			
6. Contractual	1,331,567.85			
7. Training Stipends	0.00			
8. Other	0.00			
9. Total Direct Costs (lines 1–8)	1,335,566.85			
10. Indirect Costs	0.00			
11. Funding for Involved LEAs	0.00			
12. Supplemental Funding for Participating LEAs	0.00			
13. Total Costs (lines 9–12)	1,335,566.85			
View Table Key				

Associated With Criteria: (D)			
Expenditure Categories	Project Year 1		
1. Personnel	0.00		
2. Fringe Benefits	0.00		
3. Travel	0.00		
4. Equipment	0.00		
5. Supplies	0.00		
6. Contractual	13,347.40		
7. Training Stipends	0.00		
8. Other	0.00		
9. Total Direct Costs (lines 1-8)	13,347.40		
10. Indirect Costs	0.00		
11. Funding for Involved LEAs	0.00		
12. Supplemental Funding for Participating LEAs	0.00		
13. Total Costs (lines 9–12)	13,347.40		
View Table Key			

Project Name: School Administration Managers

Project Name: RTT Communications-Family Associated With Criteria: (D)			
Expenditure Categories Project Y			
1. Personnel	0.00		
2. Fringe Benefits	0.00		
3. Travel	0.00		
4. Equipment	0.00		
5. Supplies	0.00		
6. Contractual	0.00		
7. Training Stipends	0.00		
8. Other	0.00		
9. Total Direct Costs (lines 1–8)	0.00		
10. Indirect Costs	0.00		
11. Funding for Involved LEAs	0.00		
12. Supplemental Funding for Participating LEAs	0.00		
13. Total Costs (lines 9–12)	0.00		

Project	Name:	Teacher	Prep	Impro	ovement	Grants
	Ass	ociated V	Vith C	riteria:	(D)	

Expenditure Categories	Project Year 1
1. Personnel	0.00
2. Fringe Benefits	0.00
3. Travel	0.00
4. Equipment	0.00
5. Supplies	0.00
6. Contractual	0.00
7. Training Stipends	0.00
8. Other	0.00
9. Total Direct Costs (lines 1-8)	0.00
10. Indirect Costs	0.00
11. Funding for Involved LEAs	0.00
12. Supplemental Funding for Participating LEAs	0.00
13. Total Costs (lines 9-12)	0.00

#### Additional information provided by the State for project: RTT Communications-Family

The teacher recruitment portal and RTT communications projects, while budgeted in year 1 have experienced minor delays in implementation (although planning efforts are underway) and will now begin in year 2.

#### Additional information provided by the State for project: Teacher Prep Improvement Grants

This project does not show expenditure data because there were no funds budgeted in year one of implementation.

Project Name: Data Coaches Associated With Criteria: (D)		Project Name: Talent Retention Associated With Criteria: (D)	
Expenditure Categories	Project Year 1	Expenditure Categories	Project Year 1
1. Personnel	0.00	1. Personnel	0.00
2. Fringe Benefits	0.00	2. Fringe Benefits	0.00
3. Travel	0.00	3. Travel	0.00
4. Equipment	0.00	4. Equipment	0.00
5. Supplies	0.00	5. Supplies	0.00
6. Contractual	393,445.60	6. Contractual	0.00
7. Training Stipends	0.00	7. Training Stipends	0.00
8. Other	0.00	8. Other	0.00
9. Total Direct Costs (lines 1–8)	393,445.60	9. Total Direct Costs (lines 1–8)	0.00
10. Indirect Costs	2,200.00	10. Indirect Costs	0.00
11. Funding for Involved LEAs	0.00	11. Funding for Involved LEAs	0.00
12. Supplemental Funding for Participating LEAs	0.00	12. Supplemental Funding for Participating LEAs	0.00
13. Total Costs (lines 9–12)	395,645.60	13. Total Costs (lines 9–12)	0.00
View Table Key		View Table Key	

#### Additional information provided by the State for project: Talent Retention

This project does not show expenditure data because there were no funds budgeted in year one of implementation.

Project Name: Teacher recruitment portal Associated With Criteria: (D)		
Expenditure Categories	Project Year 1	
1. Personnel	0.00	
2. Fringe Benefits	0.00	
3. Travel	0.00	
4. Equipment	0.00	
5. Supplies	0.00	
6. Contractual	0.00	
7. Training Stipends	0.00	
8. Other	0.00	
9. Total Direct Costs (lines 1–8)	0.00	
10. Indirect Costs	0.00	
11. Funding for Involved LEAs	0.00	

#### Project Name: Alternate Routes to Certification Associated With Criteria: (D)

Expenditure Categories	Project Year 1	
1. Personnel	0.00	
2. Fringe Benefits	0.00	
3. Travel	0.00	
4. Equipment	0.00	
5. Supplies	0.00	
6. Contractual	123,350.00	
7. Training Stipends	0.00	
8. Other	0.00	
9. Total Direct Costs (lines 1-8)	123,350.00	
10. Indirect Costs	0.00	
11. Funding for Involved LEAs	0.00	

12. Supplemental Funding for Participating LEAs	0.00	12. Supplemental Funding for Participating LEAs	0.00
13. Total Costs (lines 9–12)	0.00	13. Total Costs (lines 9–12)	123,350.00
View Table Key		View Table Key	

#### Additional information provided by the State for project: Teacher recruitment portal

The teacher recruitment portal and RTT communications projects, while budgeted in year 1 have experienced minor delays in implementation (although planning efforts are underway) and will now begin in year 2.

Project Name: School leadership coaches Associated With Criteria: (D)		
Expenditure Categories	Project Year 1	
1. Personnel	0.00	
2. Fringe Benefits	0.00	
3. Travel	0.00	
4. Equipment	0.00	
5. Supplies	0.00	
6. Contractual	105.60	
7. Training Stipends	0.00	
8. Other	0.00	
9. Total Direct Costs (lines 1-8)	105.60	
10. Indirect Costs	9.29	
11. Funding for Involved LEAs	0.00	
12. Supplemental Funding for Participating LEAs	0.00	
13. Total Costs (lines 9–12)	114.89	
View Table Key		

Project Name: Schoolwide Com	prehensive Professional Development		
Mode			
Associated	With Criteria: (D)		

, boolded that one lat (b)			
Expenditure Categories	Project Year 1		
1. Personnel	0.00		
2. Fringe Benefits	0.00		
3. Travel	0.00		
4. Equipment	0.00		
5. Supplies	53,895.00		
6. Contractual	669,000.00		
7. Training Stipends	0.00		
8. Other	0.00		
9. Total Direct Costs (lines 1-8)	722,895.00		
10. Indirect Costs	0.00		
11. Funding for Involved LEAs	0.00		
12. Supplemental Funding for Participating LEAs	0.00		
13. Total Costs (lines 9–12)	722,895.00		
View Table Key			

#### Additional information provided by the State for project: School leadership coaches

This project does not show expenditure data because there were no funds budgeted in year one of implementation. A small amount was spent releasing an RFP but the start of the project was delayed.

Project Name: Teacher and Leader Effectiveness Unit Associated With Criteria: (D)		
Expenditure Categories	Project Year 1	
1. Personnel	232,115.72	
2. Fringe Benefits	84,508.53	
3. Travel	4,723.81	
4. Equipment	0.00	
5. Supplies	207.24	
6. Contractual	36,738.08	
7. Training Stipends	0.00	
8. Other	0.00	
9. Total Direct Costs (lines 1–8)	358,293.38	
10. Indirect Costs	31,529.82	
11. Funding for Involved LEAs	0.00	

Project Name: STEM Residency Associated With Criteria: (D)			
Expenditure Categories	Project Year 1		
1. Personnel	0.00		
2. Fringe Benefits	0.00		
3. Travel	0.00		
4. Equipment	0.00		
5. Supplies	0.00		
6. Contractual	187,202.00		
7. Training Stipends	0.00		
8. Other	0.00		
9. Total Direct Costs (lines 1–8)	187,202.00		
10. Indirect Costs	2,200.00		
11. Funding for Involved LEAs	0.00		

12. Supplemental Funding for Participating LEAs	0.00
13. Total Costs (lines 9–12)	389,823.20
View Table Key	

12. Supplemental Funding for Participating LEAs	0.00
13. Total Costs (lines 9–12)	189,402.00
View Table Key	

Project Name: Academic Achievement Awards Associated With Criteria: (D)		Project Name: Development Coaches Associated With Criteria: (D)	
Expenditure Categories	Project Year 1	Expenditure Categories	Project Year 1
1. Personnel	0.00	1. Personnel	0.00
2. Fringe Benefits	0.00	2. Fringe Benefits	0.00
3. Travel	0.00	3. Travel	0.00
4. Equipment	0.00	4. Equipment	0.00
5. Supplies	0.00	5. Supplies	0.00
6. Contractual	0.00	6. Contractual	105.60
7. Training Stipends	0.00	7. Training Stipends	0.00
8. Other	0.00	8. Other	0.00
9. Total Direct Costs (lines 1–8)	0.00	9. Total Direct Costs (lines 1–8)	105.60
10. Indirect Costs	0.00	10. Indirect Costs	9.29
11. Funding for Involved LEAs	0.00	11. Funding for Involved LEAs	0.00
12. Supplemental Funding for Participating LEAs	0.00	12. Supplemental Funding for Participating LEAs	0.00
13. Total Costs (lines 9–12)	0.00	13. Total Costs (lines 9–12)	114.89
View Table Key		View Table Key	

#### Additional information provided by the State for project: Academic Achievement Awards

This project does not show expenditure data because there were no funds budgeted in year one of implementation.

#### Additional information provided by the State for project: Development Coaches

This project shows little or no expenditure data but all of the project funds have been encumbered but no payments had been issued during the time frame for this report.

Project Name: Talent Transfer Initiative Associated With Criteria: (D)			
Expenditure Categories	Project Year 1		
1. Personnel	0.00		
2. Fringe Benefits	0.00		
3. Travel	0.00		
4. Equipment	0.00		
5. Supplies	0.00		
6. Contractual	0.00		
7. Training Stipends	0.00		
8. Other	0.00		
9. Total Direct Costs (lines 1–8)	0.00		
10. Indirect Costs	0.00		
11. Funding for Involved LEAs	0.00		
12. Supplemental Funding for Participating LEAs	0.00		

Project Name: PZ School Implementation Associated With Criteria: (E)			
Expenditure Categories	Project Year 1		
1. Personnel	0.00		
2. Fringe Benefits	0.00		
3. Travel	0.00		
4. Equipment	0.00		
5. Supplies	0.00		
6. Contractual	0.00		
7. Training Stipends	0.00		
8. Other	0.00		
9. Total Direct Costs (lines 1–8)	0.00		
10. Indirect Costs	0.00		
11. Funding for Involved LEAs	0.00		
12. Supplemental Funding for Participating LEAs	896,615.48		

13. Total Costs (lines 9–12)	0.00	13. Total Costs (lines 9–12)	896,615.48
View Table Key		View Table Key	

#### Additional information provided by the State for project: Talent Transfer Initiative

This project does not show expenditure data because there were no funds budgeted in year one of implementation.

Project Name: Establish Delivery Unit Associated With Criteria: (E)(1), (E)(2)			
Expenditure Categories	Project Year 1		
1. Personnel	163,660.96		
2. Fringe Benefits	59,206.89		
3. Travel	1,644.60		
4. Equipment	0.00		
5. Supplies	185.40		
6. Contractual	146,513.29		
7. Training Stipends	0.00		
8. Other	0.00		
9. Total Direct Costs (lines 1-8)	371,211.14		
10. Indirect Costs	32,666.58		
11. Funding for Involved LEAs	0.00		
12. Supplemental Funding for Participating LEAs	0.00		
13. Total Costs (lines 9–12)	403,877.72		
View Table Key			

<b>Project Name: Turnaround Office</b> Associated With Criteria: (E)(1), (E)(2)				
Expenditure Categories	Project Year 1			
1. Personnel	174,908.31			
2. Fringe Benefits	61,336.62			
3. Travel	1,982.81			
4. Equipment	0.00			
5. Supplies	92.01			
6. Contractual	13,009.00			
7. Training Stipends	0.00			
8. Other	0.00			
9. Total Direct Costs (lines 1-8)	251,328.75			
10. Indirect Costs	22,116.93			
11. Funding for Involved LEAs	0.00			
12. Supplemental Funding for Participating LEAs	0.00			
13. Total Costs (lines 9–12)	273,445.68			
View Table Key				

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#### Table Key

< n	indicates data has been suppressed because of a small count or, for NAEP data, indicates reporting standards not met; sample size insufficient to permit a reliable estimate.
	indicates data are not provided.
N/A	indicates not applicable (e.g., the State did not specify a target in its approved plan, or the element is not applicable this year).

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#### **Delaware APR Supporting Files Provided by the State**

- 1. Comprehensive Approach to Education Reform (page 2): "Delaware Education Plan Update"
- 2. College and Career-Ready Standards and Assessments (page 5): "Specifications for Select High School Courses and End-of-Course Assessments"
- 3. Education Funding and Charter Schools (page 9): "House Bill 205"

### **Delaware's Supporting Files**

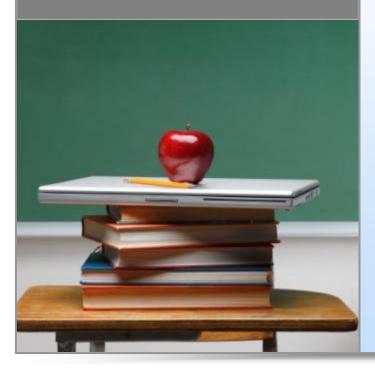
- 1. Comprehensive Approach to Education Reform (page 2): "Delaware Education Plan Update"
- 2. College and Career-Ready Standards and Assessments (page 5): "Specifications for Select High School Courses and End-of-Course Assessments"
- 3. Education Funding and Charter Schools (page 9): "House Bill 205"

# Delaware Education Plan Update





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LEA Plan Update

Q & A

# Delaware's education plan is the product of the 2009 strategic plan and the Race to the Top plan

The 2009 strategic plan, created with the input of more than 150 educators, parents and community members, is the blueprint for reform



The Race to the Top plan provides more detail to that blueprint, and funding to catalyze implementation

Single education plan for improving outcomes for Delaware's students

# Delaware's plan is based on a clear vision and theory of action

Every single student in our system will graduate college and career ready, with the freedom to choose his or her life's course

#### Dramatically improved classroom instruction

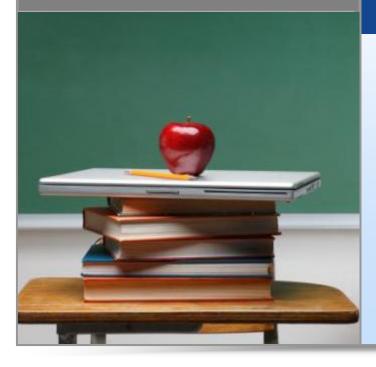
Rigorous standards, curriculum, and assessments	Sophisticated data systems and practices	Effective teachers and leaders	Deep support for the lowest- achieving schools
-------------------------------------------------------------	------------------------------------------------	--------------------------------------	---------------------------------------------------------

Support from the DDOE  $\rightarrow$  LEAs  $\rightarrow$  schools  $\rightarrow$  individual classrooms

Collaboration between educators, communities, and all Delawareans

Vision

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### Performance Update

### LEA Plan Update

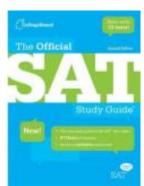
Q & A

### **Rigorous standards, curriculum, and assessments**



#### **Progress to Date**

- **Common Core Standards:** Adopted the Common Core Standards; trained over 9,000 teachers in the new standards
- **Proficiency Standards:** Engaged 150 stakeholders in setting new standards for proficiency; adopted higher proficiency standards
- DCAS: Launched the online adaptive Delaware Comprehensive Assessment System (DCAS) to measure student progress to inform instruction; released statewide scores and launched the DCAS website to provide detailed information about student performance
- Alternate Assessment: Completed the field test, external alignment studies and stakeholder panel for new proficiency standards
- **Multi-State Assessment:** Continued membership as an advisory state in both assessment consortia; will determine full "governing state" membership in one consortium in early September
- SAT: Selected the SAT<sup>®</sup> as the statewide college readiness exam and administered the SAT<sup>®</sup> to 11th graders within school, free of cost
- **AP Institutes:** Designed new Advanced Placement Summer Institutes to train teachers in core AP courses; more than 160 teachers registered for the two institutes, which are meeting in Summer 2011
- **STEM:** Prepared for a Fall 2011 pilot of new STEM courses; developed a survey for LEAs regarding current STEM courses and demographics







- **PSAT:** Administer the PSAT to all 10th grade students in October
- SAT: Analyze SAT data and engage LEAs in dialogue around recommended middle and high school course re-design
- DCAS: Conduct in-depth analysis of score trends and reporting

### Sophisticated data systems and practices

#### **Progress to Date**

- Education Insight Portal: Completed requirements for the Teacher Insight Dashboard based on 11 focus groups with ~175 individuals
- Identity Management System: Developed a system to provide single sign on access to all DDOE applications
- Data Warehouse: Completed analysis and design for 9 of ~18 warehouse subject areas; warehouse data tested in July 2011
- Data Dictionary: Installed data dictionary software; a draft of the data dictionary is currently under review
- **Student Data Exchange:** Completed work on the Student Data Exchange (eTranscripts)
- Common Course Codes: Completed ~50% of the coding of high school academic courses
- P-20 council: Passed legislation regarding higher ed. data sharing
- Data coaches: Selected Wireless Generation as the vendor for data coaches and piloted 5 coaches across 7 LEAs; hired 23 of 24 additional 24 coaches (with 1 hire pending); provided summer training for data coaches
- Instructional Improvement System: Worked with LEAs to define and develop their IIS and establish methods for tracking implementation



- Identity Management System and Student data exchange: Deploy systems in August 2011
- Dashboard portal: Develop Teacher Insight Dashboard based on design
- Data coaches: Deploy 29 coaches to all Delaware schools in August 2011

### Effective Teachers and Leaders (1/2)

#### **Progress to Date**

- Development Coaches: Selected the Delaware Academy of School Leadership (DASL) to provide development coaches and additional training in DPAS II; hired 9 development coaches who will directly coach 60 principals in effectively conducting educator evaluations
- School Administration Managers: Partnered with DASL to help principals focus their time on instructional leadership using SAMs; 29 schools have been identified for service starting September 2011
- School Leadership Coaches: Completed an RFP process to select a partner to provide leadership coaches annually to work with 40 novice principals and/or principals leading high-need schools (over a 3-year contract period)
- **Comprehensive professional development:** Supported The Vision Network in its continued provision of training and resources to approximately 25-30 schools each year
- DPAS-II: Engaged more than 300 educators in developing student growth measures; received an amendment from USED to continue measure development in the 2011-12 school year; revised the DPAS II guide and developed tools to audit implementation
- Professional Development Certification: Prepared for the September 2011 re-implementation of the Professional Development Management System, a registration and reporting system for PD



- SAMs and coaches: Launch fully in Sep.
- **Teacher-Leader:** Provide guidance to LEAs in developing teacher career paths including the role of "teacher leader"
- The Vision Network: Support the new Executive Director in convening all participating principals (August 2011)

### **Effective Teachers and Leaders (2/2)**

#### **Progress to Date**

- **STEM Residency:** Launched the STEM residency program at the University of Delaware (UD); 8 residents graduated in May 2011; recruited an additional 11 residents for the 2011-12 school year
- **Teach For America:** Became an official TFA region in June 2011; a cohort of 27 new corps members will begin teaching in the highest-need schools of New Castle County this fall
- Delaware Teaching Fellows: Selected The New Teacher Project as another teacher recruitment and pre-service preparation provider that will serve high-need schools throughout the state; completed recruitment, selection, and pre-service training for the first cohort of 23 Teaching Fellows in critical-need subject areas
- **Delaware Leadership Project (DLP):** Created and launched DLP, the state's first alternative route to principal certification program; received 90 applications; six aspiring principals completed summer intensive training as part of their 14-month commitment
- Recruitment campaign: Began revamping the teacher recruitment website to expand the applicant pool and improve functionality; prepared to embark on a statewide teacher marketing campaign
- Retention and talent transfer initiatives: Began researching comparable programs





- Preparation program assessment and teacher preparation grants: Onboard Harvard Strategic Data Fellow in September 2011
- Teaching and learning conditions survey: Conduct statewide survey

### **Deep support for the lowest-achieving schools**

#### **Progress to Date**

- Partnerships Zone Schools Round 1 Selection: Instituted the Partnership Zone for DE's lowest-achieving schools and selected the first four schools: Stubbs Elementary, Glasgow High School, Positive Outcomes Charter School and Howard High School of Technology
- Partnership Zone Schools Round 1 Support: Worked with selected LEAs to support the development of strong reform plans; supported schools in enacting hiring, professional development, scheduling and other changes for launch in September 2011
- **DDOE School Turnaround Unit:** Developed and implemented progress monitoring protocols for each Round 1 school; investigated other State Turnaround Offices to ensure that Delaware is providing the greatest possible support to all Partnership Zone schools
- Mass Insight: Developed a partnership agreement with Mass Insight (a national nonprofit that supports school turnaround efforts) to enhance the capacity of the School Turnaround Unit
- School Improvement Grants: Selected two schools for competitive school improvement grants (Mt. Pleasant High School and Seaford High School); awarded SIG funding to Partnership Zone Schools through the competitive school improvement grant process
- Academic achievement award: Selected ten schools to receive awards of \$150,000 for academic success with low-income students





- Partnership Zone Schools Select six additional schools for the partnership zone in August 2011; provide comprehensive technical assistance to Round 2 Partnership Zone schools
- School improvement grants Explore opportunities to increase the value and impact of SIG grants



### **Support and collaboration**

#### **Progress to Date**

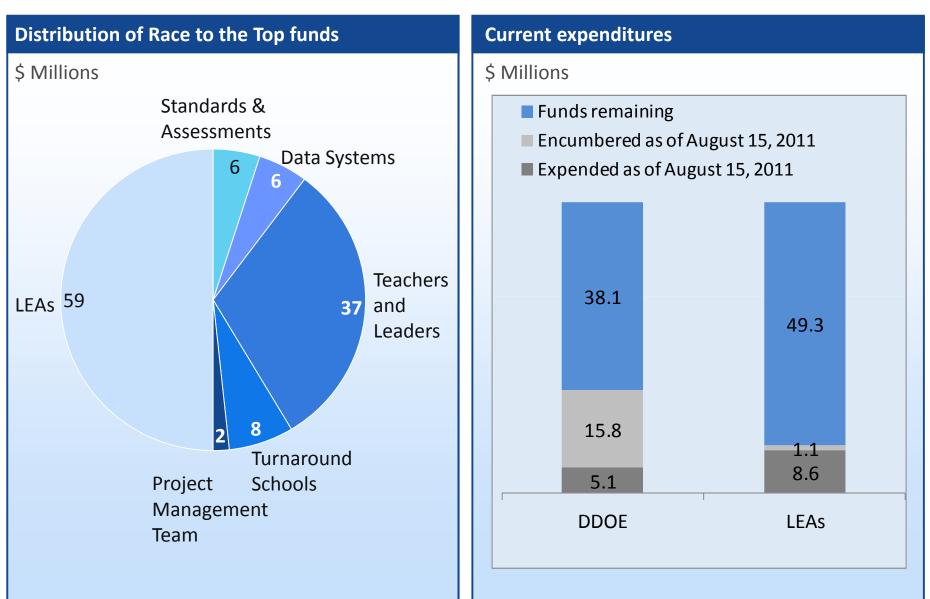
- **District Support Program:** Provided technical assistance to support districts in developing their Race to the Top plans: held monthly workshops; offered visits to high-performing schools; created an online portal for resources; provided detailed feedback on plan drafts; held regular meetings between Sec. Lowery and each LEA
- Charter School Support Program: Provided three workshops on formative assessment, curriculum refinement and human capital
- **DDOE Liaisons:** Provided a dedicated liaison to each LEA; liaisons receive monthly training and support their LEAs as needed
- Education Success Planning and Evaluation System (ESPES): Made immediate changes to better align the system with RTTT and to solve technical issues; convened stakeholders to develop "ESPES 3.0"
- Family and Community Engagement "mini-grants": Developed an application for LEA sub-grants to accelerate or sustain new activities
- **Communications:** Hired a new Public Information Officer (PIO); began daily media summaries; provided training to LEA PIOs
- Stakeholder engagement: Began monthly meetings with the leadership of DSEA, DSBA, and the Delaware Business Roundtable
- Governor's Education "Road Show": Held 11 forums in schools across Delaware to discuss the state's education plan



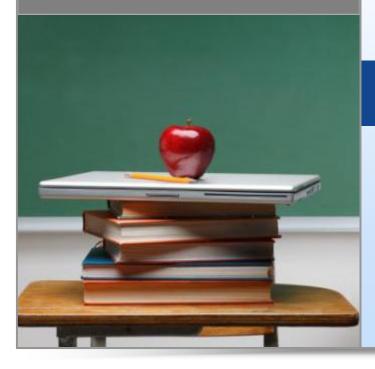


- **Communications:** Launch new DDOE website
- Family and Community Engagement
   "mini-grants": Award sub-grants to LEAs
- **ESPES:** Revise the ESPES system to meet DDOE and other stakeholders' needs

### **Financial update**



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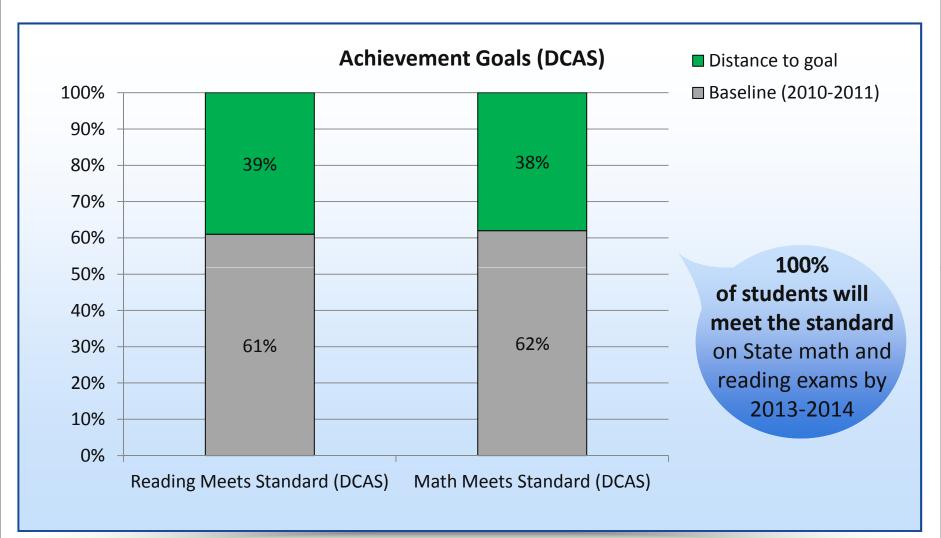
**Progress Update** 

### **Performance Update**

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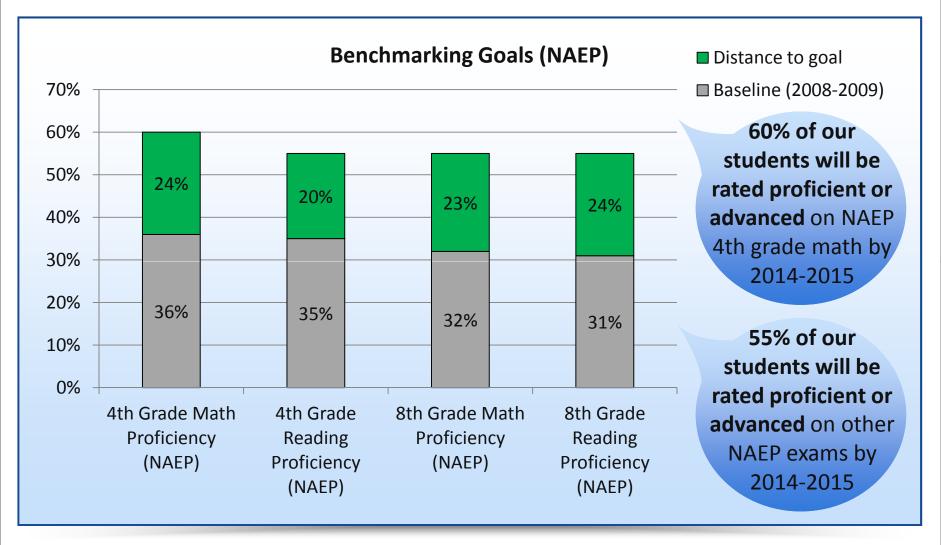
### **Achievement Goals**





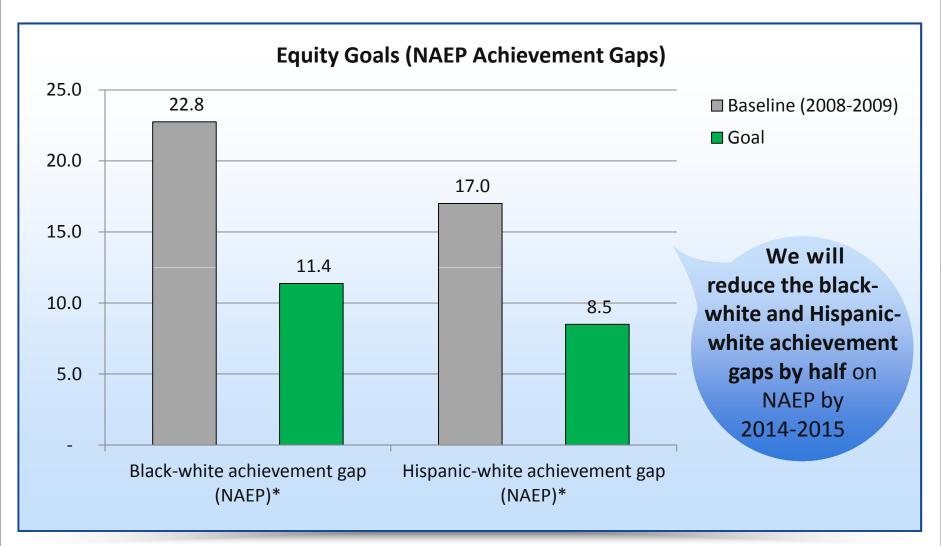
### **Benchmarking Goals**





### **Equity Goals**

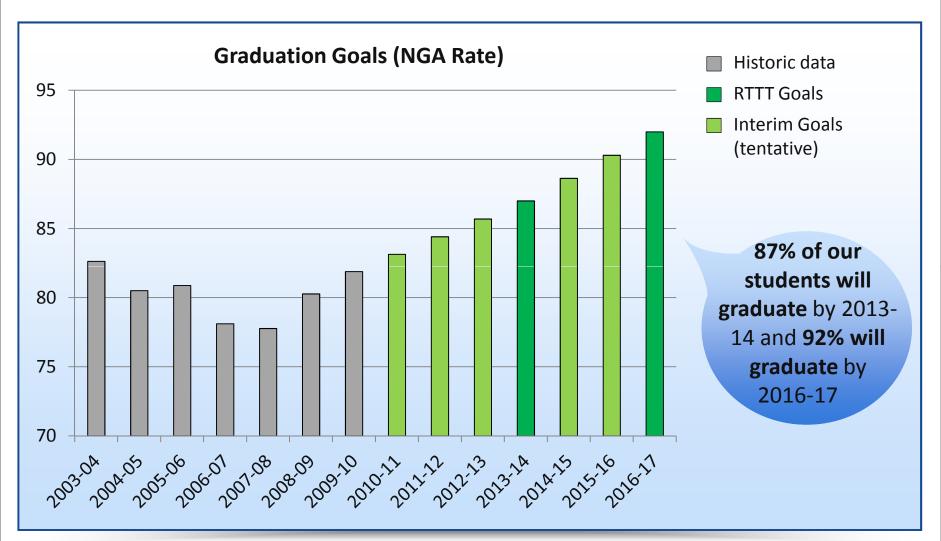




\* Gap represents the average difference in points between the average scores of the student subgroups listed on 4<sup>th</sup> and 8<sup>th</sup> grade math and reading exams. The exact calculation of this achievement gap will be confirmed in Fall 2011.

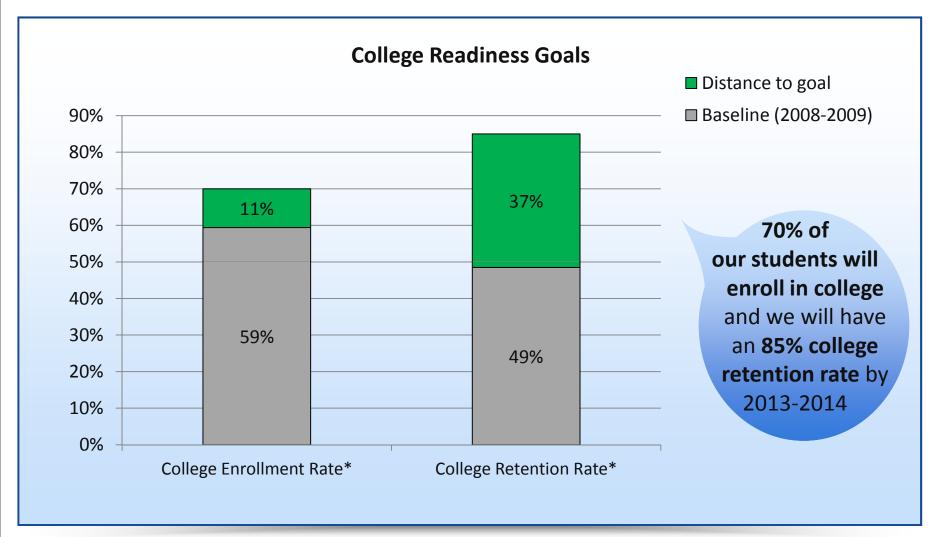
**Graduation Goals** 





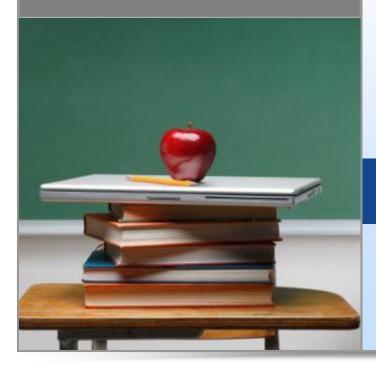
### **College Readiness Goals**





\* Rates are based on data from select DE institutions of higher education (IHEs). The exact definitions and data sources for these measures will be confirmed in Fall 2011.

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### **Activities across all LEAs**

#### **Statewide LEA Activities\***



#### Rigorous Standards, Curriculum & Assessments

Sophisticated Data Systems & Practices

Effective Teachers & Leaders

- Align curriculum with Common Core Standards
- Provide advanced coursework and target students for enrollment
- Support students in advanced coursework
- Provide 90 minutes of weekly collaborative time for teachers
- Implement an instructional improvement system
- Forecast hiring needs and target hiring to the most effective educator preparation programs
  - Increase the concentration of highly-effective educators in high-need schools
  - Use educator evaluations as a primary factor in educator development, promotion, advancement, retention and removal
  - Align professional development with evaluations and prioritize effective PD
  - Establish a teacher-leader position in each high-need school
  - Develop building leaders' instructional leadership

Deep Support for the Lowest-Achieving Schools

- Provide support to the lowest-achieving schools
- Engage families and communities effectively in supporting students' academic success

\* This list is not exhaustive, and it does not include LEA requirements to use statewide initiatives (e.g., data coaches, central hiring website)

### **Notable district initiatives**

c a



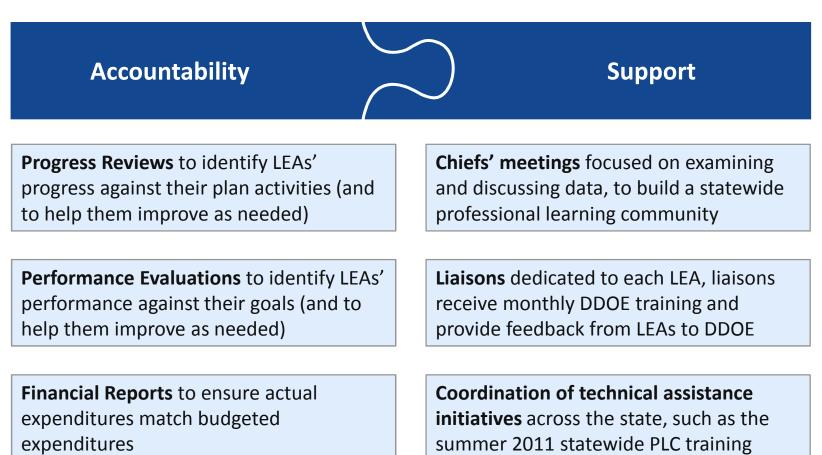
Rigorous standards, curriculum, and assessments	Sophisticated data systems and practices	Effective teachers and leaders	Deep support for the lowest-achieving schools	
<ul> <li>Create a Freshman Academy at the high school (Caesar Rodney)</li> <li>Adopt Singapore Math and a district-wide STEM program (Brandywine)</li> <li>Offer a pre-AP Institute (Cape Henlopen)</li> <li>Offer "Project Lead the Way" Bio-Medical courses (NCCVT)</li> <li>Provide AP and SAT preparation courses (Smyrna)</li> </ul>	<ul> <li>Design "Data Day" sessions and utilize a data specialist (Indian River)</li> <li>Provide 140 minutes of common planning time per week and institute teacher-run PD (Polytech)</li> <li>Provide an instructional achievement specialist and training to support Professional Learning Communities (Laurel)</li> </ul>	<ul> <li>Enhance new teacher mentoring (Capital)</li> <li>Increase principals' instructional leadership with a School Administrative Manager (Lake Forest)</li> <li>Assign Academic Deans to ten schools to focus on instruction and evaluation of teachers (Red Clay)</li> <li>Develop and implement a Teacher Leadership Academy (Sussex Tech)</li> </ul>	<ul> <li>Conduct school success reviews at the lowest- achieving schools (Appoquinimink)</li> <li>Redesign high school programs, including a new partnership with Penn Farm (Colonial)</li> <li>Adopt a school-within- a-school model at the high school (Seaford)</li> <li>Provide additional home support for students from low- income families (Woodbridge)</li> </ul>	

#### Collaboration between educators, communities, and all Delawareans

- Create a "Parent University" (Christina)
- Use an electronic system to track family engagement and link engagement to student achievement (Delmar)
- Establish community liaison centers at two major work sites (Milford)

### **Implementation Support Overview**

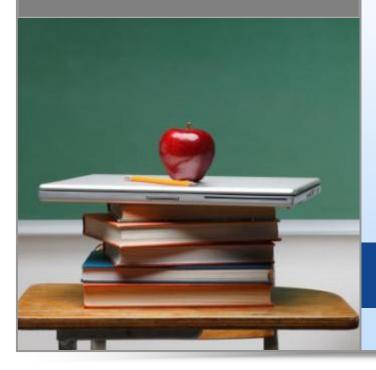




**Frequency** of the above accountability routines subject to change based on LEA performance

**Online resources** focused on examples of effective education system improvement within and outside of Delaware

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### **Questions?**



### Delaware Department of Education

### Specifications for Select High School Courses and End-of-Course Assessments



Updated March 2011

# **State Board of Education**

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Document No. 95-01/11/05/03

# Specifications for Select High School Courses and End-of-Course Assessments

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## Introduction to the Specifications for Select High School Courses and End-of-Course Assessments (Updated March 2011)

In addition to providing the specifications for select high school courses, this update incorporates the Delaware Prioritized Curriculum Standards coding and clarifies the Delaware Comprehensive Assessment System (DCAS) specifications for the end-of-course (EOC) assessments. The Prioritized Curriculum coding identifies standards, performance indicators, and grade-level expectations (GLEs) as *essential, important*, of *compact*. This coding informs educators as to the areas of instruction that should be emphasized to ensure students' academic growth.

EOC assessment update:

- EOC assessments will be introduced for use as part of the DCAS beginning in the 2011–2012 school year.
- EOC assessments will be offered at the end of the fall and spring semesters. Schools on block schedules will administer the EOC assessments in January as well as May of each year; schools on semester schedules will administer the EOC assessments in May of each year.
- The EOC assessments will be an online, immediately scored, fixed-form test. Multiple choice and other machine-scored item types will be utilized to provide immediate online scores.
- Prior to the first operational assessment there will be a separate field test. It will be administered during the 2010–2011 school year.
- The DDOE will determine, pending state legislation and subsequent policy decision, whether the EOC assessments will be a requirement for graduation and/or factor in course grades.

A major influence on the course and EOC assessment specifications should be acknowledged here. The Common Core State Standards (CCSS) were adopted by Delaware in 2010. The adoption of CCSS warrants consideration for both the EOC course and assessment specifications. With that in mind, it is important to note that the DDOE continues its dialogue with districts and charter schools around the implementation of the CCSS, including the important steps of teacher training and course mapping. Delaware is an active member of Implementing the Common Core System (ICCS) and State Collaboratives on Assessment and Student Standard (SCASS), both of which are sponsored by the Council of Chief State School Officers (CCSSO). Updates on DCAS can be found on the DCAS portal at <a href="http://de.portal.airast.org/">http://de.portal.airast.org/</a>

Michael W. Stetter, D.Ed., Director Accountability Resources Workgroup March 2011

# **ENGLISH II SPECIFICATIONS**

#### I. INTRODUCTION: DEFINITION OF THE TASK

Delaware's Secretary of Education, Lillian Lowery, in consultation with the Delaware Chief School Officers, approved the development of a high school end-of-course exam for grade 10 English language arts (ELA). An ELA design team task force formulated course specifications and links to the Delaware Content Standards/Grade-Level Expectations in ELA for a single designated course intended to serve as the basis for the No Child Left Behind Act (NCLB) accountability requirement for an end-of-course assessment in high school.

For assessment purposes, the high school end-of-course exam for ELA is called English II as it equates to a student's second year of English in high school.

#### **II.** THE PROCESS

The 2009 ELA design team task force consisted of four high school ELA and reading teachers and specialists representing each of the three counties in Delaware, one curriculum education associate from the Delaware Department of Education, and one ELA specialist from the University of Delaware:

Cary Brandenberger-Riches	NCCVT School District	New Castle County
Patricia Masten	Milford School District	Kent County
Aleta Thompson	Cape Henlopen School District	Sussex County
Ann Lewis	Laurel School District	Sussex County
Bonnie Albertson	University of Delaware	New Castle County
Juley Harper	Curriculum Workgroup	Delaware DOE

The team began the development process by reviewing the ELA performance indicators and grade-level expectations (GLEs) to identify the expectations that comprise "big ideas" and should be assessed in the English II course. The appropriate performance indicators and GLEs were then mapped to the big ideas and cross-referenced by discourse category for writing and cognitive level for reading and research, creating an English II course specifications matrix, which is located in Appendix A.

Once the critical performance indicators and GLEs were identified, the ELA design team task force reviewed other state and national standards in search of "gaps" or differences that Delaware's standards may have. The following reflects the documents reviewed:

- National Council of Teachers of English (NCTE) ELA standards
- National Assessment of Educational Progress (NAEP) grade 12 Benchmarks for reading and writing
- American Diploma Project (ADP) Ready or Not ELA Benchmarks
- International Reading Association Standards
- ADP English Benchmarks
- Grade 9–11 Delaware GLEs for Standards 1–4
- ELA Core Content Standards for College and Career Readiness

• Missouri, North Carolina, Louisiana, Florida, Texas, and West Virginia Content Standards

The ELA design team task force concluded that the core principles in Delaware's ELA content standards were a close match to the state and national standards that were reviewed. Based on the identified commonalities, the following factors should be considered when developing the EOC course and assessment.

The standards:

- Consider the needs of teachers and students by providing guidance while encouraging local characteristics and needs to be taken into account.
- Include skills that can be measured easily.
- Spell out core standards, concepts, and principles in ELA in fundamental terms.
- Offer sample texts for ELA but do not dictate a canonized list.
- Place a large emphasis on literacy skills for literary, non-literary, and media texts.
- Are written in teacher-friendly language, do not provide an overly rigid guide to ELA teachers, and are not prescriptive.
- Are supported with scientifically based reading research and evidence.
- Encourage students to think and write critically about a variety of texts—an essential skill for both college and the workforce.

The next step for the ELA design team task force was to review released items from state assessments that could serve as sample items for the identified English II course and end-of-course assessment. The following list represents the assessment documents that were reviewed for appropriate released items:

- Delaware Item Samplers
- Delaware State Testing Program (DSTP) Performance Level Descriptors and GLEs for grade 10
- Reading Framework for the 2009 National Assessment of Educational Progress
- Grade 10 ELA DSTP Stances and Standards for reading and writing
- Achieve ADP English and Communication Benchmarks grades 9–10 http://www.achieve.org/node/941
- ELA Core Content Standards for College and Career Readiness
- Missouri End-of-Course Assessment Items http://dese.mo.gov/divimprove/assess/
- North Carolina End-of-Course Assessment Items http://www.dpi.state.nc.us/accountability/testing/eoc/sampleitems/1a
- Florida Comprehensive Assessment Test Assessment Items
- California High School Exit Exam Assessment Items
- Idaho End-of-Course Assessment Items
- Indiana Graduation Qualifying Exam Assessment Items
- Louisiana Graduation Exit Exam for the 21st Century Assessment Items
- Maryland High School Assessment Items http://hsaexam.org/img/CD%20Content/samples\_2007/PR07\_English.pdf

- Massachusetts End-of-Course Assessment Items
- Minnesota End-of-Course Assessment Items
- Mississippi Subject Area Testing Program Assessment Items
- Nevada End-of-Course Assessment Items
- New York Regents Comprehensive Examination Assessment Items
- Ohio Graduation Test Assessment Items
- Oklahoma English II Assessment Items
- South Carolina End-of-Course Assessment Items
- Virginia Standards of Learning Assessment Items
- Washington Assessment of Student Learning Exit Exam Assessment Items
- College Board Sample Items
- Writing Framework for the 2011 NAEP Assessment http://www.sde.idaho.gov/site/naep/docs/wr11/wr11-nagb-framework.pdf

#### **III. THE ASSESSMENT DESIGN**

#### **Underlying Assumption**

The English II EOC assessment is based on the Delaware ELA prioritized standards, performance indicators, and grade-level expectations, and therefore the test is a transfer task assessment rather than an assessment based on specific course content.

The ELA framework assumes:

- Language is at the heart of all human interaction.
- Schools must use students' home and early social experiences as the foundation for ELA development.
- Students' linguistic diversity must be recognized, respected, and built upon.
- The language arts are important tools for acquiring concepts and knowledge in all content areas.
- Students need to develop language and communication skills that will allow them to function in a complex society and in a variety of workplaces.
- An effective 21<sup>st</sup> century ELA program emphasizes a wide range of literacy skills and expands the definition of "text" beyond the literary.

#### **Test Structure**

The EOC reading test will be an online, 60-item, fixed-form test. The passages for the EOC assessment will include both literary and informational texts with the with the goal of 30% literary and 70% informational. Every attempt will be made to identify authentic text with appropriate text complexity. The Lexile<sup>®</sup> range of 1080–1305 recommended by the CCSS will be utilized.

Multiple choice and innovative machine-scored items will be used in order to provide immediate feedback.

Items will be evaluated using Norm Webb's Depth of Knowledge (DOK) criteria.

- *Level 1 Recall of Information:* Requires students to receive or recite facts or to use simple skills or abilities.
- Level 2 Basic Reasoning: Includes the engagement of some mental processing beyond recalling or reproducing a response; it requires both comprehension and subsequent processing of text or portions of text.
- *Level 3 Complex Reasoning:* Requires students to go beyond the text; however, they are still required to show understanding of the ideas in the text. May require students to explain, generalize, connect ideas, or make inferences across an entire passage.

For an in-depth explanation refer to <u>http://wat.wceruw.org/index.aspxsee</u>.

These three cognitive levels closely align to the cognitive stances used on the Delaware Student Testing Program (DSTP).

The percentages to be used for the EOC cognitive targets reflect the percentages used for the National Assessment of Educational Progress (NAEP) reading assessment.

	Recall of Information	Basic Reasoning	Complex Reasoning
English II	20%	45%	35%

The performance indicators that are currently identified to be assessed on the English II EOC assessment are located in Appendix B.

#### **IV.** SUGGESTIONS AND CAUTIONS

Not all standards, performance indicators, and GLEs will be assessed on the EOC assessment; however, it is the expectation that all standards, performance indicators, and GLEs will be taught. For example, while a writing component is not currently part of the assessment design, writing instruction is an integral part of Delaware's Prioritized Curriculum and the CCSS. It is the expectation that districts and teachers will continue to keep writing at the core of their English II program. The ELA prioritized standards are not isolated skills but interrelated communications tools. Good instruction builds on these connections which enhances student learning.

An English II practice test is scheduled to be available on the DCAS portal as of August 9, 2011—<u>http://de.portal.airast.org/</u>.

#### V. SUMMARY

The 2009 ELA design team task force recommended that the ELA high school end-of-course be referred to as English II. The course specifications are based on Delaware's content standards, performance indicators, and GLEs. Therefore, the assessment is a transfer task rather than an assessment based on course content. The assessment is an online, 60-item, fixed-form test that yields immediate scores. It is the expectation that all standards, performance indicators, and GLEs be taught even if not assessed by the EOC exam.

# APPENDIX A: Course Specification Matrices for English II

## 1. Matrix for English II – Standard 1 Writing

**Standard 1**: Use written and oral English appropriate for various purposes and audiences.

Written Communication: Writing is a flexible, recursive process that encompasses identifying purposes and audiences, prewriting, drafting, revising, editing, and publishing. The use of a variety of technologies will facilitate this process.

Notes:

1. Items that are underlined represent content that is new to English II.

2. The Big Ideas for Standard 1 correspond to the categories in the state writing rubric.

3. Prioritized coding is indicated in red. The indicators are E = Essential, I = Important, and C = Compact.

	Modes of Discourse		
Big Ideas (Key Concepts)	Persuasive	Informative	Expressive
Purpose	<ul> <li>Students understand that persuasive writing</li> <li>is audience-centered, the intended audience is the most important consideration E</li> <li>takes a position on debatable issue to convince the audience E</li> </ul>	<ul> <li>Students understand that informative writing</li> <li>is subject-centered; the need to communicate information is the most important consideration E</li> </ul>	<ul> <li>Students understand that expressive writing</li> <li>is author-centered; the writer's intent to tell story, make meaning of experience, achieve personal goals, or create literary pieces is the most important consideration E</li> </ul>
Audience	<ul> <li>The student writer</li> <li>demonstrates an awareness of the audience I</li> <li>communicates necessary background information and /or definitions for a given audience I</li> <li>acknowledges reader's positions/beliefs about ideas/issues; understands implications for the writer and <u>adjusts content accordingly</u> I</li> <li>writes to audiences that can be increasingly distant and <u>abstract</u> in addition to more familiar audiences I</li> </ul>		
Form	<ul> <li>Letters to appropriate individuals/organizations (e.g., editor, boards, business, personnel) I</li> <li>Persuasive essays E</li> <li>Advertisements I</li> <li>Editorials I</li> <li>Reviews E</li> <li>Proposals I</li> <li>Debate briefs E</li> <li>Position papers E</li> <li>Legislative/legal documents C</li> </ul>	<ul> <li>Letters to appropriate individuals/organizations (e.g., editor, boards, businesses, personnel) C</li> <li>Summaries E</li> <li>Reports (e.g., book reports, research reports) E</li> <li>Essays (e.g., expository—pro-con, cause/ effect, definition, etc,—descriptive) E</li> <li>Articles(feature and/or specialized) I</li> <li>Messages/memos and notices I</li> <li>Biography and autobiography I</li> <li>Reviews/<u>literary criticism</u> E</li> <li>Proposals E</li> <li>Character analyses E</li> </ul>	<ul> <li>Stories C</li> <li>Journals I</li> <li>Poems I</li> <li>Memoirs I</li> <li>Personal statement essays C</li> </ul>

	Modes of Discourse		
Big Ideas (Key Concepts)	Persuasive	Informative	Expressive
Development	<ul> <li>Present a clear defensible position that supports, opposes, or <u>qualifies the issue/question E</u></li> <li>Support position with reasons that could include relevant facts, statistics, credible personal and expert opinions, examples, and/or insightful commentary E</li> <li>Acknowledge and evaluate readers' anticipated opposition (e.g., recognize alternative view points, propose solutions, make concessions, present a rebuttal) E</li> <li>Acknowledge assumptions within arguments and recognize unstated assumptions in opposition E</li> <li>Write an original (e.g., beyond the obvious) and effective title, when appropriate C</li> <li>Avoid unsupported reasons/logical fallacies (e.g., begging, "it's not fair," circular reasoning, partial truths, jumping to conclusions, jargon, faulty cause/effect statements, inadequately warranted claims) I</li> <li>Use (when appropriate) persuasive and propaganda techniques (e.g., appeal to emotion, name calling, exaggeration/hyperbole, bandwagon, transfer, testimonial, parallelism, analogy) when appropriate I</li> <li>Identify and use primary and secondary sources when appropriate, avoiding plagiarism E</li> <li>Combine information from text and prior knowledge to elaborate upon ideas in writing (text-to-self, text-to-text, text-to-world connections) that reveal to the reader the writer's depth of understanding of the issue E</li> </ul>	<ul> <li>Select an interesting, manageable and thought-provoking subject or focus for writing and one that meets the requirements of the assignment E</li> <li>Write an effective title, when appropriate C</li> <li>Provide relevant information, reasons, and/or details to elaborate or clarify the subject (e.g., personal opinion based on experience/ observation, verifiable facts, examples, explanations, definitions) E</li> <li>Analyze and use information from multiple primary and secondary sources to support generalizations and theses, and to generate new ideas and/or perspectives, avoiding plagiarism E</li> <li>Combine information from text and prior knowledge to elaborate upon ideas in writing (text-to-self, text-to-text, text-to-world connections) that reveal to the reader the writer's depth of understanding of the topic E</li> </ul>	<ul> <li>Develop increasingly more abstract and interesting ideas for writing that are fresh and original I</li> <li>Create a title that reflects the subject and engages the reader C</li> <li>Use dialogue, description, and narration when appropriate I</li> <li>Use vivid sensory images, figurative language, monologue, and/or allusion to elaborate details that will convey feelings and/or illustrate events and characters E</li> <li>Use rhetorical devices (e.g., rhetorical question, repetition, direct address) when appropriate E</li> <li>Use strategies such as humor, non-literal language (e.g., puns, double-meanings, purposeful use of ambiguity), alternative narrative techniques (e.g., stream-of-consciousness) to engage the reader I</li> <li>Combine information from text and prior knowledge, to elaborate upon ideas in writing (text-to-self, text-to-text, text-to-world connections) that reveal to the reader the writer's depth of understanding of the topic E</li> </ul>

	Modes of Discourse		
Big Ideas (Key Concepts)	Persuasive	Informative	Expressive
Organization	<ul> <li>Present reasons in a logical order (e.g., weakest to strongest argument, strongest to weakest argument, inductive or deductive reasoning) I</li> <li>Organize writing by selecting text structures that strengthen the argument I</li> <li>Develop an introduction that presents a thesis and         <ul> <li>takes a clear position and establishes self as authority I</li> <li>clarifies the issue in a way that clearly establishes a need for solution/action I</li> <li>provides necessary background I</li> <li>commands readers' attention (e.g., invokes or appeals to reader) when appropriate I</li> <li>provides criteria for evaluation of opposition I</li> </ul> </li> <li>Use subtle transition words/phrases that show increasingly more abstract relationships and make connections (e.g., controlling the pace, tracing development of the perspective and/or logic of the argument) I</li> <li>Develop a conclusion that moves beyond summary (e.g., "call to action" or "next step," answers the "so what?" question about the significance of the issue, raises related issues or consequence of non-action, provides perspective) E</li> </ul>	<ul> <li>Plan how to present information in a logical order (e.g., most important to least important information, general to specific, <u>inductive or deductive reasoning</u>) I</li> <li>Organize writing by selecting text structures that clarify or explain the subject I</li> <li>Develop an introduction/hook that presents a thesis that goes beyond the obvious and provides necessary background I</li> <li>Organize writing to engage the reader (e.g., use by using other forms and genres I</li> <li>Use subtle transition words/phrases that show increasingly more abstract relationships and make connections I</li> <li>Use paragraphs to transition between ideas and control and enhance message I</li> <li>Develop a conclusion that moves beyond summary (e.g., reinforcing the importance of the information, raising related issues, and/or generating a new hypothesis) E</li> </ul>	<ul> <li>Organize writing to engage the reader (e.g., use by using other forms and genres I</li> <li>Use paragraphs to transition between ideas and control and enhance message I</li> <li>Develop an introduction that hooks the reader and establishes the mood and tone I</li> <li>Use transition words/phrases that show increasingly more complex relationships and make connections I</li> <li>Use order other than chronological (e.g., flashback, foreshadow, flash-forward) I</li> <li>Develop a conclusion that moves beyond summary (e.g., provide resolution/closure, pose purposeful questions to the reader to keep the reader thinking, refer back to the introduction/hook for circular endings) E</li> </ul>
Sentence Structure	In order to capture the audience's attention and establish a distinctive style, tone, and voice <ul> <li>use complete sentences to express thoughts I</li> <li>vary sentence structure (e.g., simple, compound, complex, compound-complex sentences) I</li> <li>vary kinds of sentences (declarative, explanatory, interrogative, imperative) I</li> <li>vary sentence lengths I</li> <li>vary sentence beginnings (experiment with placement of phrases and clauses in sentences) I</li> <li>write sentences that create purpose-specific rhythm and flow naturally I</li> </ul>		

	Modes of Discourse			
Big Ideas (Key Concepts)	Persuasive Informative Expressive			
Word Choice	Use vivid and precise words with the audience's needs and writer's purpose, style and voice in mind: <ul> <li><u>use specific</u>, concrete language and phrasing E</li> <li>use adjectives and adverbs to describe, illustrate, and modify (clarify meaning) I</li> <li>use action verbs when possible I</li> <li>use words that convey appropriate voice (e.g., attitude, emotion, point of view, commitment) and add depth to writing I</li> <li>use a variety of accurate words and phrases that avoid repetition I</li> <li>use a purposeful range of formal/informal language depending on the audience I</li> <li>use words that have denotations or connotations appropriate for the writing purpose I</li> <li>use words that create consistent style and tone for the writing occasion I</li> </ul>			
Conventions	<ul> <li>purposely use active and passive voice I</li> <li>Use Standard Written English (SWE) conventions (and when appropriate, variations thereof) to achieve purpose and create effective style and voice. Deviations from SWE (e.g., dialect, slang) should have a specific rhetorical function E</li> <li>Use standard punctuation (commas, colons, hyphens, dashes, italics, and <u>ellipses</u>) correctly I</li> <li>In addition to standard punctuation</li> <li>use punctuation to show increasingly abstract relationships (e.g., comma for clarity such as to set off phrases, clauses, appositives; semicolon; colon to show relationships, parentheses) I</li> <li>use punctuation for rhetorical effect (e.g., dash, <u>colon, ellipses</u>) I</li> <li>Demonstrate control of grammar in sophisticated sentence structures (compound, complex, compound-complex)</li> <li><u>agreement of subject/verb, pronoun/antecedent</u> I</li> <li><u>verb use (tense)</u> I</li> <li><u>use active and passive voice appropriately and consistently</u> I</li> <li>use purposeful parallel structure I</li> </ul>			

Please refer to the Standard 1 GLEs for definitions. <u>http://www.doe.k12.de.us/infosuites/staff/ci/content\_areas/ela\_standards\_gle.shtml</u>

## 2. Matrix for English II – Standard 1 Oral Communication

Standard 1: Use written and oral English appropriate for various purposes and audiences. Oral Communication: Speakers draw upon the language of their home, community, and culture—as well as the public language of the larger culture—to communicate effectively with a variety of audiences.

*Note:* Prioritized coding is indicated in red. The indicators are E = Essential, I = Important, and C = Compact.

Performance Indicators	Grade-Level Expectations
<b>1.4</b> Orally communicate information,	Choose words and use voice appropriate to audience and purpose (e.g., inform, persuade, entertain) E
opinions, and ideas effectively to different audiences for a variety of purposes.	<ul> <li>Speak and listen for a variety of audiences (e.g., classroom, real-life) and purposes (e.g., awareness, enjoyment, information, problem solving) E</li> </ul>
	<ul> <li>Identify and discuss criteria for effective oral presentations (e.g., eye contact, projection, tone, volume, rate, articulation)</li> <li>Use visual techniques appropriately E</li> </ul>
	Share impromptu remarks about topics of interest to oneself and others I
	<ul> <li>Speaking from notes or an outline, relate an experience in descriptive detail, with a sense of timing and etiquette appropriate to the occasion I</li> </ul>
	<ul> <li>Perform expressive oral readings of prose, poetry, and drama C</li> </ul>
	Prepare and conduct interviews C
	Present a coherent, comprehensive report on differing viewpoints on an issue, evaluating the content of the material presented, and organizing the presentation in a manner appropriate to the audience I
	Differentiate between formal and informal contexts and employ an appropriate style of speaking, adjusting language, gestures, rate, and volume according to audience and purpose I
<b>1.5</b> Listen to and comprehend oral	Follow basic directions I
communication	<ul> <li>Listen attentively by making eye contact, facing the speaker, asking questions, and paraphrasing what is said E</li> <li>Ask and respond to questions from teachers and other group members I</li> </ul>
	Summarize and explain information conveyed in an oral communication accounting for key ideas, structure and relationship of parts to the whole E
	<ul> <li>Distinguish among purposes for listening (e.g., gaining information, being entertained) and take notes as appropriate E</li> <li>Recall significant details and sequence accurately I</li> </ul>
	Follow a speaker's argument and represent it in notes
	<ul> <li>Evaluate the reliability of information in oral communication using criteria based on:</li> </ul>
	<ul> <li>The topic I</li> </ul>
	The context
	<ul> <li>Analysis of logic, evidence, propaganda devices (e.g., bandwagon, double speak, name-calling)</li> <li>Style I</li> </ul>

Performance Indicators	Grade-Level Expectations
<b>1.6</b> Develop vocabulary and the ability to use words, phrases, idioms, and various	<ul> <li>Use words that reflect a growing range of interests and knowledge I</li> <li>Clarify and explain words and ideas I</li> </ul>
grammatical structures as a means of	Give and follow oral directions I
improving communication.	Use complex sentence structure I
	<ul> <li>Use appropriate noun/verb agreement,, very tense, pronouns, prefixes and suffixes E</li> </ul>
	<ul> <li>Consult dictionaries and thesauruses, and other resources to find and compare definitions, choose among synonyms, and spell words correctly I</li> </ul>
	<ul> <li>Use knowledge of roots, prefixes, and suffixes to interpret and convey the meaning of words I</li> </ul>
	<ul> <li>Identify common figures of speech(e.g., similes, metaphors, personification, hyperbole, allusion) and describe how writers use them to achieve specific effects and use them effectively E</li> </ul>
	<ul> <li>Use punctuation marks that distinguish statements, questions, exclamations, and commands C</li> </ul>
<b>1.7</b> Participate effectively in a discussion	Initiate conversations with peers and adults I
	<ul> <li>Participate in a variety of roles in group discussions (e.g., active listener, contributor, discussion leader) E</li> </ul>
	<ul> <li>Listen attentively, demonstrating respect for the opinion of others I</li> </ul>
	<ul> <li>Respond responsibly and courteously to other's remarks E</li> </ul>
	<ul> <li>Explain opinions by citing evidence and referring to sources E</li> </ul>
	<ul> <li>Evaluate the stated ideas and opinions of others, seeking clarification through questions E</li> </ul>
	<ul> <li>Invite ideas and opinions of others into the discussion E</li> </ul>
	Accept and use helpful criticism E
	Summarize the main points of a discussion orally, and in writing, specifying areas of agreement and disagreement E
	Participate in discussion without dominating I

## **3.** Matrix for English II – Standards 2 and 4 Reading

Standard 2: Construct, examine, and extend the meaning of literary, informative, and technical texts through listening, reading, and viewing.Standard 4: Use literary knowledge accessed through print and visual media to connect self to society and culture.

*Note:* Prioritized coding is indicated in red. The indicators are E = Essential, I = Important, and C = Compact.

Big Ideas for Reading (Key Concepts)	Performance Indicators	Grade-Level Expectations
VS –	Personal Connection	
Vocabulary <b>CS</b> – Comprehension Strategies (Effective use of reading	2.4k demonstrate an overall understanding of printed texts by relating the content of the text to real-life situations. CS, LC/M	<ul> <li>Draw on prior knowledge and experiences to connect personally to text (text-to-self connections) E</li> <li>Draw on prior knowledge of the world (other books, television, movies) to make text-to-world connections E</li> <li>Employ reading strategies (e.g., skimming, scanning) to locate and apply information in varied print and non-print (e.g., computers, electronic, media, interviews) sources for inquiry projects and other authentic tasks I</li> <li>Analyze how connections (text-to-self and text-to-world) are contributing to their understanding of text E</li> </ul>
process) <b>AP/A</b> – Author's	Recall of Information	
Purpose and Audience	<b>2.1</b> select and apply efficient effective decoding skills and other word recognition strategies to comprehend printed texts. <b>CS</b>	<ul> <li>Apply and use the meanings of high frequency Greek and Latin derived roots and affixes to determine meaning of unknown words (e.g., bio, derm, anti, graph, tele) I</li> <li>Read orally from familiar text at an appropriate rate, with accuracy and prosody C</li> </ul>
A/C/C – Author Craft & Choices L – Language use (e.g., figurative language, diction) CAT – Critical Analysis of Text	<b>2.3a</b> self-monitor comprehension while reading by generating a purpose for reading. <b>CS</b>	<ul> <li>Assimilate prior knowledge E</li> <li>Generate and answer questions E</li> <li>Summarize E</li> <li>Reread to clarify information E</li> <li>Make and revise predictions E</li> <li>Adjust reading rate I</li> <li>Infer information I</li> <li>Use mental imagery I</li> <li>Seek the meaning of unknown vocabulary I</li> <li>Applyze stary/literary elements and text structure I</li> </ul>
LC/M – Literary Connections/ Merit	<b>2.4d</b> demonstrate an overall understanding of printed texts by retelling a story or restating an informative text through speaking and/or writing. <b>CS</b>	<ul> <li>Analyze story/literary elements and text structure I</li> <li>Summarize a literary text, identifying the main and supporting characters, setting, events, and problem/ solution I</li> <li>Summarize the strongly implied reasons why or how events happen in a literary text E</li> <li>Summarize the main ideas and supporting details in an informative/technical text E</li> <li>Retell/restate in order the important events in a text C</li> <li>Restate in order the steps of a task in an informative/technical text I</li> </ul>

#### Both LITERARY and NON-LITERARY Text

Big Ideas for Reading (Key Concepts)	Performance Indicators	Grade-Level Expectations
	Basic Reasoning	
	<b>2.2a</b> develop an increasingly extensive vocabulary and actively seek the meaning of unknown words as an important fact of comprehending texts and messages by using context clues to determine meanings of words. <b>VS, CS</b>	<ul> <li>Use prior knowledge in conjunction with the following strategies to determine the meaning of unknown words by:         <ul> <li>Reading and rereading other sentences in the text to identify and use words that help unlock the meaning of unknown words I</li> <li>Analyzing illustrations to clarify meanings of abstract words and concepts I</li> <li>Looking for and using context clues provided by synonyms and antonyms I</li> <li>Using knowledge of homonyms and homographs to avoid reading confusion C</li> <li>Using word cues (e.g., metaphors, similes) I</li> <li>Using appositives C</li> <li>Selecting the correct definition of words that have multiple meanings E</li> </ul> </li> </ul>
	<b>2.3c</b> self-monitor comprehension while reading by taking appropriate actions (e.g., rereading to make sense, adjusting rate of reading , seeking the meaning of unknown vocabulary) to enhance understanding of oral and written text. <b>CS</b>	<ul> <li>Use illustrations to construct meaning from text I</li> <li>Reread difficult parts slowly and carefully C</li> <li>Make, confirm, adjust predictions I</li> <li>Visualize what was read for deeper understanding E</li> <li>Skim text to search for connections between and among ideas I</li> <li>Use graphic organizer or other note-taking technique to record important ideas or information E</li> <li>Explain personal connections to the topics or information in text(s) E</li> <li>Restate in own words the main events in the text I</li> <li>Frequently summarize while reading E</li> <li>Frequently paraphrase important ideas or information E</li> </ul>
	<b>2.4a</b> demonstrate an overall understanding of printed texts by makingpredictions as needed. <b>CS</b>	<ul> <li>Predict likely outcomes based on clues in text, knowledge of text structure, and knowledge of a variety of genres E</li> <li>Adjust previous predictions based on new information in a text I</li> <li>Identify logical, additional, and/or complementary information (e.g., "next" chapter or section) for a text I</li> </ul>
	<b>2.4c</b> demonstrate an overall understanding of printed texts by recognizing and interpreting figurative language and literary devices (e.g, simile, metaphor, allusion) and differentiating between literal and non-literal meanings. L	<ul> <li>Identify and interpret figurative language and literary devices (e.g., alliteration, repetition, rhythm, dialogue, rhyme, idioms, similes, metaphors, personification, exaggeration or hyperbole, humor, double meanings, symbols, imagery, mood, allusion, puns, and irony, and tone) E</li> <li>Analyze how figurative language and literary devices extend meaning E</li> <li>Differentiate between literal and non-literal meaning E</li> </ul>
	<b>2.4e</b> demonstrate an overall understanding of printed texts by organizing the important points of the test via summaries, outlines, and /or graphic organizers. <b>CS</b>	<ul> <li>Create graphic organizers to assist in comprehension of a text E</li> <li>Use an appropriate organizer based on text structure (e.g., sequence/chronological order, classification, definition, process, description, comparison, problem/solution, cause/effect) E</li> <li>Create an outline I</li> <li>Summarize text capturing most important parts of the original piece E</li> </ul>

Big Ideas for Reading (Key Concepts)	Performance Indicators	Grade-Level Expectations
	<b>2.4f</b> demonstrate and overall understanding of printed texts by indentifying the author's purpose. <b>APA</b>	<ul> <li>Analyze the author's overall purpose(s) for writing (e.g., persuade, entertain, inform, describe, explain how) a text I</li> <li>Identify the intended messages of advertisements, entertainment programs, and news sources I</li> <li>Analyze how the author's purposes shape the content E</li> <li>Analyze the difference between a stated purpose and an underlying reason in TV commercials and advertisements I</li> <li>Create meaning from a variety of media I</li> </ul>
	<b>2.4g</b> demonstrate an overall understanding of printed texts by comparing information between and within texts. <b>CAT</b>	<ul> <li>Compare subtle but relevant similarities and/or differences in ideas, viewpoints, or characters within a single text E</li> <li>Compare subtle but relevant similarities and/or difference in ideas, viewpoints, purposes, plots, settings, or characters presented in two or more texts E</li> <li>Analyze subtle changes in characters (e.g., changes in attitude, situation) E</li> </ul>
	<ul> <li>2.4h demonstrate an overall understanding of printed texts by discriminating between fact and opinion.</li> <li>RS</li> </ul>	<ul> <li>Discriminate between facts and/or subtle opinions in text(s) E</li> <li>Identify facts in a text and determine their relevance to the issue C</li> <li>Identify implied opinions in a text and determine their relevance to the issue E</li> <li>Use word clues (e.g., believe, feel, think, worst, best, least, most, never, always) to determine that a statement is an opinion C</li> <li>Question information in a text to determine if it is factual I</li> </ul>

Big Ideas for Reading (Key Concepts)	Performance Indicators	Grade-Level Expectations
	Complex Reasoning	
	<b>2.5a</b> Critically analyze and evaluate information and messages presented through print by connecting and synthesizing information from many sources. <b>CAT</b>	<ul> <li>Connect and synthesize information from increasingly different sources to generate new information/ideas or expand prior knowledge (text-to-text and text-to-self connections) E</li> <li>Synthesize information by comparing, eliminating, and merging disparate pieces into one coherent whole E</li> </ul>
	<b>2.5b</b> critically analyze and evaluate information and messages presented through print by formulating and expressing opinions. <b>CAT</b>	<ul> <li>Synthesize experience and knowledge of the world (text-to-world connections) to make, support and apply judgments (that may not be dichotomous) based on the evaluation of complex issues in:</li> <li>Literary text (e.g., character's actions, morals of narratives or poems) E</li> <li>Nonfiction E</li> <li>Analyze information in a text to develop logical opinions I</li> </ul>
	<b>2.5d</b> Critically analyze and evaluate information and messages presented through print using critical and divergent thinking, and assimilating prior knowledge to draw conclusions. <b>CAT</b>	<ul> <li>Use prior knowledge of a concept along with information in a text to:</li> <li>Draw conclusion(including implied main ideas) that require analysis and/or evaluation E</li> <li>Evaluate the author's viewpoint or attitude toward a topic or idea E</li> <li>Evaluate the effect of an author's use of formatting and design techniques (e.g., paragraphing, headings/subheadings, pictures/illustrations, column, font styles [bold, underline, italics, caps], punctuation choices) E</li> </ul>
	<b>2.5e</b> Critically analyze and evaluate information and messages presented through print by recognizing the impact of non-literal expressions in informative and technical texts and interpret the effect of literary devices. <b>CAT</b>	<ul> <li>Evaluate the impact of specific figurative and non-literal (idiomatic) expressions on the meaning of text E</li> <li>Evaluate an author's decision to use specific figurative an non-literal (idiomatic) expressions in a text E</li> <li>Evaluate how an author's use of literary devices (figurative language, dialogue, and description) and non-literal expressions (idioms, double meanings, puns, irony) in a text effects readers E</li> </ul>
	<b>2.5f</b> critically analyze and evaluate information and messages presented through print by evaluating text and media presentation for bias and misinformation, by evaluating texts for their completeness, accuracy, and clarity of communication (e.g., overcome problems of ambiguity), and by evaluating how the content, techniques, and form of texts and media affect them. <b>APA</b>	<ul> <li>Evaluate the fairness and trustworthiness of author's message (author's bias) E</li> <li>Evaluate how persuasive techniques and author's choices (e.g., word choices) shape readers' understandings E</li> <li>Evaluate the strengths and weaknesses of multiple text(s), sources, format, and argument E</li> <li>Analyze the completeness, accuracy, and/or clarity of the information in a complex text E</li> <li>Identify and evaluate information that needs to be checked for accuracy (e.g., data, statistics, sources) and evaluate the credibility of sources E</li> <li>Evaluate the credibility of messages (e.g., thoroughness, depth, breadth, balance, use of fact and opinion, inclusion of logical and/or emotional arguments) E</li> <li>Analyze ambiguous information in complex texts E</li> </ul>

Big Ideas for Reading (Key Concepts)	Performance Indicators	Grade-Level Expectations
	<ul> <li>2.5g Critically analyze and evaluate information and messages presented through print, speech, and mass media by acknowledging the possibility of a variety of interpretations of the same text; proposing other interpretations as valid if supported by the text. CAT</li> <li>2.5I critically analyze and evaluate</li> </ul>	<ul> <li>Analyze texts by reading and reacting to passages from a piece of text and critical interpretations of that same work E</li> <li>Listen to and critique opposing interpretations of the same reading and consider how these opinions were formed through classroom dialogue and independent writing E</li> <li>Synthesize diverse interpretations of the same reading and consider how these opinions were formed through classroom dialogue and independent writing E</li> <li>Practice critical thinking defending the validity of an assigned point of view even if it opposes their personal interpretation of the reading E</li> <li>Read a variety of texts and evaluate them using these criteria to determine their literary merit:</li> </ul>
	information and messages presented through print, speech, and mass media by evaluating the literary merit of various texts and media presentations recognizing literary merit. <b>CAT, LCM</b>	<ul> <li>Has a unique writing style that is appropriate I</li> <li>Has details I</li> <li>Has purpose I</li> <li>Has clear, distinctive characters I</li> <li>Is understandable I</li> <li>Has an expressive vocabulary I</li> <li>Has an unpredictable plot that is developed I</li> <li>Has a variety of episodes/action I</li> <li>Interpretation of the theme or concept I</li> <li>Presentation of information including accuracy, clarity, and organization I</li> <li>Delineation of setting I</li> </ul>
	<b>2.6a</b> critically analyze and evaluate information and messages presented through speech and mass media and extend meaning by offering a personal response to texts. <b>CAT</b>	<ul> <li>Revisit text to search for connections between and among ideas E</li> <li>Find and explain personal connections to the topics, events, characters, actions, ideas or information in text(s) E</li> </ul>
	<b>2.7b</b> critically analyze an devaluate information and messages presented through print, speech, and mass media by identifying the underlying purposes of media messages (e.g., profit vs. nonprofit, humanitarianism, support of artistry). <b>CAT</b>	<ul> <li>Identify underlying purposes (e.g., profit vs. nonprofit, humanitarianism, support of artistry) of media messages C</li> <li>Analyze the difference between a stated purpose and an underlying reason in media messages (e.g., TV commercials, radio, Internet, video games, advertisements) E</li> </ul>

### Specific to NON-LITERARY Text Only

Big Ideas for Reading (Key Concepts)	Performance Indicators	Grade-Level Expectations		
RS – Rhetorical	Basic Reasoning			
Strategies <b>TS/F</b> – Text Structure & Features <b>AB/P</b> – Author Bias &	2.4bl/T demonstrate an overall understanding of technical and informative texts by indentifying text features and text structures. <b>TS/F</b>	<ul> <li>Apply essential information from text features (e.g., title, author, cover, pictures, table of contents, maps, captions, chapter headings, information from charts and graphs, illustrations, glossaries, indices) to enhance understanding of text I</li> <li>Analyze the unique features of various informative texts (e.g., newspapers, magazines, product information, consumer materials, manuals, editorials) to enhance understanding of text E</li> <li>Analyze text structures in informative/technical texts (sequence or chronological order, classification, definition, process, description, comparison, problem/solution, cause/effect) to make meaning of text E</li> </ul>		
Perspective CAT – Critical Analysis of Text	2.4i demonstrate an overall understanding of informative and technical printed texts by making inferences. <b>CAT</b>	<ul> <li>Make strongly implied inferences about content and concrete ideas in a text and identify appropriate text support E</li> <li>Explain inferences about author's decisions (e.g., paragraphing, quotations, organization of text, formatting devices, mode of development used) E</li> <li>Make reasonable predictions as they read E</li> <li>Test and revise predictions as they read further I</li> <li>Use the combination of background knowledge and explicitly stated information from the text to answer questions they have as they read E</li> <li>Make connections between conclusions they draw and other beliefs or knowledge E</li> <li>Analyze texts to make generalizations E</li> <li>Create interpretations of text that are adapted as they continue to read and after they read E</li> </ul>		
	Complex Reasoning			
	<b>2.4j</b> demonstrate and overall understanding of printed texts by accepting or rejecting the validity of the information and giving supporting evidence. <b>RS</b>	<ul> <li>Use criteria to evaluate the validity (reliability) of primary and secondary sources of information E</li> <li>Use criteria to evaluate the author's credibility in order to determine validity and reliability of a source E</li> <li>Use criteria to evaluate author's perspective in order to determine validity and reliability of a source E</li> <li>Use date of publication to evaluate the validity and reliability of a source E</li> <li>Use criteria to evaluate the author's use of</li> <li>Logic I</li> <li>Propaganda I</li> <li>Bias I</li> <li>Language I</li> <li>Motives I</li> <li>in order to determine validity and reliability of a source</li> </ul>		

Big Ideas for Reading (Key Concepts)	Performance Indicators	Grade-Level Expectations
	<b>2.5i</b> critically analyze and evaluate information and messages presented through print, speech, and mass media by recognizing a variety of persuasive and propaganda techniques and how they are used in a variety of forms (advertising, campaigns, news formats, etc.). <b>AB/P</b>	<ul> <li>Identify and describe propaganda techniques (e.g., name calling, exaggeration/hyperbole, bandwagon, testimonial, broad generalization, red herring, circular thinking, parallelism) E</li> <li>Identify persuasive techniques (e.g., appeal to emotion, appeal to authority, cause/effect, repetition, rhetorical question) I</li> <li>Recognize and identify how propaganda and persuasive techniques are used in a variety of forms (e.g., television, commercials, movies, advertisements, newspapers, billboards, magazines, catalogues and packaging) to enhance the meaning of a text E</li> </ul>

### Specific to LITERARY Text Only

Big Ideas for Reading (Key Concepts)	Performance Indicators	Grade-Level Expectations			
G – Genre	Personal Connections				
Characteristics <b>LD</b> – Literary Devices (figurative, language, tone, mood, irony)	<b>4.1a</b> connect their own experience to those of literary characters by explaining the reasons for a character's actions, identifying with characters based on a clear understanding of motivation and situation <b>LE</b> , <b>LC/M</b>	<ul> <li>Evaluate a character's actions in a literary text, critically analyzing the text E</li> <li>Make and support insightful connections between the reader's personal situations and motivations of characters in a text I</li> </ul>			
<b>O</b> – Organization (e.g., Story	<b>4.1b</b> responding to the sensory, intellectual, and emotional elements of literature LE, LC/M	<ul> <li>Evaluate the effect of the author's use of imagery and figurative language on a reader E</li> <li>Use ideas from the text to evaluate personal responses to literature (text-to-self connections) E</li> </ul>			
structure, Genre specific conventions)	<b>4.1c</b> relating to the feelings of characters of varying ages, genders, nationalities, races, cultures, religions, and disabilities. <b>LE, LC/M</b>	<ul> <li>Read and analyze stories from different cultures and eras to broaden cultural awareness E</li> <li>Demonstrate an understanding of the experiences and feelings of fictional characters (e.g., show empathy for, disagree with, compare to personal or other familiar experiences) based on age, gender, nationalities, races, cultures, and/or disabilities E</li> </ul>			
LE – Literary Elements (e.g., point of view, character, setting) S – Style T – Theme	<b>4.1e</b> connect their own experiences to those of literary characters by (e) (seeking other literary texts and media as the result of literary experience. <b>LC/M</b>	<ul> <li>As a result of reading a literary text, students will connect to other texts using the following as guides for connections:</li> <li>What does this remind me of in another book I've read? I</li> <li>How is this text similar to other things I've read? I</li> <li>How is this different to other books I've read? I</li> <li>Have I read about something like this before? I</li> <li>Seek other texts and media with similar themes and connections I</li> </ul>			
LC/M – Literary Connections/ Merit CAT – Critical Analysis of Text	<b>4.3a</b> respond to literary texts and media representing the diversity of American cultural heritage inclusive of ages, genders, nationalities, races, religions, and disabilities (b) responding to literary text and media. <b>LC</b>	<ul> <li>Read and evaluate complex stories from different cultures and eras to broaden cultural awareness E</li> <li>Empathize with experiences and feelings of fictional characters based on age, gender, nationalities, races, cultures, and/or disabilities E</li> </ul>			
	<b>4.4a</b> connect their own experiences to those literary characters by (a) using literature as a resource for shaping decisions. <b>LE, LC/M, T</b>	<ul> <li>Read stories and relate characters' experiences to shape own decisions by asking questions such as:</li> <li>I felt like that character when E</li> <li>If that happened to me, I would E</li> <li>I can relate to that character because one time E</li> </ul>			
	Recall of Information				
	<b>2.4bL</b> demonstrate an overall understanding of literary texts by (b) indentifying the story elements (e.g., characters, setting, and plot), features	<ul> <li>Identify character(s) in a literary text or speaker(s) in a poem I</li> <li>Describe the roles (e.g., protagonist/hero, antagonist/villain) characters play in a literary text I</li> <li>Describe the changes in setting (flashback, foreshadowing) I</li> <li>Identify various types of conflict (man vs. man, man vs. nature, man vs. self, man vs. society) E</li> </ul>			

Big Ideas for Reading (Key Concepts)	Performance Indicators	Grade-Level Expectations
	(e.g., flash foreshadowing, flashback, foreword), and story structures (conflict, resolution, cause/effect). <b>LD, O, T</b>	<ul> <li>Identify conflict(s) climax(s)/turning point(s) and resolutions(s) C</li> <li>Identify significant details related to the plot to analyze the pattern of organization (compare/contrast, problem/solution, sequence, cause/effect) I</li> <li>Distinguish between main plot and multiple subplots E</li> <li>Identify point of view (first person, third person limited, third person objective, omniscient) E</li> <li>Identify the story structure or organizational pattern in a literary text (e.g., time order, geographic order, order of importance, cause/effect, classification E</li> </ul>
	Basic Reasoning	
	<b>4.2a</b> respond to literary text by making inferences about content events, characters, setting, and author's decisions. <b>LE, LC/M, T</b>	<ul> <li>Make strongly implied inferences about content, abstract ideas, events, characters, setting, mood, <u>theme and tone</u> in a text and identify appropriate text support E</li> <li>Make inferences about author's choices (e.g., paragraphing, dialogue, organization of text, formatting devices, mode of development, <u>notes to readers</u>) and rhetorical strategies (e.g., persuasive words, <u>anecdotes</u>, figurative language, emotional words, humor, questions, repetition, irony) and identify appropriate support from the text E</li> <li>Make reasonable predictions as they read E</li> <li>Test and revise predictions as they read further-I</li> <li>Use the combination of background knowledge and explicitly stated information from the text to answer questions they have as they read I</li> <li>Make critical or analytical judgments about what they read E</li> <li>Create self-motivated interpretations of text that are adapted as they continue to read and after they read I</li> <li>Analyze texts to make generalizations I</li> <li>Analyze connections between self and literary things E</li> <li>Draw conclusions about characters and events in a text E</li> </ul>
	<b>4.2b</b> understand the differences between genres. <b>G</b> , <b>T</b>	<ul> <li>Use knowledge of distinctive characteristics of various genres including but not limited to:</li> <li>Fiction (e.g., short story, poetry, folk tale, mystery, tall tale, fairy tales, novels, fable, myth, fantasy, science fiction, historic fiction, and realistic fiction) E</li> <li>Literary nonfiction (e.g., letter, biography, speeches, autobiography) E</li> <li>Drama (e.g., classic and/or contemporary multi-act plays) E</li> <li>to analyze the meaning of the text</li> </ul>
	Complex Reasoning	
	<b>4.4b</b> apply knowledge gained from literature as basis for understanding self and society by (b) using literature as a resource for understanding social and political issues. <b>CAT</b> , <b>LE</b> , <b>LC/M</b> , <b>T</b>	<ul> <li>Compare works of literature from the same historical period written by authors from different cultural, generational, and gender perspectives E</li> <li>Analyze an author's viewpoint and message in relation to the historical and cultural context of the author's work E</li> </ul>

Big Ideas for Reading (Key Concepts)	Performance Indicators	Grade-Level Expectations
	<b>4.2c</b> Interpret the impact of author's decisions such as word choice, style, content, and literary elements; understand the author's intent in choosing particular genre. <b>LE, CAT</b>	<ul> <li>Evaluate the effect of author's choices (word and content) on the reader E</li> <li>Analyze how the author's writing style influences the reader E</li> <li>Evaluate the effectiveness of an author's choice of words with specific connotations to create mode E</li> <li>Compare styles among text to determine effects of author's choices E</li> <li>Compare characteristics and elements of various literary forms including short stories, poetry, essays, plays, speeches, and novels E</li> <li>Evaluate an author's decision to use a particular genre in a given situation E</li> </ul>
	<b>4.2f</b> Identify the effect of point of view. <b>LE, CAT</b>	<ul> <li>Analyze how point of view effects a literary text (e.g., how a story would be different if told from a different point of view) E</li> <li>Analyze how point of view impacts a reader E</li> <li>Evaluate the effect of the author's use of point of view such as: first versus third, limited versus omniscient, and subjective versus objective E</li> </ul>

# 4. Matrix for English II – Standard 3 Research

**Standard 3:** Access, organize, and evaluate information gained through listening, reading, and viewing.

*Note:* Prioritized coding is indicated in red. The indicators are E = Essential, I = Important, and C = Compact.

Big Ideas (Key Concepts)	Recall of Information	Basic Reasoning	Complex Reasoning
<b>3.1a1</b> - Identify and locate a variety of sources including printed materials, personal interview, oral reporting forums, and technological forms of information	<ul> <li>Locate information using appropriate sources and strategies I</li> <li>Determine valid resources for researching a topic, including primary and secondary sources E</li> </ul>	<ul> <li>Use multiple sources of information (books, television, videos/DVDs, resource people, cassettes, dictionaries, recordings, encyclopedias, and available databases) I</li> <li>Select essential sources (e.g., dictionaries, encyclopedias, interviews, observations, electronic media, computer databases) appropriate to topic I</li> <li>Use text features (e.g., guide words, indices, glossaries, key words, table of contents, cross references, appendices) to access information C</li> <li>Use traditional and electronic search tools E</li> <li>Use teacher-selected Internet sites and data bases to access information I</li> </ul>	Evaluate the importance and quality of sources E
<b>3.1a2</b> - Develop and use procedures to gather information—developing and following a process for research	<ul> <li>Determine a clear purpose, topic and audience for research E</li> <li>Gather information from more than one source I</li> <li>Locate information using appropriate sources and strategies I</li> </ul>	<ul> <li>Read, view, listen or interact with information and decide what is valuable for research I</li> <li>Extract information (e.g., take notes, make copies) I</li> <li>Organize and interpret gathered information using various graphic organizers (e.g., outlining, webbing) I</li> <li>Record sources in a standard bibliographic format I</li> <li>Relay facts from research I</li> </ul>	<ul> <li>Formulate a research question or thesis statement E</li> <li>Summarize ways in which the research process and product can be improved I</li> </ul>

Big Ideas (Key Concepts)	Recall of Information	Basic Reasoning	Complex Reasoning
<b>3.1b</b> – Independently extract information relevant to achieve a specific purpose	<ul> <li>Use various technologies (e.g., appropriate word processing functions, photocopier, audiovisual equipment, scanner) to extract needed information C</li> <li>Determine the most appropriate form of technology for the task of extracting needed information C</li> </ul>	<ul> <li>Decide what information is valuable for a particular situation I</li> <li>Select and use various methods (e.g., web, chart) to manage information I</li> </ul>	<ul> <li>Create own system for organizing information E</li> </ul>
<b>3.2a</b> – Use technology to synthesize information into a meaningful format to express ideas and experiences	Use various forms of technology     word processing E     presentation programs I     digital cameras C     scanners I     multimedia I     to formulate writing and/or communicate knowledge of products		<ul> <li>Use technology to synthesize information by</li> <li>making a graphic organizer I</li> <li>making an outline I</li> <li>using a meaningful format (text, drawings, graphs, diagrams, and graphics) to express ideas I</li> <li>producing a video production C</li> </ul>
<b>3.2b</b> – Independently present information which is sufficient in quantity and depth to achieve a specific purpose, avoiding plagiarism	<ul> <li>Decide how the information fits together I</li> <li>Decide how the information would best be presented I</li> <li>Recognize the need to put information from sources in their own words E</li> </ul>	<ul> <li>List sources of information in bibliographic form that follows a designated format (MLA, APA) E</li> </ul>	<ul> <li>Present gathered information in an oral or written format, which</li> <li>Uses sentences organized in paragraph form to tell about a designated topic C</li> <li>Incorporates information from more than one source I</li> <li>Includes information relevant to topic and purpose I</li> <li>Identifies source of information I</li> <li>Fulfills the identified purpose as clearly indicated in the thesis statement E</li> <li>Utilizes an organizational plan for combining paragraphs to address a designated purpose and topic I</li> <li>Incorporates information from multiple sources E</li> </ul>

Big Ideas (Key Concepts)	Recall of Information	Basic Reasoning	Complex Reasoning
<b>3.3a2</b> – Establish criteria by which sources and information can be analyzed for accuracy, bias, stereotype, and validity	<ul> <li>Use technology to facilitate evaluation C</li> </ul>	<ul> <li>Differentiate between primary and secondary sources C</li> <li>Independently select sources which are authoritative including UD Lib Search I</li> <li>Formulate conclusions based upon information relevant to a specific purpose I</li> <li>Use information to express ideas relevant to specific purpose I</li> <li>Demonstrate how information retrieved does or does not address original problem I</li> </ul>	<ul> <li>Independently analyze source and information for accuracy, bias, stereotypes, and validity I</li> <li>Evaluate information in terms of credibility, accuracy, and social, economic, political, legal and ethical issues that may impact it E</li> </ul>
<b>3.3b1</b> – Independently interpret information as appropriate to a specific purpose		<ul> <li>Use retrieved information to accomplish a specific purpose I</li> <li>Prioritize sources based on relevance I</li> <li>Consider whether they have uncovered any worthwhile information that might take their research in a different direction I</li> <li>Consider whether they have uncovered any worthwhile information that has caused them to see their topic from a new perspective I</li> <li>Consider whether research needs to be redirected in any way based on material uncovered based on relevance I</li> </ul>	Reevaluate their position on the topic and your research strategy I
<b>3.3b2</b> – Independently draw/ formulate conclusions based upon information relevant to a purpose			<ul> <li>Use prior knowledge of a concept along with information in a text to:</li> <li>Draw conclusions (including implied main ideas) that require analysis and/or evaluation E</li> <li>Evaluate the author's viewpoint or attitude toward a topic or idea when strongly implied E</li> <li>Evaluate the effect of an author's use of basic formatting and design techniques (e.g., paragraphing,</li> </ul>

Big Ideas (Key Concepts)	Recall of Information	Basic Reasoning	Complex Reasoning
			headings/subheadings, pictures/ illustrations, columns, font styles [bold, underline, italics, caps], punctuation choices) E

# APPENDIX B: ENGLISH II PRIORITIZED STANDARDS AND ASSESSED PERFORMANCE INDICATORS

## **English II ELA Prioritized Standards and Assessed Performance Indicators**

\*Note that not all standards, performance indicators, and GLEs will be assessed by the end-of-course assessment. They should, however, be taught in the English II course. The ELA prioritized standards are not isolated skills but interrelated communications tools. Good instruction builds on these connections which enhances student learning.

DCAS	Performance	Standard 1 Writing (Written Communication)
Assessed	Indicators	Use written and oral English appropriate for various purposes and audiences.
	1.1	<ul> <li>Writers will produce texts that exhibit the following text features, all of which are consistent with the genre and purpose of the writing: development, organization, style, and word choice.</li> <li>Development – The topic, theme, stand/perspective, argument, or character is fully developed.</li> <li>Organization – The text exhibits a discernible progression of ideas.</li> </ul>
		<ul> <li>Style – The writer demonstrates a quality of imagination, individuality, and a distinctive voice.</li> <li>Word Choice – The words are precise, vivid, and economical.</li> </ul>
	1.2	<ul> <li>Writers will produce texts that exhibit the following language conventions at all grade levels: sentence formation, conventions.</li> <li>Sentence Formation – Sentences are complete and varied in length and structure.</li> <li>Conventions – Appropriate grammar, mechanics, spelling, and usage enhance the meaning and readability of the text.</li> <li>Formal English conventions are to be followed unless otherwise called for by the purpose of the writing.</li> </ul>
	1.3	<ul> <li>Writers will produce examples that illustrate the following discourse classifications: by the completion of the grade, writers will be able to write persuasive, informative, and expressive pieces.</li> <li>Expressive (author-oriented) texts, both personal and literary.</li> <li>Informative (subject-oriented) texts.</li> <li>Persuasive (audience-oriented) texts.</li> </ul>

DCAS Assessed	Performance Indicators	<b>Standard 1 Oral Communication</b> Speakers draw upon the language of their home, community, and culture—as well as the public language of the larger culture—to communicate effectively with a variety of audiences.
	1.4	Orally communicate information, opinions, and ideas effectively to different audiences for a variety of purposes.
	1.5	Listen to and comprehend oral communications.
	1.6	Develop vocabulary and the ability to use words, phrases, idioms, and various grammatical structures as a means of improving communication.
	1.7	Participate effectively in a discussion

		Standard 2 Reading
DCAS	Performance	Construct, examine, and extend the meaning of literary, informative, and technical texts through listening,
Assessed	Indicators	reading, and viewing.
	2.1	Using appropriate texts, students will be able to select and apply efficient, effective decoding skills and other word recognition strategies to comprehend printed texts.
$\checkmark$	2.2a	Students will be able to develop an increasingly extensive vocabulary and actively <b>seek the meaning of unknown words</b> as an important facet of comprehending texts and messages <b>by using context clues</b> to determine the meanings of words.
	2.3a	Students will be able to self-monitor comprehension while reading by (a) generating a purpose for reading.
	2.3c	Using appropriate texts, students will be able to self-monitor comprehension while reading by (c) taking appropriate actions (e.g., rereading to make sense, adjusting rate of reading, seeking the meaning of unknown vocabulary) to enhance understanding of oral and written text.
$\checkmark$	2.4a	Students will be able to demonstrate an overall understanding of printed texts by (a) making predictions as needed.
$\checkmark$	2.4bl/T	Students will be able to demonstrate an overall understanding of technical and informative texts by (b) identifying text features and text structures.
√	2.4bL	Students will be able to demonstrate an overall understanding of literary texts by <b>(b) identifying the story elements</b> (e.g., characters, setting, and plot), <b>features</b> (e.g., foreshadowing, flashback, flash-foreword), and <b>story structures</b> (conflict, resolution, cause/effect).
$\checkmark$	2.4c	Students will be able to demonstrate an overall understanding of printed texts by (c) recognizing and interpreting figurative language and literary devices (e.g., simile, metaphor, allusion) and (e) differentiating between literal and non-literal meanings.
✓	2.4d	Students will be able to demonstrate an overall understanding of printed texts by (d) retelling a story or restating an informative text through speaking and/or writing.
$\checkmark$	2.4e	Students will be able to demonstrate an overall understanding of printed texts by (e) organizing the important points of the text via summaries, outlines, and/or graphic organizers.
$\checkmark$	2.4f	Students will be able to demonstrate an overall understanding of printed texts by (f) identifying the author's purpose.
$\checkmark$	2.4g	Students will be able to demonstrate an overall understanding of printed texts by (g) comparing information between and within texts.
$\checkmark$	2.4h	Students will demonstrate an overall understanding of printed texts by (h) discriminating between fact and opinion.
$\checkmark$	2.4i	Students will be able to demonstrate an overall of informative and technical printed text s by (i) making inferences.
$\checkmark$	2.4j	Students will be able to demonstrate an overall understanding of printed texts by (j) accepting or rejecting the validity of the information and giving supporting evidence.
$\checkmark$	2.4k	Students will be to demonstrate an overall understanding of printed texts by (k) relating the content of the text to real-life situations.
✓	2.5a	Students will be able to critically analyze and evaluate information and messages presented through print by a) connecting and synthesizing information from many sources.
$\checkmark$	2.5b	Students will be able to critically analyze and evaluate information and messages presented through print by (b) formulating and expressing opinions.

		Standard 2 Reading
DCAS Assessed	Performance Indicators	Construct, examine, and extend the meaning of literary, informative, and technical texts through listening, reading, and viewing.
~	2.5d	Students will be able to critically analyze and evaluate information and messages presented through print using critical and divergent thinking, and assimilating prior knowledge to draw conclusions.
~	2.5e	Students will be able to critically analyze and evaluate information and messages presented through print and by (e) recognizing the impact of non-literal expressions in informative and technical texts and interpret the effect of literary devices.
~	2.5f	Students will be able to critically analyze and evaluate information and messages presented through print by (i) evaluating texts and media presentations for bias and misinformation, by (k) evaluating texts for their completeness, accuracy, and clarity of communication (e.g., overcome problems of ambiguity), and by (a) evaluating how the content, techniques, and form of texts and media affect them.
	2.5g	Using appropriate texts, students will be able to critically analyze and evaluate information and messages presented through print, speech, and mass media by (g) acknowledging the possibility of a variety of interpretations of the same text; proposing other interpretations as valid if supported by text.
✓	2.5i	Using appropriate texts, students will be able to critically analyze and evaluate information and messages presented through print, speech, and mass media by (I) recognizing a variety of persuasive and propaganda techniques and how they are used I a variety of forms(advertising, campaigns, ne formats, etc.)
	2.51	Using appropriate texts, students will be able to critically analyze and evaluate information and messages presented through print, speech and mass media by (I) evaluating the literary merit of various texts and media presentations (d) recognizing literary merit.
	2.6a	Using appropriate texts, students will be able to critically analyze and evaluate information and messages presented through print, speech, and mass media and extended meaning by (a) offering a personal response to texts.
	2.7b	Using appropriate texts, students will be able to critically analyze and evaluate information and messages, presented through print, speech, and mass media by (b) identifying the underlying purposes of media messages (e.g., profit vs. nonprofit, humanitarianism, support of artistry).

DCAS	Performance	Standard 3 Research
Assessed	Indicators	Access, organize, and evaluate information gained through listening, reading, and viewing.
	3.1a1	By the completion of the grade, students will be able to identify, locate, and select sources of information relevant to a defined need by <b>identifying and locating a variety of sources including printed materials, personal interviews, oral reporting, forums, and technological forms of information.</b>
	3.1a2	By the completion of the grade, students will be able to identify, locate, and select sources of information relevant to a defined need by <b>developing and using procedures to gather information and ideas; developing and following a process for research completion</b> .
	3.1b	By the completion of the grade, students will be able to identify, locate, and select sources of information relevant to a defined need by <b>independently extracting information to achieve a specific purpose</b> ; extracting information relevant to a <b>specific</b> purpose.
	3.2a	By the completion of the grade, students will be able to organize, manipulate, and express the information and ideas relevant to a defined need by using technology to synthesize information into a meaningful format to express ideas and experiences, and to create text, drawings, graphs, diagrams, photographs, videos, and graphics.

DCAS	Performance	Standard 3 Research
Assessed	Indicators	Access, organize, and evaluate information gained through listening, reading, and viewing.
	3.2b	By the completion of the grade, students will be able to organize, manipulate, and express the information and ideas relevant to a defined need by <b>independently presenting information which is sufficient in quantity and depth to achieve a specific purpose, avoiding plagiarism</b> .
	3.3a2	By the completion of the grade, students will be able to organize, manipulate, and express the information and ideas relevant to a defined need by: establishing criteria by which sources and information can be analyzed for accuracy, bias, stereotypes, validity, and authority.
	3.3b1	By the completion of the grade, students will be able to organize, manipulate, and express the information and ideas relevant to a defined need by: <b>independently interpreting information as appropriate to a specific purpose</b> .
	3.3b2	By the completion of the grade, students will be able to organize, manipulate, and express the information and ideas relevant to a defined need by: <b>independently drawing conclusions based upon information relevant to a specific purpose; independently formulate logical conclusions based upon information relevant to a specific purpose</b> .

DCAS Assessed	Performance Indicators	Standard 4 Reading Use literary knowledge accessed through print and visual media to connect self to society and culture.
~	4.1a	Using literature appropriate for age, stage, and interests, students will be able to respond to <b>connect their own experience</b> <b>to those of literary characters</b> by: (a) explaining the reasons for a character's actions, (d) identifying with characters based on a clear understanding of motivation and situation.
	4.1b	Using literature appropriate for age, stage, and interests, students will be able to respond to <b>connect their own experience</b> to those of literary characters by (b) responding to the sensory, intellectual, and emotional elements of literature
	4.1c	Using literature appropriate for age, stage, and interests, students will be able to respond to <b>connect their own experience</b> to those of literary characters by (c) relating to the feelings of characters of varying ages, genders, nationalities, races, cultures, religions and disabilities.
	4.1e	Using appropriate texts, students will be able to connect their own experiences to those of literary characters by (e) (g) seeking other literary texts and media as the result of literary experience.
✓	4.2a	Using literature appropriate for age, stage, and interests, students will be able to respond to <b>literary text</b> and media using interpretive, critical, and evaluative processes by (a) <b>making inferences</b> about <b>content</b> , events, characters, setting, and author's decisions.
~	4.2b	Using literature appropriate for age, stage, and interests, students will be able to respond to literary text and media using interpretive, critical, and evaluative processes by (e1) <b>understanding the differences between genres []</b> .
$\checkmark$	4.2c	Using literature appropriate for age, stage, and interests, students will be able to respond to literary text using interpretive, critical, and evaluative processes by (c) interpreting the <b>impact of author's decisions such as word choice, style, content</b> , and literary elements, (e2) understanding [] the <b>author's intent in choosing a particular genre</b> .
✓	4.2f	Using literature appropriate for age, stage, and interests, students will be able to respond to literary text using interpretive, critical, and evaluative processes by (f) <b>identifying the effect of point of view</b> .

DCAS Assessed	Performance Indicators	Standard 4 Reading Use literary knowledge accessed through print and visual media to connect self to society and culture.
	4.3a	Using appropriate texts, students will be able to respond to demonstrate an appreciation for a broad range of culturally diverse literary texts and media created by historical, modern, and contemporary authors through (a) responding to literary texts and media representing the diversity of American cultural heritage inclusive of ages, genders, nationalities, races, religions, and disabilities, (b) responding to literary text and media representative of various nations and cultures.
	4.4a	Using appropriate texts, students will be able to connect their own experiences to those of literary characters by (a) <b>using literature as a resource for shaping decisions</b> .
~	4.4b	Using literature appropriate for age, stage, and interests, students will be able to apply knowledge gained from literature as a basis for understanding self and society by (b) using literature as a resource for <b>understanding social and political issues</b> .

# **BIOLOGY END-OF-COURSE** SPECIFICATIONS

## I. INTRODUCTION

Delaware has redesigned the student testing program to require specific end of course tests aligned to the content standards. The No Child Left Behind (NCLB) Act, 20 U.S.C.A. § 6311 (b)(1)(C), requires assessments in science. Biology was chosen as the science end-of-course assessment as student records indicate that more students take biology than any other science in high school and all Delaware high schools offer biology as a course.

This committee was charged with developing course-level expectations for the end-of-course high school biology assessment that measure the Delaware content standards. The assessment will be criterion-referenced and standards-based and will be designed to measure the knowledge and skills a student should have mastered by the end of biology. The purpose of this document is to ensure that the Biology end-of-course (EOC) assessment is aligned with the expectations of the Delaware Science Content Standards for 10<sup>th</sup> grade. The expectations clarify the Delaware Science Content Standards in multiple ways.

- 1. The expectations provide further clarification as to the depth and breadth of each standard and grade-level expectation, as written by the standards developers.
- 2. The expectations provide information as to the expected level(s) of cognition for each standard (see cognitive levels on page 53).
- 3. The expectations specify the emphasis placed upon each standard (essential, important, compact) which informs the test developer as to the number of items for each standard. More items on the test will be from essential standards than from important or compact standards. Likewise, more items will be from important standards than from compact standards. The compacted standards will not be represented on the test.

## II. PROCESS USED

The Biology EOC assessment expectations were specified by the joint groups of Delaware Department of Education's Accountability Resources and Curriculum, Instruction and Professional Development Workgroups, who worked in conjunction with the Learning-Focused prioritized curriculum maps and district science teachers and administrators. The Delaware Department of Education thanks all teachers and administrators who worked on prioritizing the curriculum and specifying the end-of-course expectations.

Michael Buoni	Southern Delaware PD Center	Sussex County
Catherine Houghton	Christina School District	New Castle County
Kelli Martin	Curriculum	Delaware DOE
April McCrae	Curriculum	Delaware DOE
Edward McGrath	Red Clay School District	New Castle County
Ellen Mingione	Assessment	Delaware DOE
John Moyer	Curriculum	Delaware DOE

In order to determine course-level expectations, the committee analyzed many documents. The committee reviewed other states' course-level expectations and compiled a matrix of courses being assessed at high schools nationwide. At the national level, the National Assessment of Educational Progress (NAEP) frameworks were reviewed along with the National Science Education standards and the American Association for the Advancement of Science (AAAS) atlas maps. At the state level, the committee analyzed the Delaware Science Content Standards, grade-level expectations, and standard clarification documents.

Priority was given to the work completed by the Learning-Focus teams. Note that not all standards are assessed by this test. Some standards do not apply and are not taught in biology (i.e., Standard 4: Earth in Space). Some standards which are part of biology cannot be easily assessed by this method and therefore are not listed in this document. Other standards, while important, do not represent the essential understandings all students should know or do at the end of this course and are therefore not a part of this document.

## III. LEARNER/ASSESSMENT EXPECTATIONS

It is the intent of the Biology EOC assessment specifications to represent essential understandings and skills (what all students should know and be able to do), not individual discrete facts. Further, the test is intended to equitably assess knowledge and skills of all students with respect to the Delaware Science Content Standards. The test will assess students on knowledge and skills found only within the Delaware Science Content Standards. The developers of this document recognize that many high school biology courses include knowledge and skills which are not part of the Delaware Science Content Standards; however, the instructors of these courses must also recognize that the end-of-course test will focus solely on the standards. For students to perform at high levels, the high school course must be aligned with the standards.

The Delaware Science Content Standards that will be assessed include:

- Standard One: The Nature and Application of Science and Technology. This standard specifies how science is to be taught and learned in an inquiry-based approach using technology, tools, and materials appropriate to the content. This standard is the foundation of for all learning and assessment.
- Standard Two: Materials and their Properties, conservation of matter and chemical reactions
- Standard Three: Energy and Its Effects, forms and sources of energy, and the transformation and conservation of energy.
- Standard Six: Life Processes, structure/function relationships, matter and energy transformations, regulation and behavior, and technology applications.
- Standards Seven: Diversity and Continuity of Living Things, reproduction, heredity and development, diversity and evolution, and technology applications.

This document can be used by the biology teacher in multiple ways to align teaching and learning with test expectations.

It is recommended that the teacher:

- Align instruction to focus on the standards indicated in this document.
- Provide greater instructional time and emphasis on essential standards, less emphasis on important standards, and even less emphasis on compact standards.
- Use the cognitive level examples as a guide for student learning and classroom assessment.

#### **Cognitive Framework**

A four-level framework has been used to specify the cognitive levels expected within each standard. This cognitive framework is that of Norm Webb's Depth of Knowledge levels ("Depth of Knowledge Levels for Four Content Areas," March 28, 2002). www.asccc.org/events/Curriculum/.../NormanWebbs4levels.pdf

#### Level 1: Recall and Reproduction of Simple Procedures or Processes:

This includes facts, terms, definitions, simple procedures, or processes. Level 1 items will have verbs such as recall, identify, state, define, use, calculate, and measure. Some level 1 items may also use verbs such as explain or describe depending upon what is being explained or described.

#### Level 2: Skills and Concepts:

This includes knowledge and skills beyond level 1 that require additional thought. Level 2 items will have verbs such as classify/sort items into meaningful categories, organize, estimate, organize data, give an example, cause/effect, significance of, impact upon, and compare/contrast data. Other verbs may be explained, describe, and interpret, depending upon the complexity of the concept or skill.

#### Level 3: Strategic Thinking:

Level 3 items are complex and advanced and students must justify the "how" and "why" through evidence. Students may be asked to explain concepts, draw conclusions from observations, cite evidence, design investigations, describe a model, use concepts to solve a problem, analyze similarities and differences, evaluate solutions, recognize misconceptions, explain a big idea, or form conclusions.

#### Level 4: Extended Thinking:

Level 4 items are complex and require a high cognitive demand. Students may be asked to make connections within the biology content or between biology and other content areas, state relationships between or among several pieces of data, synthesize information from multiple sources, explain alternate evidence, make predictions given several pieces of evidence, and transfer ideas to new situations.

#### **Interpreting the Standards**

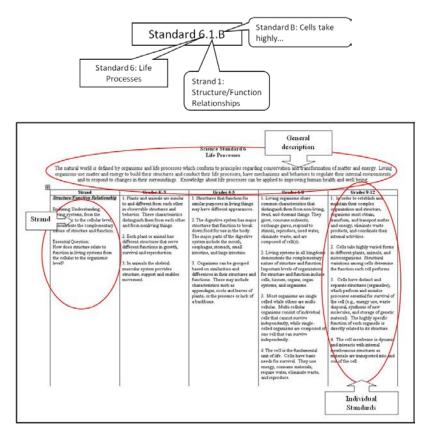
There are eight science standards in Delaware. Each standard is divided into strands which focus on major concepts that increase in depth with grade level. All eight science standards are listed below. However, the end-of-course Biology assessment will measure only specified standards and strands. The purpose of this section is to provide clarification on how the Delaware Science Content standards are organized.

- Standard 1: Nature and Application of Science and Technology:
  - The understandings and abilities of scientific inquiry
  - Science, technology and society
  - The history and context of science
- Standard 2: Materials and Their Properties:
  - Properties and Structure of materials
  - Mixtures and solutions
  - Conservation of matter
  - Chemical reactions
  - Material technology
- Standard 3: Energy and Its Effects:
  - Forms and sources of energy
  - Forces and the transfer of energy
  - Energy interacting with materials; the transformation and conservation of energy
  - The production, consumption, and application of energy:
- Standard 4: Earth in Space:
  - The Earth/Moon, Sun System
  - The Solar System
  - Stars and Galaxies
  - Technology and applications
- Standard 5: Earth's Dynamic Systems:
  - Components of earth
  - Interactions throughout Earth's systems
  - Technology and applications
- Standard 6: Life Processes:
  - Structure/function relationship
  - Matter and energy transformations
  - Regulation and behavior
  - Life processes and technology application
- Standard 7: Diversity and Continuity of Life:
  - Reproduction, heredity and development
  - Diversity and evolution
  - Technology applications
- Standard 8: Ecology:
  - Interactions within the environment
  - Energy flow and materials cycles in the environment
  - Human impact

Below is a page from Standard 6: *Life Processes*. The standard is indicated at the top of the page. Below the standard number is a general description of the standard. The general description is not the standard but is intended to provide an overarching description of the entire standard.

To the left of the document is the strand. Each standard is divided into strands as listed above. On this page, the strand is "Structure/Function Relationships." Below the strand is the enduring understanding and essential questions of that strand. The enduring understanding is the "big idea" that guides this strand at all grade levels and increases in depth and breadth with grade level.

On the right of the page listed under "grades 9-12" are the individual standard statements. These are the standards which will be used to guide test item development. When referring to a standard, this document uses numbers such as 6.1.2. The first number refers to the standard which is "6". The second number refers to the strand which is "1" or the first strand in this standard. The third number refers to the individual standard under that strand.



The Grade-Level Expectations are located at the end of each standard. These expectations are a guide and provide clarity to teachers as to the types the inquiry-based experiences in which students should engage and what students should be able to do to meet the standard.

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	Standard 6: Life Processes, Grade Level Expectations Grades 9-12
1	Essential Question: How does structure relate to function in living systems from the organismic to the cellular level?
	Essential Question: How is matter transferred and energy transferred/transformed in living systems?
	Essential Question: How do responses to internal and external cues aid in an organism's survival?
ļ	Essential Question: What can we do to benefit the health of humans and other organisms?
	Enduring Understanding: Living systems, from the organismic to the cellular level, demonstrate the complementary nature of structure and function.
	Enduring Understanding: All organisms transfer matter and convert energy from one form to another. Both matter and energy are necessary to build and maintain structures within the organism.
	Enduring Understanding: Organisms respond to internal and external cues, which allow them to survive.
	Enduring Understanding: The health of humans and other organisms is affected by their interactions with each other and their environment, and may be altered by human manipulation.
[	Building upon the K-9 expectations, all students in Grade 10 will be able to:
	Enduring Understanding: Living systems, from the organismic to the cellular level, demonstrate the complementary nature of structure and function.
	Use microscopes to identify similarities and differences among a variety of cells (e.g., muscle, nerve, epithelial, blood, adipose), and explain how structural variations relate to the function that each of the cells performs.
	Differentiate between prokaryotic cells and eukaryotic cells in terms of their general structures (cell membrane & genetic material) and degree of complexity. Give examples of prokaryotic organisms and organisms with eukaryotic cells.
	Explain how organelles of single-celled organisms function as a system to perform the same basic life processes as are performed in multi-cellular organisms (e.g., acquisition of energy, elimination of waste, reproduction, gas exchange, growth, repair, and protein synthesis).
	Use fluid mosaic models of the plasma membrane to explain how its structure regulates the movement of materials across the membrane.
	Show how water moves in and out of cells down a concentration gradient. Recognize that this process, known as osmosis, requires no input of energy.
	Explain the role of cell membranes as highly selective barriers (e.g., diffusion, osmosis, active transport).
	Distinguish between active and passive transport. Recognize that active transport requires energy input to move molecules from an area of low concentration to an area of high concentration (against the concentration gradient).
	Design a controlled experiment to investigate the capacity of the cell membrane to regulate how materials enter and leave the cell.
	Construct cell models (e.g., phenolphthalein-agar cubes, potato-iodine cubes) to investigate the relationship among cell size, surface area to volume ratio and the rates of diffusion into and out of the cell. Explain why large organisms have developed from many cells rather than one large cell.
	Recognize that as a result of the coordinated structures and functions of organ systems, the internal environment of the human body remains relatively stable despite changes in the outside environment.
	Explain how the cells of a multi-cellular organisms work together for the benefit of the colonial or singular organism.
l	

To the left of the document is the strand. Each standard is divided into strands as listed above. On this page, the strand is "Structure/Function Relationships." Below the strand is the enduring understanding and essential questions of that strand. The enduring understanding is the "big idea" that guides this strand at all grade levels and increases in depth and breadth with grade level.

On the right of the page listed under "grades 9-12" are the individual standard statements. These are the standards which will be used to guide test item development. When referring to a standard, this document uses numbers and letters, such as 6.1.B. The first number refers to the standard which is "6." The second number refers to the strand which is "1" or the first strand in this standard. The letter refers to the individual standard under that strand.

#### **IV. SUGGESTIONS AND CAUTION**

Particular attention needs to be given to the standards and strands listed in this document. Guidance on the emphasis of each standard is delineated by the terms essential, important, and compact.

Classroom learning often goes beyond the standards. In an inquiry-based classroom, learning encompasses a wider range of learning opportunities. While the end-of-course exam focuses on a specific set of standards in a given administration, student success in the classroom is determined by many factors. A student could score well on the end-of-course assessment, while not showing the same level of success in the classroom.

#### **Format of Test Expectations**

The expectations are formatted in the following ways.

- 1. Categorically Each table indicates the standard and strand assessed.
- 2. Depth of Knowledge Clarifications within each table indicate the depth of knowledge or skill intended within the standard.
- 3. Cognitive Range Each table indicates the expected span of knowledge intended for assessment.
- 4. Test Representation of Standard Each table indicates whether the standard is essential, important, or compact. The greatest number of DCAS items will come from essential standards, with less from important standards and no DCAS items will be compact standards.

#### V. SUMMARY

The course-level expectations are focused on the standards and the level of priority assigned to each standard. The majority of test items will be taken directly from standards that are essential with a smaller percentage of items written to the important standards. No compact standards will be tested in large-scale assessment. The cognitive levels are a guide to provide clarification to the test vendor as to the depth and breadth of the standard. Most standards give a range of possibilities within the various cognitive levels.

### VI. BIOLOGY END-OF-COURSE EXPECTATIONS

The Delaware Content Standards for Science is a comprehensive document containing eight standards with corresponding grade-level expectations (GLEs). The Biology EOC Expectations provide a guide to indicate the level of emphasis to be placed on the standards and GLEs. By coding standards and GLEs taught in the Biology course, it enables teachers to distinguish between the essential, important, and compact elements of the curriculum. As a result, students receive similar instruction based on a common course.

Essential standards are those that emphasize the key knowledge and skills that students should understand at great depth and on which most instructional time is spent. Important standards comprise a lesser extent of the curriculum and lead to understanding essential knowledge and skills. Compact standards are not included on the DCAS assessment.

Standard Title	6 Life Processes
Strand 6.1	Structure and Function
Content Standard Statement	6.1.A In order to establish and maintain their complex organization and structure, organisms must obtain, transform, and transport matter and energy, eliminate waste products, and coordinate their internal activities. Priority: Essential
Grade-Level Expectation(s)	• Explain how organelles of single-celled organisms function as a system to perform the same basic life processes as are performed in multi-cellular organisms (e.g., acquisition of energy, elimination of waste, reproduction, gas exchange, growth, repair, and protein synthesis).
Clarifications and Cognitive Level(s) Expected	This is an important standard that creates a foundation for later biological concepts. Items for this standard should focus on how parts coordinate functions as a system. The specific functioning of each organelle is <u>not</u> a focus. <b>Depth of Knowledge Categories</b>
	Level 1 Items: Should focus on identifying requirements of all living things.

Standard Title	6 Life Processes
Strand 6.1	Structure and Function
Content Standard Statement	6.1.B Cells take highly varied forms in different plants, animals, and microorganisms. Structural variations among cells determine the function each cell performs. Priority: Essential
Grade-Level Expectation(s)	<ul> <li>Identify similarities and differences among a variety of cells (e.g., muscle, nerve, epithelial, blood, leaf, root). Explain how structural variations relate to the function that each of the cells performs.</li> <li>Differentiate between prokaryotic cells and eukaryotic cells in terms of their general structures (cell membrane and genetic material) and degree of complexity. Give examples of prokaryotic organisms and organisms with eukaryotic cells.</li> </ul>
Clarifications and Cognitive Level(s) Expected	<ul> <li>This is an essential standard so it is expected that this will be a focus on the assessment.</li> <li>Items for this standard should emphasize structure/function relationships.</li> <li>Depth of Knowledge Categories</li> <li>Level 1 Items: May ask students to recall the function of cell structures.</li> <li>Level 2 Items: May ask students to compare/contrast structures of different cells.</li> <li>Level 3 Items: May ask students to draw conclusions about cell function based on structures observed.</li> </ul>

Standard Title	6 Life Processes
Strand 6.1	Structure and Function
Content Standard Statement	6.1.C Cells have distinct and separate structures (organelles), which perform and monitor processes essential for survival of the cell (e.g., energy use, waste disposal, synthesis of new molecules, and storage of genetic material). The highly specific function of each organelle is directly related to its structure. Priority: Important
Grade-Level Expectation(s)	<ul> <li>Differentiate between prokaryotic cells and eukaryotic cells in terms of their general structures (cell membrane &amp; genetic material) and degree of complexity. Give examples of prokaryotic organisms and organisms with eukaryotic cells.</li> <li>Explain how organelles of single-celled organisms function as a system to perform the same basic life processes as are performed in multi-cellular organisms (e.g., acquisition of energy, elimination of waste, reproduction, gas exchange, growth, repair, and protein synthesis). (Note: This refers to the idea that single-celled organisms are self-sufficient, while multi-cellular organisms depend on a division of labor among cells.)</li> </ul>
Clarifications and Cognitive Level(s) Expected	This is an important standard so it is expected that less emphasis will be placed upon this standard in the assessment than is on essential standards. Items for this standard should focus on how parts coordinate functions as a system. The specific functioning of each organelle is not a focus.
	Depth of Knowledge Categories
	Level 1 Items: May focus on recall of general structures that all students should know that include the cell membrane, cell wall, nucleus, mitochondria, chloroplasts, and cytoplasm.
	Level 2 Items: May ask students to classify organisms according to the kingdom level only, e.g., bacteria, fungi, plants, animals and protists. Specific names of organisms are not the focus.

Standard Title	6 Life Processes
Strand 6.1	Structure and Function
Content Standard Statement	6.1.D The cell membrane is dynamic and interacts with internal membranous structures as materials are transported into and out of the cell. Priority: Essential
Grade-Level Expectation(s)	<ul> <li>Use models or diagrams to explain how the structure of the cell membrane regulates the movement of materials across the membrane.</li> <li>Show how water moves in and out of cells down a concentration gradient. Recognize that this process, known as osmosis, requires no input of energy.</li> </ul>
Clarifications and Cognitive Level(s) Expected	This is an essential standard so it is expected that this will be a focus on the assessment. Note: Students should be able to explain if water will enter or leave a cell based on solute concentration. They will not be accountable for vocabulary such as <u>hypo/hyper/isotonic</u> or <u>osmotic pressure</u> .
	Depth of Knowledge Categories
	Level 1 Items: Define osmosis; describe the primary function of the cell membrane.
	Level 3 Items: Interpret the relative concentration of a solution based on the shape (shriveled or swollen) of the cell suspended in the solution.
	Level 4 Items: Predict whether a cell will shrink or swell based on concentration of the environment compared to the concentration of cell contents.

Standard Title	6 Life Processes
Strand 6.1	Structure and Function
Content Standard Statement	6.1.E The transportation of materials across the membrane can be passive (does not require the expenditure of cellular energy) or active (requires the expenditure of cellular energy) depending upon membrane structure and concentration gradients. Priority: Important
Grade-Level Expectation(s)	<ul> <li>Distinguish between active and passive transport. Recognize that active transport requires energy input to move molecules from an area of low concentration to an area of high concentration (against the concentration gradient).</li> </ul>
	<ul> <li>Interpret data from a controlled experiment to investigate the capacity of the cell membrane to regulate how materials enter and leave the cell.</li> </ul>
	<ul> <li>Interpret data from cell models (e.g., phenolphthalein-agar cubes, potato-iodine cubes) to explain the relationship among cell size, surface area to volume ratio and the rates of diffusion into and out of the cell. Explain why large organisms have developed from many cells rather than one large cell.</li> </ul>
Clarifications and Cognitive	This is an important standard so it is expected that less emphasis will be placed upon this standard in the assessment than is on essential standards.
Level(s) Expected	(Note: this may include a diagram of an experiment involving solutes crossing dialysis tubing).
	(Note: students should understand how surface area/volume ratios affect cell processes, but they will not be expected to calculate surface area/volume ratios.)
	Depth of Knowledge Categories
	Level 1 Items: May ask for a definition of passive or active transport.
	Level 2 Items: Given a "before and after" picture of a cell in a solution, students will describe how materials cross the membrane (e.g., by passive or active transport) based upon information about the concentration gradient.

Standard Title	6 Life Processes
Strand 6.1	Structure and Function
Content Standard Statement	<ul><li>6.1.F Cells store and use information to guide their functions. DNA molecules in each cell carry coded instructions for synthesizing protein molecules. The protein molecules have important structural and regulatory functions.</li><li>Priority: Essential</li></ul>
Grade-Level Expectation(s)	<ul> <li>Define a gene as a section of DNA that directs the synthesis of a specific protein. A protein has a specific regulatory or structural role.</li> </ul>
Clarifications and Cognitive	This is an essential standard so it is expected that this will be a focus on the assessment.
Level(s) Expected	Depth of Knowledge Categories
Expected	Level 1 Items: Describe gene, codon, protein, and nucleic acid
	Level 2 Items: Describe the cause and effect relationship between mutations and protein structure/function.
	Level 3 Items: Predict consequences of a mutation on a protein and, therefore, on cell function.

Standard Title	6 Life Processes
Strand 6.1	Structure and Function
Content Standard Statement	<ul><li>6.1.G Humans have a nervous system composed of a brain and specialized cells that conduct signals rapidly through the long cell extensions that make up nerves. The nerve cells communicate with each other by secreting specific molecules (neurotransmitters).</li><li>Priority: Compact</li></ul>
Grade-Level Expectation(s)	<ul> <li>Recognize that as a result of the coordinated structures and functions of organ systems, the internal environment of the human body remains relatively stable despite changes in the outside environment.</li> <li>Explain how the cells of a multi-cellular organisms work together for the benefit of the colonial or singular organism.</li> </ul>
Clarifications and Cognitive Level(s) Expected	<ul> <li>This is a compact standard, a definition by nature. It is intended as foundational content and therefore is not recommended for large-scale assessment.</li> <li>Depth of Knowledge Categories</li> <li>Level 1 Items: Identify parts of the nervous system or differentiate between parts/ structures of the nervous system and those that are not.</li> </ul>

Standard Title	6 Life Processes
Strand 6.1	Structure and Function
Content Standard Statement	6.1.H In multi-cellular organisms, cells perform specialized functions as parts of sub- systems (e.g., tissues, organs, and organ systems), which work together to maintain optimum conditions for the benefit of the whole organism Priority: Important
Grade-Level Expectation(s)	<ul> <li>Explain how the cells of a multi-cellular organisms work together for the benefit of the colonial or singular organism.</li> </ul>
Clarifications and Cognitive Level(s) Expected	This is an important standard so it is expected that less emphasis will be placed upon this standard in the assessment than is on essential standards. <b>Depth of Knowledge Categories</b>
Lapered	Level 1 Items: Choose from a list of terms that range from least to most complex (i.e., cell, tissue, organ, organ system, organism).
	Level 2 Items: Classify the levels of cellular organization by complexity.
	Level 3 Items: Explain why cells from a multi-cellular organism cannot live independently.

Standard Title	6 Life Processes
Strand 6.1	Structure and Function
Content Standard Statement	<ul><li>6.1.I The endocrine system consists of glands which secrete chemical messengers (hormones) that are transported via the circulatory system and act on other body structures.</li><li>Priority: Compact</li></ul>
Grade-Level Expectation(s)	<ul> <li>Recognize that as a result of the coordinated structures and functions of organ systems, the internal environment of the human body remains relatively stable despite changes in the outside environment.</li> <li>Explain how the cells of a multi-cellular organisms work together for the benefit of the colonial or singular organism.</li> </ul>
Clarifications and Cognitive Level(s) Expected	This is a compact standard so it is expected that less emphasis will be placed upon this than essential or important standards. <b>Depth of Knowledge Categories</b>
	Level 1 Items: Recognize that cells in a multi-cellular are interdependent or identify the purpose of the endocrine system (definitional).

Standard Title	6 Life Processes
Strand 6.1	Structure and Function
Content Standard Statement	<ul><li>6.1.J The immune system consists of cells, organs, and secretions that protect the organism from toxins, irritants, and pathogens.</li><li>Priority: Compact</li></ul>
Grade-Level Expectation(s)	<ul> <li>Recognize that as a result of the coordinated structures and functions of organ systems, the internal environment of the human body remains relatively stable despite changes in the outside environment.</li> <li>Explain how the cells of a multi-cellular organisms work together for the benefit of the colonial or singular organism.</li> </ul>
Clarifications and Cognitive Level(s) Expected	<ul><li>This is a compact standard so it is expected that less emphasis will be placed upon this than essential or important standards.</li><li>Depth of Knowledge Categories</li><li>Level 1 Items: Defines or identifies a function as being the responsibility of the immune system.</li></ul>
	Level 2 Items: May ask the student to describe why increased blood flow to an injury may be helpful in the healing process of an organism.
	Level 3 Items: May provide data and ask students to provide evidence that the immune system has protected the organism.

Standard Title	6 Life Processes
Strand 6.2	Matter and Energy Transformation
Content Standard Statement	6.2.A Cells carry out a variety of chemical transformations (i.e., cellular respiration, photosynthesis, and digestion) which allow conversion of energy from one form to another, the breakdown of molecules into smaller units, and the building of larger molecules from smaller ones. Most of these transformations are made possible by protein catalysts called enzymes. Priority: Essential
Grade-Level Expectation(s)	<ul> <li>Explain that physically breaking down food into smaller pieces by mechanical digestion helps facilitate breakdown (by increasing surface area) into chemical components and that digestive enzymes are necessary for the breakdown of food into those chemical components (e.g., starch to glucose, lipids and glycerol to fatty acids, proteins to amino acids).</li> <li>Observe and recognize that unicellular organisms take in food from their environment and chemically digest it (if needed) within their cell body.</li> <li>Understand that nutrients are transported to cells where they serve as building blocks for the synthesis of body structures and as reactants for cellular respiration.</li> <li>Describe the process by which water is removed from sugar molecules (dehydration synthesis) to form carbohydrates and is added to break them down (hydrolysis).</li> <li>Recognize that during cellular respiration, chemical bonds between food molecules are broken (hydrolysis), and energy is transferred to ADP to create ATP (the energy storage molecule that fuels cellular processes). Acknowledge that all organisms must break the high energy needed for life processes.</li> </ul>
Clarifications and Cognitive Level(s) Expected	This is an essential standard so it is expected that this will be a focus on the assessment. This is an overarching standard, and specific details will be associated with other standards.
	Depth of Knowledge Categories
	Level 1 Items: Identify the purpose of food in a cell (provide energy and matter for growth and repair).

Standard Title	6 Life Processes
Strand 6.2	Matter and Energy Transformation:
Content Standard Statement	6.2.B Plant cells contain chloroplasts, which convert light energy into chemical energy through the process of photosynthesis. This chemical energy is used by the plants to convert carbon dioxide and water into glucose molecules, that may be used for energy or to form plant structures. Photosynthesis adds oxygen to the atmosphere and removes carbon dioxide. Priority: Essential
Grade-Level Expectation(s)	<ul> <li>Explain the processes used by autotrophs to transform light energy into chemical energy in the form of simple sugars. Give examples of how these compounds are used by living things as sources of matter and energy.</li> <li>Describe photosynthesis as an energy storing process and explain how environmental factors such as temperature, light intensity, and the amount of water available can affect photosynthesis.</li> </ul>
Clarifications and Cognitive Level(s) Expected	This is an essential standard so it is expected that this will be a focus on the assessment.
	Depth of Knowledge Categories
	Level 1 Items: Identify the organelle where photosynthesis takes place. Describe how the products of photosynthesis are used by a plant.
	Level 2 Items: Classify the reactants and products of the photosynthesis equation.
	Level 3 Items: Explain how photosynthesis causes a plant to increase in mass. (Note: we are not asking students to understand the Calvin Cycle or its steps—just to identify $CO_2$ as a source of matter.)

Standard Title	6 Life Processes
Strand 6.2	Matter and Energy Transformation:
Content Standard Statement	6.2.C All organisms, including plants, use the process of cellular respiration to transform stored energy in food molecules into usable energy. The energy produced is stored in the form of ATP and is used by organisms to conduct their life processes. Cellular respiration may require oxygen and adds carbon dioxide to the atmosphere. Priority: Essential
Grade-Level Expectation(s)	<ul> <li>Recognize that during photosynthesis, plants use energy from the sun and elements from the atmosphere and the soil to make specific compounds. Recognize that these compounds are used by living things as sources of matter and energy.</li> </ul>
Clarifications and Cognitive Level(s) Expected	This is an essential standard so it is expected that this will be a focus on the assessment.
	Depth of Knowledge Categories
	Level 1 Items: Identify the organelle where respiration takes place. Describe how the products of respiration are used by a plant or animal.
	Level 2 Items: Classify the reactants and products of the respiration equation.
	Level 3 Items: Explain why a plant releases $CO_2$ at night. Explain how trees are able to survive in the winter after they have lost their leaves.

Standard Title	6 Life Processes
Strand 6.2	Matter and Energy Transformation:
Content Standard Statement	<ul><li>6.2.D Photosynthesis and cellular respiration are complementary processes resulting in the flow of energy and the cycling of matter in ecosystems.</li><li>Priority: Essential</li></ul>
Grade-Level Expectation(s)	<ul> <li>Investigate and describe the complementary relationship (cycling of matter and the flow of energy) between photosynthesis and cellular respiration.</li> </ul>
Clarifications and Cognitive	This is an essential standard so it is expected that this will be a focus on the assessment.
Level(s) Expected	Depth of Knowledge Categories
LApeeted	Level 2 Items: Describe the complementary relationship (cycling of matter and the flow of energy) between photosynthesis and cellular respiration.
	Level 3 Items: Explain why photosynthesis does not deplete the total level of $CO_2$ in the atmosphere.
	Level 4 Items: May ask students to view a graph that illustrates $CO_2$ levels in a closed system and, based on knowledge of what is IN that system, explain why the data reads as it does.

Standard Title	6 Life Processes
Strand 6.3	Regulation and Behavior
Content Standard Statement	<ul><li>6.3.A The endocrine, nervous, and immune systems coordinate and help maintain homeostasis in humans and other organisms.</li><li>Priority: Compact</li></ul>
Grade-Level Expectation(s)	<ul> <li>Recognize that as a result of the coordinated structures and functions of organ systems, the internal environment of the human body remains relatively stable despite changes in the outside environment.</li> <li>Illustrate how nerve cells communicate with each other to transmit information from the internal and external environment often resulting in physiological or behavioral responses.</li> <li>Draw a schematic to illustrate a positive and negative feedback mechanism that regulates body systems in order to help maintain homeostasis.</li> </ul>
Clarifications and Cognitive Level(s) Expected	(Do not have student list the component parts of these three systems. The focus of this standard is on homeostasis.) This is a compact standard so it is expected that less emphasis will be placed upon this than essential or important standards. <b>Depth of Knowledge Categories</b>
	Level 1 Items: State the function of the immune system.
	Level 2 Items: Compare/contrast nervous system to endocrine system in terms of rate of response. Match the system with the response that is invoked to maintain homeostasis in a given situation.

Standard Title	6 Life Processes
Strand 6.3	Regulation and Behavior
Content Standard Statement	<ul><li>6.3.B Multi-cellular animals have nervous systems that generate behavioral responses. These responses result from interactions between organisms of the same species, organisms of different species, and from environmental changes.</li><li>Priority: Compact</li></ul>
Grade-Level Expectation(s)	<ul> <li>Recognize that as a result of the coordinated structures and functions of organ systems, the internal environment of the human body remains relatively stable despite changes in the outside environment.</li> <li>Recognize that in order to help maintain the health of an organism, the immune system works in nonspecific ways (e.g., skin, mucous, membranes) and specific ways (e.g., antibody-antigen interactions.)</li> </ul>
Clarifications and Cognitive Level(s) Expected	<ul> <li>This is a compact standard so it is expected that less emphasis will be placed upon this than essential or important standards.</li> <li>Depth of Knowledge Categories</li> <li>Levels 2-3 Items: Identify something as being or not being evidence of a stimulus/response behavior.</li> </ul>

Standard Title	6 Life Processes
Strand 6.4	Life Processes and Technology
Content Standard Statement	<ul><li>6.4.A Certain chemicals, pathogens, and high energy radiation seriously impair normal cell functions and the health of the organism.</li><li>Priority: Compact</li></ul>
Grade-Level Expectation(s)	<ul> <li>Describe how environmental factors (e.g., UV light or the presence of carcinogens or pathogens) alter cellular functions.</li> </ul>
Clarifications and Cognitive Level(s) Expected	This is a compact standard so it is expected that less emphasis will be placed upon this than essential or important standards.
	Depth of Knowledge Categories
	Level 1 Items: State the function of the immune system or define homeostasis.
	Level 2 Items: Identify situations or items that can seriously impair cellular function.
	Level 3 Items: Explain how interruptions to normal cell function can alter the health of an organism.

Standard Title	6 Life Processes
Strand 6.4	Life Processes and Technology
Content Standard Statement	6.4.B The scientific investigation of cellular chemistry enables the biotechnology industry to produce medicines, foods, and other products for the benefit of society. Priority: Essential
Grade-Level Expectation(s)	<ul> <li>Investigate how scientists use biotechnology to produce more nutritious food, more effective medicine, and new ways to mitigate pollution.</li> </ul>
Clarifications and Cognitive Level(s) Expected	This is a compact standard so it is expected that less emphasis will be placed upon this than essential or important standards. <b>Depth of Knowledge Categories</b>
	Level 2 Items: Describe how knowing what sorts of things damage specific bacterial structures is beneficial to the medical profession.
	Level 3 Items: Describe how people protect themselves from high-energy radiation (i.e., using sun block).

Standard Title	6 Life Processes
Strand 6.4	Life Processes and Technology
Content Standard Statement	<ul><li>6.4.C Many drugs exert their effects by mimicking or increasing the production or destruction of neurotransmitters.</li><li>Priority: Compact</li></ul>
Grade-Level Expectation(s)	<ul> <li>Investigate how drugs can affect neurotransmission.</li> <li>Explain how antibiotics (e.g., penicillin, tetracycline) kill bacterial cells without harming human cells due to differences between prokaryotic and eukaryotic cell structure.</li> </ul>
Clarifications and Cognitive Level(s) Expected	This is a compact standard so it is expected that less emphasis will be placed upon this than essential or important standards.
	Depth of Knowledge Categories
	Level 3 Items: Describe the effect of introducing a stimulant, depressant, or hallucinogenic drug into the human system. (This is more of a health standard than a specific $10^{th}$ grade biology standard, but the content listed in this depth of knowledge question is valid given the students' exposure to the information in health classes.)

Life Processes and Technology
6.4.D Biotechnology is a growing international field of research and industry. Many scientists conduct cutting-edge research in biotechnology. Priority: Compact
<ul> <li>Investigate how scientists use biotechnology to produce more nutritious food, more effective medicine, and new ways to mitigate pollution.</li> </ul>
This is a compact standard so it is expected that less emphasis will be placed upon this than essential or important standards. <b>Depth of Knowledge Categories</b> Level 2 Items: State examples of how biotechnology affects society, i.e., genetically
e s F T t

Standard Title	7 Diversity and Continuity of Living Things
Strand 7.1	Reproduction, Heredity, and Development
Content Standard Statement	7.1.A. Hereditary/genetic information in chromosomes is contained in molecules of DNA. Genes are sections of DNA that direct syntheses of specific proteins associated with traits in organisms. These consist of various combinations of four different nucleotides that encode this information through their sequences. Priority: Essential
Grade-Level Expectation(s)	<ul> <li>Describe the relationship between DNA, genes, chromosomes and proteins.</li> <li>Explain that a gene is a section of DNA that directs the synthesis of a specific protein associated with a specific trait in an organism.</li> <li>Trace how a DNA sequence, through transcription and translation, results in a sequence of amino acids.</li> <li>Demonstrate that when DNA replicates, the complementary strands separate and the old strands serve as a template for the new complementary strands. Recognize that this results in two identical strands of DNA that are exact copies of the original.</li> <li>Illustrate how a sequence of DNA nucleotides codes for a specific sequence of amino acids.</li> </ul>
Clarifications and Cognitive Level(s) Expected	This is an essential standard so it is expected that this will be a focus on the assessment.
	Depth of Knowledge Categories
	Level 1 Items: Define terms DNA, gene, protein, nucleotide.
	Level 2 Items: Describe the hierarchy of DNA base, gene, DNA molecule, chromosome, and nucleus (possibly as an analogy with letter, word, sentence).
	Level 3 Items: Describe how DNA structure determines amino acid sequence of a protein.

7 Diversity and Continuity of Living Things
Reproduction, Heredity, and Development
<ul><li>7.1.B Known patterns of inheritance can be used to make predictions about genetic variation.</li><li>Priority: Important</li></ul>
<ul> <li>Use Punnett squares, including dihybrid crosses, and pedigree charts to determine probabilities and patterns of inheritance (i.e., dominant/recessive, co-dominance, sex-linkage, multi-allele inheritance).</li> <li>Analyze a karyotype to determine chromosome numbers and pairs. Compare and contrast normal and abnormal karyotypes.</li> <li>Explain how crossing over and Mendel's Laws of Segregation and Independent Assortment contribute to genetic variation in sexually reproducing organisms.</li> </ul>
This is an important standard so it is expected that less emphasis will be placed upon this standard in the assessment than is on essential standards.
Depth of Knowledge Categories
Level 2 Items: Distinguish among dominance, recessiveness, and co-dominance.
Level 3 Items: Use a Punnett square to interpret the results of a mating involving a sex linked gene and make predictions about characteristics of the offspring.
Level 4 Items: Sample questions.
Lady Spike Lady Spike Jake Glory Jake Glory Rascal Belle C Sassy Lassie Dot Mo Spot Patch a.) Are spotted noses the result of a dominant or recessive gene? How do you know?
b.) What are the genotypes of individuals Lady and Spike?

Standard Title	7 Diversity and Continuity of Living Things
Strand 7.1	Reproduction, Heredity, and Development
Content Standard Statement	<ul><li>7.1.C Mutations in DNA of organisms normally occur spontaneously at low rates, but can occur at higher rates (i.e., exposure to pathogens, radiation, and some chemicals). Most mutations have no effect on the organism, but some may be beneficial or harmful depending on the environment.</li><li>Priority: Essential</li></ul>
Grade-Level Expectation(s)	<ul> <li>Describe how exposure to radiation, chemicals and pathogens can increase mutations.</li> <li>Explain that mutations in the DNA sequence of a gene may or may not affect the expression of the gene. Recognize that mutations may be harmful, beneficial, or have no impact on the survival of the organism.</li> </ul>
Clarifications and Cognitive Level(s) Expected	This is an essential standard so it is expected that this will be a focus on the assessment. Depth of Knowledge Categories
	Level 1 Items: Given a short strand of DNA as the original, provide three or four "mutated" strands—have student identify that the most different strand from the original is the most likely to cause a mutation.
	Given short strand of DNA as the original, choose from amongst several that are not a mutation.
	Level 2 Items: Describe how accidental changes in genetic code might result in greater survival rates of a given species (or vice versa).

Standard Title	7 Diversity and Continuity of Living Things
Strand 7.1	Reproduction, Heredity, and Development
Content Standard Statement	7.1.D Only random mutations in germ cells (gametes) can create the variation that is inherited by an organism's offspring. Somatic mutations are not inherited, but may lead to cell death, uncontrolled cell growth, or cancer. Priority: Important
Grade-Level Expectation(s)	<ul> <li>Explain that mutations in the DNA sequence of a gene may or may not affect the expression of the gene. Recognize that mutations may be harmful, beneficial, or have no impact on the survival of the organism.</li> <li>Explain how the type of cell (gamete or somatic) in which a mutation occurs determines heritability of the mutation.</li> <li>Predict the possible consequences of a somatic cell mutation.</li> <li>Describe the cell cycle as an orderly process that results in new somatic cells that contain an exact copy of the DNA that make up the genes and chromosomes found in the parent somatic cells.</li> </ul>
Clarifications and Cognitive Level(s) Expected	This is an important standard so it is expected that less emphasis will be placed upon this standard in the assessment than is on essential standards.
	Depth of Knowledge Categories
	Level 1 Items: Define cancer.
	Level 2 Items: Compare/contrast somatic v. germ line mutations.
	Level 3 Items: Explain how a somatic cell mutation can cause overproduction of a cell substance. Explain how a mutation can alter a DNA sequence but not affect cell products.

Standard Title	7 Diversity and Continuity of Living Things
Strand 7.1	Reproduction, Heredity, and Development
Content Standard Statement	7.1.E During the cell cycle, DNA of the parent cell replicates and the cell divides into two cells that are identical to the parent. This process is used for growth and repair of body tissues and for asexual reproduction. Priority: Essential
Grade-Level Expectation(s)	<ul> <li>Explain how the cell cycle contributes to reproduction and maintenance of the cell and/or organism.</li> </ul>
Clarifications and Cognitive Level(s) Expected	This is an essential standard so it is expected that this will be a focus on the assessment. Students will not be held accountable for the stages of mitosis.
	Depth of Knowledge Categories
	Level 1 Items: Ask students to state the result of a cell undergoing mitosis.
	Level 2 Items: Describe the genetic makeup of two daughter cells that have recently resulted from a cell undergoing mitosis.
	Level 3 Items: Explain how a cut is able to "heal" and form new skin over time.

Standard Title	7 Diversity and Continuity of Living Things
Strand 7.1	Reproduction, Heredity, and Development
Content Standard Statement	7.1.F Meiosis is the production of sex cells (gametes). The production and release of these gametes is controlled by hormones. In meiosis, the number of chromosomes is reduced by one-half and chromosomes may randomly exchange homologous parts to create new chromosomes with combinations not necessarily found in the parent cell. This may increase variation within the species. Priority: Essential
Grade-Level Expectation(s)	<ul> <li>Recognize that during the formation of gametes, or sex cells (meiosis), the number of chromosomes is reduced by one-half, so that when fertilization occurs the diploid number is restored.</li> </ul>
Clarifications and Cognitive Level(s) Expected	This is an essential standard so it is expected that this will be a focus on the assessment. Students will NOT be held accountable for naming the stages of meiosis.
	Depth of Knowledge Categories
	Level 1 Items: Require students to know how many daughter cells result from meiosis.
	Level 2 Items: Compare number of chromosomes of parent cell to daughter cells -or- number of chromosomes of meiotic cell v. mitotic cell in an organism.
	Level 3 Items: Explain how the process of meiosis promotes diversity in a species.

Standard Title	7 Diversity and Continuity of Living Things
Strand 7.1	Reproduction, Heredity, and Development
Content Standard Statement	7.1.G Upon fertilization, the fusion of the gametes restores the original chromosome number, and new gene combinations lead to increased genetic variation, which, in turn, increases the likelihood of survival of the species. Priority: Essential
Grade-Level Expectation(s)	<ul> <li>Compare and contrast the processes of growth (cell division) and development (differentiation).</li> </ul>
Clarifications and Cognitive Level(s) Expected	This is an essential standard so it is expected that this will be a focus on the assessment. Depth of Knowledge Categories
	Level 1 Items: Ask students to know the number of chromosomes in the body cells of a parent organisms given the number of chromosomes in an egg cell or explain why meiosis ensures that humans always have 46 chromosomes in their somatic cells.
	Level 2 Items: Ask students to explain why meiosis is needed in sexual reproduction.
	Level 3 Items: Explain how sexual reproduction is essential to genetic variation.

Standard Title	7 Diversity and Continuity of Living Things
Strand 7.1	Reproduction, Heredity, and Development
Content Standard Statement	<ul><li>7.1.H The sex chromosomes contain different genes, and therefore, certain traits will show patterns of inheritance based on gender.</li><li>Priority: Important</li></ul>
Grade-Level Expectation(s)	<ul> <li>Explain why sex-linked traits are expressed more frequently in males.</li> </ul>
Clarifications and Cognitive Level(s) Expected	This is an important standard so it is expected that less emphasis will be placed upon this standard in the assessment than is on essential standards.
	Depth of Knowledge Categories
	Level 1 Items: Recognize what it means for a trait to be sex-linked.
	Level 2 Items: Describe how a genetic disorder could be more likely in the male population than in the female population.
	Level 3 Items: Show the pedigree of a sex-linked trait and ask students to identify possible/likely reasons for the patterns of inheritance.

Standard Title	7 Diversity and Continuity of Living Things
Strand 7.1	Reproduction, Heredity, and Development
Content Standard Statement	<ul> <li>7.1.I Embryological development in plants and animals involves a series of orderly changes in which cells divide and differentiate. Development is controlled by genes whose expression is influenced by internal factors (i.e., hormones) and may also be influenced by environmental factors (i.e., nutrition, alcohol, radiation, drugs, and pathogens). Alteration in this balance may interfere with normal growth and development.</li> <li>Priority: Compact</li> </ul>
Grade-Level Expectation(s)	<ul> <li>Recognize that any environmental factor that influences gene expression or alteration in hormonal balance may have an impact on development.</li> </ul>
Clarifications and Cognitive Level(s) Expected	This is a compact standard so it is expected that less emphasis will be placed upon this than essential or important standards. <b>Depth of Knowledge Categories</b>
	Level 1 Items: Recognize that environmental factors can affect cell growth.
	Level 3 Items: Explain why X-rays may cause more damage to a fetus than to an adult.

Standard Title	7 Diversity and Continuity of Living Things
Strand 7.2	Diversity and Evolution
Content Standard Statement	<ul><li>7.2.A Evolution is a change in allelic frequencies of a population over time. The theory of evolution is supported by extensive biochemical, structural, embryological, and fossil evidence.</li><li>Priority: Essential</li></ul>
Grade-Level Expectation(s)	<ul> <li>Recognize random mutation (changes in DNA) and recombination within gametes as the sources of heritable variations that give individuals within a species survival and reproductive advantage or disadvantage over others in the species.</li> </ul>
Clarifications and Cognitive Level(s) Expected	This is an essential standard so it is expected that this will be a focus on the assessment. Depth of Knowledge Categories
	Level 1 Items: Identify some sources of evidence for the theory of evolution.
	Level 2 Items: Describe how fossil evidence supports the theory of evolution; describe how pieces of evidence support the theory of evolution.
	Level 3 Items: Draw conclusions about evolutionary relationships if two specimens have DNA that is very similar in its code.

Standard Title	7 Diversity and Continuity of Living Things
Strand 7.2	Diversity and Evolution
Content Standard Statement	7.2.B The great diversity of organisms is the result of more than 3.5 billion years of evolution that has filled every available niche with life forms. The millions of different species of plants, animals, and microorganisms that live on Earth today are related by descent with modification from common ancestors. Priority: Essential
Grade-Level Expectation(s)	<ul> <li>Explain how biochemical evidence, homologous structures, embryological development and fossil evidence support or refute prior hypotheses of common ancestry.</li> <li>Explain how species evolve through descent with modification, thus allowing them to adapt to different environments.</li> </ul>
Clarifications and Cognitive Level(s) Expected	This is an essential standard so it is expected that this will be a focus on the assessment. This is a foundational standard that encompasses most other evolution standards. This standard is essential but may be tested in a very broad manner with more specific questions being identified with more specific standard statements.
	Depth of Knowledge Categories
	Level 1 Items: Define evolution.
	Level 2 Items: Show several structures (e.g., homologous body structures or DNA fingerprints), some very similar, some very different, and ask students to identify two structures that appear to be closely related.
	Level 3 Items: Display a specific body structure and provide students with four or more "environments" in which they would expect to find that structure useful to an organism; or explain why biochemical evidence of evolutionary relationships may contradict evidence based on homologous structures or fossil evidence.

Standard Title	7 Diversity and Continuity of Living Things
Strand 7.2	Diversity and Evolution
Content Standard Statement	7.2.C The process of natural selection occurs when some heritable variations that arise from random mutation and recombination give individuals within a species some survival advantages over others. These offspring with advantageous adaptations are more likely to survive and reproduce, thus increasing the proportion of individuals within a population with advantageous characteristics. When populations become isolated, these changes may accumulate and eventually result in new species. Priority: Essential
Grade-Level Expectation(s)	<ul> <li>Analyze natural selection simulations and use data generated from them to describe how environmentally-favored traits are perpetuated over generations resulting in species survival, while less favorable traits decrease in frequency or may lead to extinction.</li> <li>Compare and contrast the role of sexual selection to the role of natural selection on the evolutionary process.</li> <li>Relate a population's survival to the reproductive success of adapted individuals in that population.</li> </ul>
Clarifications and Cognitive Level(s) Expected	This is an essential standard so it is expected that this will be a focus on the assessment.
	Depth of Knowledge Categories
	Level 1 Items: Define natural selection.
	Level 2 Items: Given an example of two "versions" of the same species, identify which is most likely to survive and procreate in a given environment (illustrating an understanding of selective pressures).
	Level 3 Items: Given an example of population data of a species over time, infer an evolutionary relationship between special characteristics and population fluctuations.

Standard Title	7 Diversity and Continuity of Living Things
Strand 7.2	Diversity and Evolution
Content Standard Statement	7.2.D Evolution does not proceed at the same rate in all populations, nor does it progress in a linear or set direction. Environmental changes have a strong influence on the evolutionary process. Other factors that influence evolution include: sexual selection, mutation, genetic drift, and genetic modification. Priority: Important
Grade-Level Expectation(s)	<ul> <li>Describe that evolution involves changes in the genetic make-up of whole populations over time, not changes in the genes of an individual organism.</li> <li>Discuss how environmental pressure, genetic drift, mutation and competition for resources influence the evolutionary process. Recognize that a change in a species over time does not follow a set pattern or timeline.</li> <li>Explain the roles of geographical isolation and natural selection on the evolution of new species.</li> <li>Predict possible evolutionary implications for a population due to environmental changes over time (e.g., volcanic eruptions, global climate change, and industrial pollution).</li> <li>Explain why homogeneous populations may be more vulnerable to environmental changes than heterogeneous populations.</li> </ul>
Clarifications and Cognitive Level(s)	This is an important standard so it is expected that less emphasis will be placed upon this standard in the assessment than is on essential standards. Note: the GLEs provide good examples of material that are testable.
Expected	Depth of Knowledge Categories
	Level 1 Items: List of things that might cause evolution—they pick the item that is not a cause of evolution. Note: evolution is a result of variation and likelihood of that variation being transmitted to offspring. Asking about "things that cause evolution" may be misleading.
	Level 2 Items: Compare natural selection to genetic drift or kin selection as an evolutionary process.
	Level 3 Items: Given population data that illustrates a genetic drift or founder's effect scenario, have students identify a reason for the proliferation of a gene within a population (e.g., tay sachs).

Standard Title	7 Diversity and Continuity of Living Things
Strand 7.2	Diversity and Evolution
Content Standard Statement	<ul><li>7.2.E Organisms are classified into a hierarchy of groups and subgroups based on similarities in structure, comparisons in DNA and protein and evolutionary relationships.</li><li>Priority: Compact</li></ul>
Grade-Level Expectation(s)	<ul> <li>Explain how evolutionary relationships between species are used to group organisms together.</li> <li>Explain how DNA evidence can be used to determine evolutionary relationships.</li> </ul>
Clarifications and Cognitive	This is a compact standard so it is expected that less emphasis will be placed upon this than essential or important standards.
Level(s) Expected	Depth of Knowledge Categories
Expected	Level 1 Items: Relates percentage of DNA similarity to evolutionary relationship.
	Level 2 Items: Provide pictures of multiple organisms and have students choose the ones that should be grouped together. Ideally students would explain or be given multiple choice reasons for their decisions.
	Level 3 Items: Provide multiple strands of DNA nucleotide code and have students determine which two samples are most likely related evolutionarily—ideally they would explain or be given multiple choices to explain why their choice is correct.

Standard Title	7 Diversity and Continuity of Living Things
Strand 7.2	Diversity and Evolution
Content Standard Statement	<ul><li>7.2.F Genetically diverse populations are more likely to survive changing environments.</li><li>Priority: Essential</li></ul>
Grade-Level Expectation(s)	
Clarifications and Cognitive Level(s) Expected	This is an essential standard so it is expected that this will be a focus on the assessment. Depth of Knowledge Categories
	Level 3 Items: Make predictions on the survival of a population that is genetically diverse versus one that is genetically similar.

Standard Title	7 Diversity and Continuity of Living Things
Strand 7.2	Diversity and Evolution
Content Standard Statement	7.2.G Biological evolution is the foundation for modern biology and is used to make predictions for medical, environmental, agricultural and other societal purposes. Priority: Essential
Grade-Level Expectation(s)	<ul> <li>Explain how antibiotic resistance populations evolve from common bacterial populations.</li> <li>Research how invasive species have genetically altered an indigenous population.</li> </ul>
Clarifications and Cognitive Level(s) Expected	This is an essential standard so it is expected that this will be a focus on the assessment.
	Depth of Knowledge Categories
	Level 1 Items: Identify genetic modification as a tool used by humans to manipulate their world for their own purposes.
	Level 3 Items: Provide population data that suggests that an invasive species has caused a shift in genetic tendencies of another organism—have students choose the most valid reason for this shift in genetics; or explain why overuse of antibiotics may lead to emergence of resistant pathogens.

Standard Title	7 Diversity and Continuity of Living Things
Strand 7.3	Technology Applications
Content Standard Statement	7.3.A The expanding ability to manipulate genetic material, reproductive processes, and embryological development creates choices that raise ethical, legal, social, and public policy questions. Priority: Compact
Grade-Level Expectation(s)	<ul> <li>Discuss examples of how genetic engineering technology can be applied in biology, agriculture and medicine in order to meet human wants and needs.</li> </ul>
Clarifications and Cognitive Level(s) Expected	This is a compact standard so it is expected that less emphasis will be placed upon this than essential or important standards.
	DOK (Depth of Knowledge)
	Level 1 Items: Give examples of how technology has been used to monitor or manipulate genetic, reproductive, or embryological processes (e.g., disease resistant plants, fertility treatment, fetal ultrasound monitoring)
	Level 3 Items: Provide students with a scenario of being able to choose the sex of your child "pre-conception"; provide four questions that relate to this scenario, and ask for the one that is most pertinent to public policy or ethics or legality, etc.; or explain opposing views of fetal stem cell research.

Standard Title	7 Diversity and Continuity of Living Things
Strand 7.3	Technology Applications
Content Standard Statement	7.3.B Recombinant DNA technology, which is a form of genetic engineering, involves the insertion of DNA from one cell into a cell of a different organism where the inserted DNA is expressed. Genetic engineering is being applied in biology, agriculture, and medicine in order to meet human wants and needs. Priority: Important
Grade-Level Expectation(s)	<ul> <li>Investigate how the human ability to manipulate genetic material and reproductive processes can be applied to many areas of medicine, biology, and agriculture. Evaluate the risks and benefits of various ethical, social and legal scenarios that arise from this ability.</li> <li>Explain the basic process of bacterial transformation and how it is applied in genetic engineering.</li> </ul>
Clarifications and Cognitive Level(s) Expected	This is an important standard so it is expected that less emphasis will be placed upon this standard in the assessment than is on essential standards.
	Depth of Knowledge Categories
	Level 1 Items: Define genetic engineering.
	Level 2 Items: Identify different organisms that would be good or bad candidates for genetic engineering and why.
	Level 3 Items: Have students identify a genetic modification suggestion for an area that needs an increase in plant production within a harsh environment (e.g., drought resistant crops).
	Level 4 Items: Ask students to explain how genetic engineering can be used to mass produce a human biological product (e.g., insulin, clotting factor).

Standard Title	7 Diversity and Continuity of Living Things
Strand 7.3	Technology Applications
Content Standard Statement	<ul><li>7.3.C DNA is analyzed to determine evolutionary relationships, study populations, identify individuals, and diagnose genetic disorders.</li><li>Priority: Important</li></ul>
Grade-Level Expectation(s)	<ul> <li>Explain how DNA evidence can be used to determine evolutionary relationships.</li> <li>Explain how developments in technology (e.g., gel electrophoresis) have been used to identify individuals based on DNA as well as to improve the ability to diagnose genetic diseases.</li> </ul>
Clarifications and Cognitive Level(s) Expected	This is an important standard so it is expected that less emphasis will be placed upon this standard in the assessment than is on essential standards.
	Depth of Knowledge Categories
	Level 2 Items: Give reasons why DNA is a suitable chemical for identification of genetic and/or evolutionary relationships.
	Level 3 Items: Given a diagram of electrophoresis gels from a possible paternity test, determine the parentage of a test subject.

Standard Title	2 Materials and Their Properties
Strand 2.1	Properties and Structures of Materials
Content Standard Statement	2.1.B Elements and compounds are pure substances. Elements cannot be decomposed into simpler materials by chemical reactions. Elements can react to form compounds. Elements and/or compounds may also be physically combined to form mixtures Priority: Essential
Grade-Level Expectation(s)	<ul> <li>Observe formulas and diagrams of compounds found in food (fats, proteins, carbohydrates). Identify elements that comprise these compounds. (2.1.2)</li> </ul>
Clarifications and Cognitive Level(s) Expected	This is an essential standard so it is expected that this will be a focus on the assessment. Depth of Knowledge Categories
	Level 1 Items: Determine the number of carbon atoms in 3C6H12O6. Identify elements important in biological molecules. Identify an element found in proteins not found in carbohydrates. Identify a structural diagram of glucose as a building block of complex carbohydrates. OR Describe how matter is conserved between the reactants and products of photosynthesis and/or cellular respiration
	Level 3 Items: Explain why carbon's bonding properties make it a good "backbone" for many biological molecules.
	Level 4 Items: Explain why a high protein diet over long periods of time may be dangerous for someone with kidney disease.

Standard Title	2 Materials and Their Properties
Strand 2.3	Conservation of Matter
Standard Statement	<ul><li>2.3.A The total mass of the system remains the same regardless of how atoms and molecules in a closed system interact with one another, or how they combine or break apart.</li><li>Priority: Essential</li></ul>
Grade Level Expectation(s)	<ul> <li>Identify the reactants and the products in equations that represent photosynthesis and cellular respiration. Explain how the equations demonstrate the Law of Conservation of Matter and Energy in terms of balanced equations.</li> </ul>
Clarifications and Cognitive Level(s) Expected	This is an essential standard so it is expected that this will be a focus on the assessment.
	Depth of Knowledge Categories
	Level 1 Items: Describe how matter is conserved between the reactants and products of photosynthesis and/or cellular respiration.
	Level 3 Items: Explain why a plant becomes appears to lose mass when placed in salt water for several hours.

Standard Title	2 Materials and Their Properties
Strand 2.4	Chemical Reactions
Content Standard Statement	2.4.C The rate of a chemical reaction depends on the properties and concentration of the reactants, temperature, and the presence or absence of a catalyst. Priority: Essential
Grade-Level Expectation(s)	
Clarifications and Cognitive Level(s)	This is an essential standard so it is expected that this will be a focus on the assessment. <i>This will be tested in terms of enzyme reactivity</i> . <b>Depth of Knowledge Categories</b>
Expected	Examples of cognitive levels:
	Level 1 Items: Describe the effect of raising reaction temperature on reaction rate (assuming no enzyme denaturation).
	Level 2 Items: Provide students with a description of environmental conditions in which an enzyme is functioning; provide four possible rates of reaction graphs and ask for the one that best describes what would happen in this situation.
	Level 3 Items: Give students a procedure for determining rate of an enzymatic reaction (e.g. amylase/starch reaction, test with iodine). Ask students how to interpret results.

Standard Title	2 Materials and Their Properties
Strand 2.4	Chemical Reactions
Content Standard Statement	<ul><li>2.4.D Energy is transformed in chemical reactions. Energy diagrams can illustrate this transformation. Exothermic reactions release energy. Endothermic reactions absorb energy.</li><li>Priority: Essential</li></ul>
Grade-Level Expectation(s)	<ul> <li>Identify the reactants and the products in equations that represent photosynthesis and cellular respiration. Explain how the equations demonstrate the Law of Conservation of Matter and Energy in terms of balanced equations. (2.3.1) (2.4.1)</li> </ul>
Clarifications and Cognitive	This is an essential standard so it is expected that this will be a focus on the assessment.
Level(s) Expected	Depth of Knowledge Categories
Lapered	Level 1: Given an energy diagram that includes values for kcal, determine (from the graph) kcal of energy absorbed or released (in other words, students must find the difference in energy from the beginning of the reaction and the end).
	Level 2: Explain that breaking bonds requires energy but forming bonds releases energy. (NOTE: This is also found in standard 3.1.6.) Look at an energy diagram and decide if energy is required for the reaction or released by the reaction.

Standard Title	2 Materials and Their Properties
Strand 2.4	Chemical Reactions
Content Standard Statement	2.4.E A catalyst lowers the activation energy of a chemical reaction. The catalyst remains unchanged and is not consumed in the overall reaction. Enzymes are protein molecules that catalyze chemical reactions in living systems. Priority: Important
Grade-Level Expectation(s)	<ul> <li>Explain how enzymes permit low temperature chemical reactions to occur in cells.</li> <li>Investigate how various factors (temperature, pH, enzyme/substrate concentration) affect the rate of enzyme activity.</li> </ul>
Clarifications and Cognitive	This is an important standard so it is expected that less emphasis will be placed upon this standard in the assessment than is on essential standards.
Level(s) Expected	Emphasis should be on the role of enzymes in cellular metabolism and not digestion.
	Depth of Knowledge Categories
	Level 1 Items: Define enzymes as biological catalysts or Identify enzymes as proteins.
	Level 2 Items: Identify catalystic characteristics of enzymes (e.g., specificity, reusability, susceptibility to conditions that disrupt protein structure) or explain why an enzyme is not included as a reactant or a product in a biochemical reaction.
	Show a chemical reaction on an energy diagram and ask students to identify the reaction as exothermic or endothermic.
	Level 3 Items: Explain why temperature and pH can affect an enzyme catalyzed reaction or explain why biological specimens (and/or food) are preserved by refrigeration in terms of enzyme activity.

Standard Title	2 Materials and Their Properties
Strand 2.4	Chemical Reactions
Content Standard Statement	<ul><li>2.4.F Certain small molecules (monomers) react with one another in repetitive fashion (polymerization) to form long chain macromolecules (polymers). The properties of the macromolecules depend on the properties of the molecules used in their formation and on the lengths and structure of the polymer chain. Polymers can be natural or synthetic.</li><li>Priority: Compact</li></ul>
Grade-Level Expectation(s)	• Expectation: Use molecular models to explain how carbon atoms uniquely bond to one another to form a large variety of molecules, including those necessary for life (e.g., polysaccharides, polypeptides). (2.4.6)
Clarifications and Cognitive	This is an important standard so it is expected that less emphasis will be placed upon this standard in the assessment than is on essential standards.
Level(s) Expected	Students need to understand that large molecules (polymers) are made of smaller molecules (monomers) and should not be held accountable for the terms dehydration synthesis or hydrolysis.
	Depth of Knowledge Categories
	Level 1 Items: Identify the monomers of a large polymer—i.e., protein is made from amino acids or items identify structural diagrams of monomers that are the building blocks of biological polymers.
	Level 2 Items: Show an equation for a biological reaction that begins with multiple monomers and results in a smaller number of polymer products. Ask students to identify the reactants and products and identify where the material came from to produce the polymer.
	Level 3 Items: Suggest reasons why the cell benefits by storing sugars as a polysaccharide.

Standard Title	3 Energy and Its Effects
Strand 3.1	Forms and Sources of Energy
Content Standard Statement	3.1.F Chemical energy is derived from the making and breaking of chemical bonds. Priority: Essential
Grade-Level Expectation(s)	
Clarifications and Cognitive	This is an essential standard so it is expected that this will be a focus on the assessment.
Level(s) Expected	Depth of Knowledge Categories
Lapoetea	Level 1 Items: Define "biological energy" as a form of chemical energy.
	Level 2 Items: Explain that breaking bonds requires energy but forming bonds releases energy. Prepare an energy diagram of a biological reaction and ask students to identify the reaction as endothermic or exothermic.
	Level 3 Items: Relate a net gain or loss of energy from a biological reaction to the end result being achieved (i.e., photosynthesis and cell respiration as energy storing or energy releasing summative reactions). Explain how a series of biochemical reactions (a pathway) may release energy overall even if individual reactions require energy.

Standard Title	3 Energy and Its Effects
Strand 3.3	The Transformation and Conservation of Energy
Content Standard Statement	3.3.A Energy cannot be created nor destroyed. Energy can be transferred from one object to another and can be transformed from one form to another, but the total amount of energy never changes. Recognizing that energy is conserved, the processes of energy transformation and energy transfer can be used to understand the changes that take place in physical systems. Priority: Essential
Grade-Level Expectation(s)	
Clarifications and Cognitive	This is an essential standard so it is expected that this will be a focus on the assessment.
Level(s) Expected	Depth of Knowledge Categories
Lapered	Level 1 Items: Identify types/examples of biological energy transformations (e.g., photosynthesis as solar to chemical).
	Level 2 Items: Provide energy-illustrating diagrams and ask students to identify the net gain (endothermic) of energy to the system or the net "loss" (exothermic) of energy from the system.
	Level 3 Items: Have students relate a net gain or loss of energy from a biological reaction to the end result being achieved (i.e., photosynthesis and cell respiration as energy storing or energy releasing summative reactions).

Standard Title	1 The Nature and Application of Science and Technology
Strand 1.1	Understandings and Abilities of Scientific Inquiry
Content Standard Statement	1.1.A Understand that: Scientists conduct investigations for a variety of reasons including to explore new phenomena, to replicate other's results, to test how well a theory predicts, to develop new products, and to compare theories. Priority: Essential
Grade-Level Expectation(s)	<ul> <li>Be able to: identify and form questions that generate a specific testable hypothesis that guide the design and breadth of the scientific investigation.</li> </ul>
Clarifications and Cognitive Level(s) Expected	This is an essential standard so it is expected that this will be a focus on the assessment.
	Depth of Knowledge Categories
	Level 1 Items: Identify a question as scientifically testable or not.
	Level 3 Items: Compare two or more hypotheses on a related question and evaluate which is the best hypothesis.

Standard Title	1 The Nature and Application of Science and Technology
Strand 1.1	Understandings and Abilities of Scientific Inquiry
Content Standard Statement	<ul><li>1.1.B Understand that: Science is distinguished from other ways of knowing by the use of empirical observations, experimental evidence, logical arguments, and healthy skepticism.</li><li>Priority: Essential</li></ul>
Grade-Level Expectation(s)	<ul> <li>Be able to: design and conduct valid scientific investigations to control all but the testable variable in order to test a specific hypothesis.</li> </ul>
Clarifications and Cognitive Level(s)	This is an essential standard so it is expected that this will be a focus on the assessment. Depth of Knowledge Categories
Expected	Level 1 Items: Identify variables and controls in an experiment scenario. Identify a statement as either an qualitative, quantitative observation, or an inference.
	Level 2 Items: Compare two experimental designs and identify the better design (add explanation to up to level 3).
	Level 3 Items: Evaluate a scientific procedure/process for validity; or select a scientific method to best address different types of scientific studies. Suggest using field or observational research, correlation studies, or cause/effect. Which method would be best to determine if humans that smoke develop lung cancer at a greater rate than nonsmokers? Which method would be best to determine the effect of a hormone on plant cell growth? How could you best determine the preferred food source for a species of bird?

Standard Title	1 The Nature and Application of Science and Technology
Strand 1.1	Understandings and Abilities of Scientific Inquiry
Content Standard Statement	<ul><li>1.1.C Understand that: theories in science are well-established explanations of natural phenomena that are supported by many confirmed observations and verified hypotheses. The application of theories allows people to make reasonable predictions. Theories may be amended to become more complete with the introduction of new evidence.</li><li>Priority: Essential</li></ul>
Grade-Level Expectation(s)	<ul> <li>Be able to: collect accurate and precise data through the selection and use of tools and technologies appropriate to the investigations. Display and organize data through the use of tables, diagrams, graphs, and other organizers that allow analysis and comparison with known information and allow for replication of results.</li> </ul>
Clarifications and Cognitive	This is an essential standard so it is expected that this will be a focus on the assessment.
Level(s) Expected	Depth of Knowledge Categories
Барессей	Level 1 Items: Define theory.
	Level 2 Items: Contrast the layperson's definition and use of the word theory to a scientist's definition and use of the word theory or distinguish a theory from a hypothesis, idea, or other scientific statement.
	Level 3 Items: Explain why theories may change over time.
	Level 4 Items: Compare data from two related experiments then evaluate if the data is confirming or contradictory (with explanations).

Standard Title	1 The Nature and Application of Science and Technology
Strand 1.1	Understandings and Abilities of Scientific Inquiry
Content Standard Statement	<ul><li>1.1.D Understand that: investigating most real-world problems requires building upon previous scientific findings and cooperation among individuals with knowledge and expertise from a variety of scientific fields. The results of scientific studies are considered valid when subjected to critical review where contradictions are resolved and the explanation is confirmed.</li><li>Priority: Essential</li></ul>
Grade-Level Expectation(s)	<ul> <li>Be able to: Construct logical scientific explanations and present arguments which defend proposed explanations through the use of closely examined evidence.</li> </ul>
Clarifications and Cognitive	This is an essential standard so it is expected that this will be a focus on the assessment.
Level(s) Expected	Depth of Knowledge Categories
	Level 2 Items: Compare and contrast two sets of data regarding variables and controls used and quality of information obtained.
	Level 3 Items: Given background information and data from several researchers' experiments involving the effect of fertilizers on plant growth, reach a conclusion about the most effective fertilizer and give supporting evidence.
	Level 4 Items: Given data from the above experiments, select the most appropriate fertilizer in certain circumstances and considering specific parameters (e.g., cost, ease of use, environmental impact versus relative efficacy).

Standard Title	1 The Nature and Application of Science and Technology
Strand 1.1	Understandings and Abilities of Scientific Inquiry
Content Standard Statement	<ul><li>1.1.E. Understand that: in communicating and defending the results of scientific inquiry, arguments must be logical and demonstrate connections between natural phenomena, investigations, and the historical body of scientific knowledge.</li><li>(American Association for the Advancement of Science, 2001)</li><li>Priority: Essential</li></ul>
Grade-Level Expectation(s)	Be able to: communicate and defend the results of scientific investigations using logical arguments and connections with the known body of scientific information.
Clarifications and Cognitive Level(s)	This is an essential standard so it is expected that this will be a focus on the assessment.
Expected	Depth of Knowledge Categories
	Level 4 Items: Analyze data such as:
	<ul><li>Maps with volcano and earthquake locations;</li><li>Fossil finds of similar animals on different continents; and</li></ul>
	<ul> <li>Patterns of antibiotic use and antibiotic resistant bacteria.</li> </ul>
	Use data, historical knowledge, reading passages, Darwin excerpts, the theories of Plate Tectonics, and the Theory of Natural Selection to explain and relate these geologic and biologic patterns.

# END-OF-COURSE ASSESSMENT RECOMMENDATIONS FOR ALGEBRA I AND INTEGRATED MATHEMATICS I

# I. INTRODUCTION: DEFINITION OF THE TASK

Secretary Lowery in consultation with the Delaware Chief School Officers approved the development of high school end-of-course exams for Algebra I and Integrated Math I. The charge to the content team was to design the end-of-course assessment expectations and guidelines.

# II. THE PROCESS

The design team task force consisted of four, high school math teachers representing each of the three counties in Delaware, two curriculum education associates, and one assessment education associate from the Delaware Department of Education:

John Melidosian	Red Clay School District	New Castle County
Ellen Carr	Capital School District	Kent County
Jan Shetzler	Caesar Rodney School District	Kent County
Renee Parsley	Sussex Technical School District	Sussex County
Crystal Lancour	Curriculum	Delaware DOE
Diana Roscoe	Curriculum	Delaware DOE
Katia Foret	Assessment	Delaware DOE

The team began the development process by reviewing the Grade-Level Expectations (GLEs) to identify the expectations that comprise "big ideas" and need to be assessed.

Delaware educators worked with Learning-Focused school consultants in 2009 to prioritize the Delaware Standards and GLEs. Prioritizing of the curriculum is designed to focus instruction on standards and GLEs that lead to the greatest student achievement. The statewide "Power Curriculum" work was used to identify important GLEs, and the team mainly selected GLEs labeled as Essential and Important. This process of selecting GLEs took place for both Algebra I and Integrated Mathematics I. A core number of GLEs were part of both courses, and the team recommends that these be the items used in the state growth formulas for AYP. A listing of these GLEs can be found in Appendix A.

Once the critical GLEs were selected and sorted by course, a course Map Timeline was used to generate the assessment percentages for each standard —Algebra, Number, Geometry, and Probability/Statistics. The Content Strand Configuration can be found in Appendix B.

The final task of day one was to review other state and national organization end-of-course documents in search of "gaps" or differences that our design may have. The following reflects the documents reviewed:

- The College Board Algebra I course standards
- Achieve ADP Algebra I End-Of-Course Exam Content Standards
- Massachusetts Learning Standards for Algebra I
- South Carolina Academic Standards for Algebra I
- Washington State High School Mathematics Standards Organized by Courses
- Indiana Algebra I standards

- Achieve, Inc. High School Integrated Model course Sequence Course I
- Georgia End-of-Course Test Content Descriptions Mathematics I
- Indiana Integrated Mathematics I Standards

On day two, the team worked to address the "gaps" that were identified at the end of day one. The following commentary captures the topics the team analyzed:

- Quadratic Functions and Laws of Exponents may indeed be a part of district Algebra I or Integrated Mathematics I content; however, the team agreed to test these concepts in year two when both courses would have ample time to solidify these concepts.
- Some gaps reflected the fact that the concepts were addressed at other grade levels in Delaware. The College Board had statistical standards in Algebra I, more aligned to Delaware's grade 12. Achieve included Triangle Congruence within the Integrated Mathematics I course sequence, yet it is not a part of the Delaware GLEs until year two.
- Another set of gaps were determined not to fall within a "big idea" that needed to be a part of the Delaware end-of-year one coursework. A traditional emphasis on adding and subtracting, multiplying and dividing polynomials and unit analysis are not a part of Delaware's GLE "big ideas," but may be included in district Algebra I, Algebra II, Precalculus, or Integrated 4 coursework.

The identified gaps were noted, but the team determined they did not need to be addressed at this time nor did they wish to alter the list of EOC assessment GLEs. The remaining part of day two was spent finding released items from assessments that could serve as sample items for the identified Delaware GLEs. The following list represents the assessment documents that were reviewed for appropriate released items:

- Delaware Item Samplers
- South Carolina Assessment Items
- Indiana Assessment Items
- Massachusetts Assessment Items
- Washington State Assessment Items
- Georgia Assessment Items
- College Board Sample Items
- Achieve ADP Algebra I Sample Items

Sample Items appear in Appendix C and include the appropriate content and process GLEs as well as a description of the intent of the item. This document contains sample items intended to serve as a starting point for future discussions on formative and summative assessment in mathematics. The content of this document may change in the future as a result of Delaware's potential adoption of the National Common Core Mathematics Standards and as the final map of Essential, Important, and Compact Mathematics standards and GLEs emerges from the Prioritized Curriculum project now underway in our state.

# **III. RECOMMENDATION FOR THE ASSESSMENT DESIGN**

The GLEs from which items can be designed appears in Appendix A. Listed in the center are GLEs common to both assessments. The GLEs listed on the left side of the table will generate

additional items specific to the Algebra I End-of-Course Exam, and the GLEs listed on the right side of the table will generate additional items specific to the Integrated Mathematics I End-of-Course Exam.

The differences will be characterized by an emphasis on symbolic manipulation, the inclusion of inequalities, and the inclusion of systems of linear equations for Algebra I. Integrated Mathematics I includes additional geometry and probability GLEs. The major focus of both assessment designs is a comprehensive understanding of linear and exponential functions. Neither assessment design focused heavily on quadratic functions, abstract work without a context, and laws of exponents which will all need to be addressed in Algebra II or Integrated Mathematics II future state designs.

# **IV. SUGGESTIONS AND CAUTIONS**

This document outlines an "assessment" end-of-course list of expectations. Under no circumstances does it serve as a "course" list of expectations. The beauty of assessing only a core list of big ideas is that it will give districts the flexibility to address the remaining grade-level expectations in a way that suits their district needs. The danger of assessing only a core list of big ideas is two-fold. Some districts may develop course work that only addresses the identified big ideas and then find that year two may need to include too many ideas. Other districts may find that students pass the state end-of-course exam but not their district coursework.

GLEs labeled "compact" in the Delaware high school standards may be embedded within certain assessment items if those concepts and skills have been required in previous grade levels. For example, in grade nine, two compact grade-level expectations that may be embedded within an assessment item are "compare relative sizes of real numbers" and "apply the order of operations." Although not directly assessed, compact GLEs embody knowledge and skills that are part of the conceptual learning progression and help to define mathematical proficiency within this learning progression.

Please note that, when limited to multiple choice items, the design team had great difficulty finding assessment items that reflect anything other than procedural fluency with some degree of reasoning (refer to Appendix C, Sample Items). Mathematical proficiency characterized by the inclusion of complex thinking, adaptive reasoning, communication of ideas, and problem-solving skills (which are all 21<sup>st</sup> Century Skills) cannot be fully assessed within a multiple choice format. The design team recommends that districts develop a brief extended response portion administered at the conclusion of the coursework to be locally scored and included in the local classroom grade. Course designs must include the entire Delaware 9<sup>th</sup> grade GLEs (refer to the tables at the end of the sample items) in addition to the assessment GLEs outlined in this document.

# V. SUMMARY

The Delaware Math design team developed a list of grade-level expectations to be assessed on the Algebra I and Integrated Mathematics I End-of-Course Assessments as well as identified the common core GLEs to be assessed by both exams. A Content Strand Configuration has been determined based on course timelines. In addition, an item sampler has been proposed in draft form to enhance teachers and test developers in their understanding of Delaware Assessment GLEs. The format of the items allows for a strong assessment of procedural fluency but a weak assessment of problem solving skills and strategies. The Math End-of-Course Assessment Recommendations for Algebra I and Integrated Math I should serve as the basis for discussions with the DCAS summative assessment vendor and Delaware mathematics educators in the December 2009 to February 2010 timeframe with due consideration for their completeness and compatibility with the proposed National Common Core Mathematics College/Career Readiness Standards.

# **APPENDIX A: DELAWARE'S ASSESSMENT EXPECTATIONS**

Algebra 1 (Additional)		Common to Both Algebra I and Integrated Mathematics I	Integrated Mathematics 1 (Additional)
		Algebraic Reasoning	
	9.2.1	Explain slope as a rate of change between dependent and independent variables	
	9.2.2	Understand and compare the graphs, tables, and equations within linear contexts that are proportional (y- intercept is the origin) and those that are not	
	9.2.3	Describe the effect of parameter changes on linear and exponential functions within a context, table, graph, and equation	
	9.2.4	Compare linear with exponential functions using, the context, table, graph, or equation	
	9.2.5	Demonstrate and apply recursive thinking to classify linear and exponential functions	
	9.2.6	Use a variety of strategies to write expressions that generate linear and exponential patterns	
	9.2.7	Model and solve real-world linear situations using tables, graphs, and symbols	
	9.2.8	Model and solve situations involving systems of equations with tables or graphs using technology	
	9.2.9	Analyze data sets using technology to find an appropriate linear and exponential mathematical model.	
	9.2.10	Demonstrate a conceptual understanding of correlation	
	9.2.12	Analyze the interrelationship among the table, graph and equation of both linear and exponential functions paying particular attention to the meaning of intercept and slope in the context of the problem	
	9.2.17	Create and solve single variable equations and inequalities algebraically and in a context	
Determine if a given value is a solution to a given equation or inequality	9.2.13		
Given a context, determine the equation of a line given combinations of point, slope, and intercept information	9.2.15		

Algebra 1 (Additional)		Common to Both Algebra I and Integrated Mathematics I		Integrated Mathematics 1 (Additional)
Convert between equivalent forms of linear functions	9.2.16			
Model and solve situations involving systems of equations and inequalities	10.2.6			
Solve systems of linear equations and inequalities both algebraically and using technology	10.2.11			
		Numeric Reasoning		
	9.1.8	Use <b>properties</b> of the <b>real number</b> system to simplify expressions (Associative, Commutative, Identity, Inverse, and Distributive)		
		Geometric Reasoning		
	9.3.1	Represent and verify parallel and perpendicular relationships in linear functions		
	9.3.5	Solve problems which require an understanding of the Pythagorean Theorem relationships		
			9.3.4	Demonstrate an understanding of and apply formulas for area, surface area, and volume of geometric figures including pyramids, cones, spheres, and cylinders
		Quantitative Reasoning		
	9.4.2	Interpret data displays for a given purpose and set(s) of data (e.g., histograms, parallel box plots, stem-and-leaf plots, scatter plots)		
	9.4.7	Define a sample space to compare probabilities using the Fundamental Counting Principle		
	9.4.8	Compare event experimental probability with theoretical probability (Law of Large Numbers)		
			9.4.5	Describe the effect of outliers in one-variable contexts
			9.4.6	Use and design simulations or experiments to determine probabilities of independent events

	Process Standards			
£σ	5.3	*Apply and adapt a variety of appropriate strategies to solve problems		
Problem Solving	5.4	*Monitor and reflect on the process of mathematical problem solving		
Γ. N	5.2	Solve problems that arise in mathematics and in other contexts		
ng &	6.2	*Make and investigate mathematical conjectures		
Reasoning & Proof	6.4	Select and use various types of reasoning (such as: compare; analyze; make an inference-inductively and deductively; evaluate) and methods of proof		
ation	7.2	*Communicate their mathematical thinking coherently and clearly to peers, teachers, and others		
Communication	7.3	Analyze and evaluate the mathematical thinking and strategies of others		
Com	7.4	Use the language of mathematics to express mathematical ideas precisely		
tions	8.1	Recognize and use connections among mathematical ideas		
Connections	8.2	Understand how mathematical ideas interconnect and build on one another to produce a coherent whole		

\* These GLEs are not reflected appropriately within the sample items due to the nature of the multiple choice format.

# APPENDIX B: Delaware's Assessment Content Strand Configuration

Content Strand Configuration for EOC			
Conten	t Standard	Algebra I	Integrated Mathematics I
Algebra	Expressions and Equation Solving	25%	25%
	Linear Functions	25%	25%
	Exponential Functions	15%	20%
	Systems of Equations	15%	0%
Νι	imber	5%	5%
Geometry		5%	10%
Probability and Statistics		10%	15%

# **APPENDIX C: SAMPLE ITEMS**

2.1 Explain slope as a rate of change between dependent and independent variables

And/Or

2.12 Analyze the interrelationship among the table, graph and equation of both linear and exponential functions paying particular attention to the meaning of intercept and slope in the context of the problem

#### **Process Grade-Level Expectation:**

- 7.4 Use the language of mathematics to express mathematical ideas precisely
- 8.1 Recognize and use connections among mathematical ideas

#### Intent of the Item:

The student must recognize that the term "slope" is represented by the rate of change in the table and will be the change in the value of the computer over the change in age of the computer. This ratio captures the average amount that the computer value depreciates each year. The rate of change is not the same for each year, which is why the vocabulary term "line of best fit" is used. The student must correctly interpret the meaning of the "rate of change" in this table, in spite of any specific number variations. A numeric value is not required here, although the student should also be able to do this as well as write an equation for the line of best fit.

#### Sample Item:

Age (in Years)	Value
(x)	(y)
0	\$800
1	\$620
2	\$410
3	\$200

The table below shows the age and the value of a computer.

Which of these is the meaning of the slope of an equation for a line of best fit for these data?

- A. The value of the computer when it was bought
- B. The amount that the value of the computer decreases per year
- C. The age of the computer depends on the value of the computer
- D. The cost it takes to purchase a new computer

2.1 Explain slope as a rate of change between dependent and independent variables

#### **Process Grade-Level Expectation:**

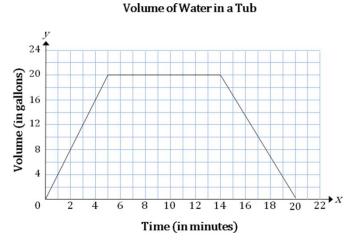
8.1 Recognize and use connections among mathematical ideas

#### Intent of the Item:

The student must first interpret the graphical representation in terms of the context in order to determine the section of the graph that represents "filling the tub." The student must then understand that the rate of change is represented by the slope of the line during this section of the graph. The student needs to correctly determine the slope of this line and finally the student must be able to convert the slope into a unit rate (per 1 minute) or initially read the graph using 1 as the change in the *x* direction.

#### Sample Item:

The graph below models the relationship between time, in minutes, and the volume of water, in gallons, in a tub.



What is the rate, in gallons per minute, at which the tub is being filled?

- A. 1 gallon per minute
- B. 4 gallons per minute
- C. 14 gallons per minute
- D. 20 gallons per minute

2.3 Describe the effect of parameter changes on linear functions within a context, table, graph, and equation.

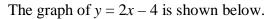
# **Process Grade-Level Expectation:**

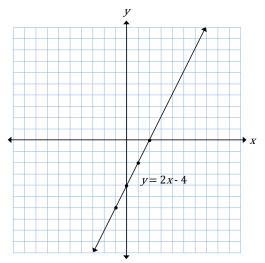
6.4 Select and use various types of reasoning (such as compare, analyze, make an inferenceinductively and deductively, evaluate) and methods of proof

#### Intent of the Item:

The item assesses student knowledge of linear intercepts within a graphical representation. Some students may also use clues from the equations and/or need to sketch the new graph.

#### Sample Item:





If the slope of the line is doubled, the new equation is y = 4x - 4. Which of these is a correct comparison of the two lines?

- A. The *x*-intercept and *y*-intercept change.
- B. The *x*-intercept and *y*-intercept stay the same.
- C. The *x*-intercept changes, and the *y*-intercept is the same.
- D. The *x*-intercept is the same, and the *y*-intercept changes.

2.6 Use a variety of strategies to write expressions that generate linear and exponential patterns

### And/Or

2.2 Understand and compare the graphs, tables, and equations within linear contexts that are proportional (y-intercept is the origin) and those that are not

# **Process Grade-Level Expectation:**

- 5.2 Solve problems that arise in mathematics and in other contexts
- 8.1 Recognize and use connections among mathematical ideas

#### Intent of the Item:

The student is expected to recognize a pattern that generates the value of Canadian currency given the number of dollars, and then create an abstract representation of the pattern in the form of an expression using the variables v and n. The strategy used to first define the pattern will vary, but many students may choose to generate the pattern for several different discrete numbers of dollars, paying attention to the process they used to generate the discrete values before they are able to write the process abstractly.

 $1 = 1.42; 2 = 2 \times 1.42 \text{ or } 2.84; 3 = 3 \times 1.42 \text{ or } 4.26 \rightarrow$ 

To get the value of the Canadian money, I take the number of U.S. dollars times  $1.42 \rightarrow$ 

 $V = n \times $1.42$  OR V = 1.42n

#### Sample Item:

When Maria went to Canada, one U.S. dollar was worth 1.42 in Canadian money. If *n* stands for the number of U.S. dollars, which equation gives the value (*v*) of those dollars in Canadian money?

A. v = n - 1.42B. v = 1.42nC.  $v = \frac{n}{1.42}$ D.  $v = \frac{1.42}{n}$ 

2.7 Model and solve real-world linear situations using tables, graphs, and symbols

#### **Process Grade-Level Expectation:**

- 5.2 Solve problems that arise in mathematics and in other contexts
- 7.4 Use the language of mathematics to express mathematical ideas precisely

#### **Intent of the Item:**

The intent of this item is to analyze and define the process for finding the monthly cell phone bill, and then write this process in the abstract format of an equation. Some students will use a strategy of finding one or several discrete answers in order to identify the process being used to find monthly cost when the minutes are over 100. For example, if the minutes are 150, then (150-100)  $50 \times \$.08$  is \$4.00 which is added to the monthly fee of \$23.95. Leading them to the abstract form of  $C = (m-100) \times (0.08) + 23.95$ . They must finally recognize that this equation could be written using different formats such as c = 23.95 + 0.08(m-100)

#### Sample Item:

A cellular phone company charges monthly rates according to the following plan:

- Monthly fee of \$23.95
- The first 100 minutes of calling time are free
- \$0.08 charge per minute of calling time over 100 minutes

If c is the total monthly cost and m is the number of minutes of calling time, which equation models this rate plan when m is greater than 100 minutes?

A. 
$$c = 0.08m - 76.05$$

- B. c = 0.08(m 100) 23.95
- C. c = 23.95 + 0.08(m 100)
- D. c = 23.95 + 0.08m

2.7 Model and solve real-world linear situations using tables, graphs, and symbols

#### **Process Grade-Level Expectation:**

6.4 Select and use various types of reasoning (such as: compare; analyze; make an inferenceinductively and deductively; evaluate) and methods of proof

8.2 Understand how mathematical ideas interconnect and build on one another to produce a coherent whole

# Intent of the Item:

The cognitive demand of this item requires students to move beyond the skill level of writing an equation directly from the given context. Students must analyze the context and compensate for the fact that the information given is not at the beginning of the payment cycle, rather eight weeks into the cycle. The student should be able to acknowledge that the beginning value and the rate of payback are the two values necessary to write the equation. They must also be able to devise a strategy for finding the beginning value. Finally, the student must write the process for finding the amount owed in the abstract form of an equation.

#### Sample Item:

A man borrows money from his relatives to buy a used car and agrees to pay them back \$45 each week. After 8 weeks, he still owes them \$1,620. Which equation expresses the amount he still owes (R) as a function of the number of weeks (W)?

- A. R = 1980 45W
- B. R = (1980 45)W
- C. R = 45W
- D. R = 1620 45W

2.12 Analyze the interrelationship among the table, graph and equation of both linear and exponential functions paying particular attention to the meaning of intercept and slope in the context of the problem

### **Process Grade-Level Expectation:**

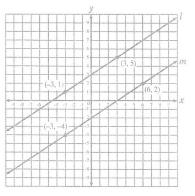
7.4 Use the language of mathematics to express mathematical ideas precisely

#### Intent of the Item:

This item assesses the student's knowledge of the meaning of mathematical terms (intercept, slope, parallel, and perpendicular) within the context of a coordinate grid and linear representations.

#### Sample Item:

The coordinate grid below shows the graphs of two lines: line l and line m.



Which of the following is a true statement about the relationship between line l and line m?

- A. The slope of line *I* is greater than the slope of line *m*.
- B. The *x*-intercept of line *m* is greater that the *x*-intercept of line *l*.
- C. The *y*-intercept of line *m* is greater than the *y*-intercept of line *l*.
- D. The slope of line *m* is greater than the slope of line *l*.

2.17 Solve single variable equations and inequalities algebraically

#### **Process Grade-Level Expectation:**

5.3 Apply and adapt a variety of appropriate strategies to solve problems

#### **Intent of the Item:**

These two items are based on the same stem and assess whether students can identify an equation that models the context and then whether the student can recognize a solution and/or problem solve for a solution.

#### Sample Item:

Chris and Kim worked together to paint skateboards. Kim painted 10 more than twice the number of skateboards that Chris painted. Together they painted 100 skateboards. Which of these equations can be used to find the number of skateboards (*c*) that Chris painted?

A. 
$$2c + 10 = 90$$

B. 
$$3c + 10 = 90$$

C. 
$$2c + 10 = 100$$

D. 3c + 10 = 100

#### Answer: D

Find the number of skateboards that Kim and Chris painted based on the item above.

- A. Kim = 90, Chris = 40
- B. Kim = 74, Chris = 26
- C. Kim = 70, Chris = 30
- D. Kim = 90, Chris = 45

#### Answer: C

2.4 Compare linear with exponential functions using, the context, table, graph, or equation

And/Or

2.5 Demonstrate and apply recursive thinking to classify linear and exponential functions

#### **Process Grade-Level Expectation:**

6.4 Select and use various types of reasoning (such as: compare; analyze; make an inferenceinductively and deductively; evaluate) and methods of proof

8.1 Recognize and use connections among mathematical ideas

#### Intent of the Items:

These two items assess whether a student can recognize the different characteristics of linear and exponential functions and can use this knowledge to compare the context, table, graph, or equation in order to identify the appropriate function family. Function families are introduced and first studied through a focus on patterning. Exponential patterns are studied following linear patterns due to the connection between the recursive patterns of both functions (constant addition vs. constant multiplication).

#### Sample Items:

Which graph represents exponential growth?



# Answer: Choice D

Which of the following represents a linear function?

A.  $f(x) = 3^{x}$ B.  $f(x) = x^{3}$ C.  $f(x) = 3x^{2}$ D. f(x) = x + 3

2.4 Compare linear with exponential functions using, the context, table, graph, or equation

#### **Process Grade-Level Expectation:**

6.4 Select and use various types of reasoning (such as: compare; analyze; make an inferenceinductively and deductively; evaluate) and methods of proof

Or

8.2 Understand how mathematical ideas interconnect and build on one another to produce a coherent whole

#### Intent of the Item:

This item assesses whether students understand that the recursive pattern that builds an exponential function continuously multiplies (by 2) rather than adding (3) which would build a linear pattern. As opposed to comparing the two functions, students must also be able to apply knowledge of exponential characteristics to infer/predict the value of r.

#### Sample Item:

Consider the table below.

x	у
0	3
1	6
2	r

What value of r will make the table a representation of an exponential function?

A. 3

B. 18

- C. 9
- D. 12

2.8 Model and solve situations involving systems of equations with tables or graphs using technology

### **Process Grade-Level Expectation:**

5.2 Solve problems that arise in mathematics and in other contexts

6.4 Select and use various types of reasoning (such as: compare; analyze; make an inferenceinductively and deductively; evaluate) and methods of proof

#### Intent of the Item:

This item assesses whether a student can write equations to represent the context and then use those equations either symbolically or with technology to find the point when both equations will intersect or equal the same value.

#### Sample Item:

Anna and Ravi became members of different health clubs on the same day.

- Anna's club charges members \$25 per month and does not require a registration fee.
- Ravi's club charges members \$15 per month plus a one-time registration fee of \$50.

After how many months of membership will Anna and Ravi have paid the same total of money?

A. 2

B. 4

C. 5

D. 10

- 2.16 Convert between equivalent forms of linear functions
- 3.1 Represent and verify parallel and perpendicular relationships in linear functions

#### **Process Grade-Level Expectation**

7.4 Use the language of mathematics to express mathematical ideas precisely

#### **Intent of the Item:**

If a student is able to correctly rewrite the format of the first given equation into slope-intercept form, it will be apparent that both equations have a slope of -1. If a student decides to apply the method of substitution, they must then make sense of why all the variables are canceled.

#### Sample Item:

Consider the system of equations below.

x + y = 6y = -x + 2

Which statement correctly describes the graphs of these equations?

- A. The lines are parallel.
- B. The lines are perpendicular.
- C. The lines intersect at (2, 4).
- D. The lines intersect at (-2, 8).

1.6 Apply the "order of operations"

# **Process Grade-Level Expectation:**

7.4 Use the language of mathematics to express mathematical ideas precisely

# Intent of the Item:

Students must demonstrate knowledge of the "order of operations" to simplify a numeric expression along with an understanding of mathematical notation such as  $3^2$  represents  $3 \times 3$  not  $3 \times 2$ . A common misconception is that multiplication is always completed before division no matter the left-to-right order of expression.

# Sample Item:

What is the value of the expression below?

 $18 \div 2 \cdot 3^2$ 

A. 81

B. 54

C. 9

D. 1

1.8 Use properties of the real number system to simplify expressions (Associative, Commutative, Identity, Inverse, and Distributive)

# **Process Grade-Level Expectation:**

8.1 Recognize and use connections among mathematical ideas

# Intent of the Item:

The student must recognize that equivalent equations can be generated by applying the same operation to all terms in an existing equation. The student must also recognize that in order to obtain 4t or (1)(4t) the inverse operation must be applied to 3 and then this same operation applied to 1 (the multiplication of 1/3).

# Sample Item:

Suppose the equation below is true.

$$3(4t) = 1$$

Which of the following must also be true?

A. 
$$4t = \frac{1}{3}$$
  
B.  $4t = \frac{3}{4}$   
C.  $4t = 1$   
D.  $4t = 3$ 

3.1 Represent and verify parallel and perpendicular relationships in linear functions

#### **Process Grade-Level Expectation:**

6.2 Make and investigate mathematical conjectures

8.2 Understand how mathematical ideas interconnect and build on one another to produce a coherent whole

#### Intent of the Item:

Students must know that parallel lines must have equal slopes, know how to determine the slope of a line given two points, and then test the possible point combinations that reflect a slope equal to that of the original line GH. They must also incorporate number sense when comparing slopes. 5/5 is equivalent to 1 and therefore also equivalent to 2/2.

#### Sample Item:

Points E, G, and H are located in the coordinate plane as follows:

E (2, 5) G (4, 1) H (-1,-4)

For which coordinates of point F will  $\overrightarrow{EF}$  be parallel to  $\overrightarrow{GH}$ ?

- A. (-4,4)
- B. (-5,-3)
- C. (0,3)
- D. (-1,1)

Answer: Choice C

3.1 Represent and verify parallel and perpendicular relationships in linear functions

#### **Process Grade-Level Expectation:**

5.3 Apply and adapt a variety of appropriate strategies to solve problems

Or

6.4 Select and use various types of reasoning (such as: compare; analyze; make an inferenceinductively and deductively; evaluate) and methods of proof

# Intent of the Item:

This item assesses the understanding of perpendicularity in relation to an equation's format and the ability to symbolically rewrite an equation in order to discover the slope. Students must recognize that slopes of perpendicular lines are negative reciprocals, whose product is -1. Although the slopes of the equations in the options are easily read as the coefficients of *x*, the equation in the prompt is not in the "slope-intercept" format. Therefore, students must use one of several strategies to determine the slope in the given equation ( $m = \frac{3}{4}$ ).

# Sample Item:

Which is the equation of a line perpendicular to 3x - 4y = 12?

A. 
$$y = 3x + 5$$
  
B.  $y = -\frac{3}{4}x + 8$   
C.  $y = \frac{4}{3}x - 3$   
D.  $y = -\frac{4}{3}x + 12$ 

Answer: Choice D

3.5 Solve problems which require an understanding of the Pythagorean Theorem relationships

#### **Process Grade-Level Expectation:**

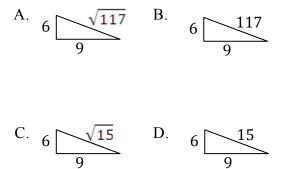
5.3 Apply and adapt a variety of appropriate strategies to solve problems

#### Intent of the Item:

This item is written at a low cognitive level and simply requires the skill of solving an equation for *c* in the formula,  $a^2 + b^2 = c^2$ . Students should be able to symbolically manipulate and solve this formula for missing values of legs or hypotenuse.

#### Sample Item:

Jacob used the Pythagorean Theorem to see how much distance he would save taking a shortcut home from football practice. He usually walked 6 blocks south and 9 blocks east. Which picture shows his shortcut?



Answer: Choice A

3.5 Solve problems which require an understanding of the Pythagorean Theorem relationships

#### **Process Grade-Level Expectation:**

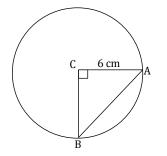
- 8.1 Recognize and use connections among mathematical ideas
- 5.2 Solve problems that arise in mathematics and in other contexts

#### Intent of the Item:

Students must first recognize that CA and DB are both radii of the same circle and that therefore the value of both legs of the right triangle are known. They must then use the Pythagorean formula to solve for the value of the hypotenuse, which is the length of AB.

#### Sample Item:

Given Circle C with points A and B on the circle, find the length of  $\overline{AB}$ .



- A.  $\sqrt{12 cm}$
- B. √18 cm
- C. 36 cm
- D. √72 *cm*

Answer: Choice D

3.5 Solve problems which require an understanding of the Pythagorean Theorem relationships

#### **Process Grade-Level Expectation:**

5.3 Apply and adapt a variety of appropriate strategies to solve problems

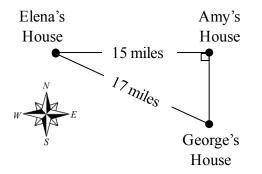
6.4 Select and use various types of reasoning (such as: compare; analyze; make an inferenceinductively and deductively; evaluate) and methods of proof

#### Intent of the Item:

This item assesses whether a student can apply the Pythagorean Theorem to find a missing distance or leg in a right triangular context.

#### Sample Item:

Elena's house is 15 miles west of Amy's house and 17 miles northwest of George's house. The houses are represented by the points shown in the diagram below.



What is the distance between George's house and Amy's house?

- A. 2 miles
- B. 8 miles
- C. 16 miles
- D. 11 miles

Answer: Choice B

4.2 Interpret data displays for a given purpose and set(s) of data (e.g., histograms, parallel box plots, stem-and-leaf plots, scatter plots)

#### **Process Grade-Level Expectation:**

6.4 Select and use various types of reasoning (such as: compare; analyze; make an inferenceinductively and deductively; evaluate) and methods of proof

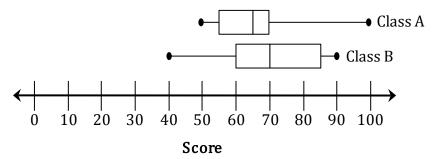
8.2 Understand how mathematical ideas interconnect and build on one another to produce a coherent whole

#### **Intent of the Item:**

Students must be able to interpret the meaning of the box, the median line, and the "whiskers" in terms of the portion of total students each part represents. Each side of the box and both whiskers represent 25% of the total class size. They then need to apply a problem-solving strategy such as compiling the number of students in each class 70 or above and subtracting this information to find "how many more."

#### Sample Item:

The box plots below show the distribution of social studies test scores for two different classes.



The minimum passing score was 70. No two students earned the same score. Class A has 28 students and class B has 32 students. How many more students in class B passed the test than in class A?

A. 4

B. 8

- C. 9
- D. 10

#### Answer: Choice C

4.7 Define a sample space to compare probabilities using the Fundamental Counting Principle

#### **Process Grade-Level Expectation:**

5.2 Solve problems that arise in mathematics and in other contexts

#### **Intent of the Item:**

Students may use the procedural knowledge of the Fundamental Counting Principle to multiply the number of shirt choices by the number of pant choices by the number of shoe choices. Students may also use strategies that help them discretely list or sort all possible choices such as a tree diagram or an organized list.

#### Sample Item:

Suppose you have one of each of the following items in your closet:

#### Items in Closet

Category	Type/Color
shirts	plaid, red, blue, or tan
pants	brown, black
shoes	plastic sandals, canvas shoes, leather shoes

How many combinations can you make using one item from each category?

A. 9

B. 12

- C. 18
- D. 24

Answer: Choice D

4.7 Define a sample space to compare probabilities using the Fundamental Counting Principle

#### **Process Grade-Level Expectation:**

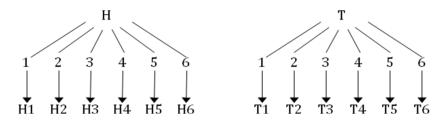
- 7.3 Analyze and evaluate the mathematical thinking and strategies of others
- 7.4 Use the language of mathematics to express mathematical ideas precisely

#### Intent of the Item:

The item assesses the student's ability to interpret a diagram that organizes the total possible outcomes for rolling a die and flipping a coin.

#### Sample Item:

The diagram shows the outcomes of flipping a coin and rolling a die.



Which statement regarding the diagram is true?

- A. The probability of obtaining "H6" is 2 out of 12.
- B. There are 14 possible outcomes in the sample space.
- C. The chance of flipping "heads" and rolling a "5" is 1 in 6.
- D. Flipping "tails" and rolling a "2" represents about 8% of the possible outcomes of the sample space.

Answer: Choice D

2.13 Determine if a given value is a solution to a given equation or inequality

## Intent of the Item:

Students must demonstrate the procedural skill of replacing a variable with a discrete value in order to justify that both sides of the equation represent equivalent values. Number sense understandings such as integer addition are required as well the ability to read. Knowledge of mathematical language is necessary to interpret the symbolic meaning of all the mathematical expressions and operations in the equation.

## Sample Item:

Which value of *p* makes the equation (-4 + p) 10 = 2p true?

A. -40B. 5 C.  $-\frac{1}{2}$ D. -5

Answer: Choice B

2.13 Determine if a given value is a solution to a given equation or inequality

#### **Process Grade-Level Expectation:**

7.4 Use the language of mathematics to express mathematical ideas precisely

#### ntent of the Item:

Students must be able to symbolically solve an inequality for an unknown variable yet be able to use the inequality symbol and interpret its use, as the item choices reverse the direction of the symbol in comparison to the original equation.

#### Sample Item:

What is the solution to the following inequality?

$$\frac{1}{3}(6-x) \ge -2$$

- A.  $x \ge 0$
- B. *x*≤0
- C. *x*≥12
- D. *x*≤12

Answer: Choice D

4.5 Describe the effect of outliers in one-variable contexts

#### **Process Grade-Level Expectation:**

7.2 Communicate their mathematical thinking coherently and clearly to peers, teachers, and others

#### **Intent of the Item:**

This item assesses the knowledge that the mean differs greatly from the median when outliers are present in the data. The student must recognize that the low of 60 is very different from the other numbers, an outlier, with a greater effect on the average of the numbers as opposed to the middle of the numbers.

#### Sample Item:

The table below shows the number of geese living at Wildlife Park from February through October.

Month	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Number of Geese	60	161	178	188	203	228	196	180	172

- The mean of the data is 174.
- The median of the data is 180.

Which statement <u>best</u> explains why the <u>mean</u> is less than the median?

- A. The data set only includes 9 months.
- B. The range of the data set is very large.
- C. The minimum value of 60 is well below the other numbers in the data set.

#### Answer: Choice C

# **Additional Grade-Level Expectations**

# Algebra I

The following tables represent the set of additional grade 9 GLEs to be included in an Algebra I course. Consequently, this content may be embedded in the DCAS summative items but may not be directly assessed on the EOC test.

	Numeric Reasoning
1.1	Demonstrate an understanding of numbers as rational or irrational
1.3	Estimate square roots
1.4	Determine the appropriateness of an answer by using number sense or estimation
1.5	Represent and operate with very large and very small numbers to include various representations of them
1.7	Make generalizations about the effect of operations on rational numbers
	Algebraic Reasoning
2.11	Demonstrate an understanding of the difference between discrete and continuous data
2.14	Make strategic selection of graphing calculator viewing window and scale to <b>solve</b> problems
	Geometric Reasoning
3.2	Classify 3-dimensional figures according to the shapes of their base(s) and faces
3.3	Use properties of triangles and quadrilaterals to construct them in the coordinate plane
3.4	Demonstrate an understanding of and apply formulas for area, surface area, and volume of geometric figures including pyramids, cones, spheres, and cylinders
3.6	Compare the relationship between the volume of different shapes with the same base and height (e.g., cylinder and cone, prism and pyramid)
	Quantitative Reasoning
4.1	Describe and <b>explain</b> how the validity of predictions are affected by number of trials, sample size, and the population
4.3	Find an appropriate mathematical <b>model</b> of a linear or exponential function and use the <b>model</b> to make predictions recognizing the limitations of the <b>model</b>
4.4	Analyze the validity of statistical conclusions on both one- and two-variable data
4.5	Describe the effect of outliers in both one-variable and two-variable contexts
4.6	Use and design <b>simulations</b> or experiments to determine probabilities of independent and <b>dependent events</b>
	Problem Solving
5.1	Build new mathematical knowledge
	Reasoning & Proof
6.1	Understand that reasoning and proof are fundamental aspects of mathematics
6.3	Develop and evaluate mathematical arguments and proofs
	Communication
7.1	Organize and consolidate their mathematical thinking through communication
	Connections
8.3	Recognize and apply mathematics in contexts outside of mathematics

## **Integrated Mathematics I**

The following tables represent the set of additional grade 9 GLEs to be included in an Integrated Mathematics I course. Consequently, this content may be embedded in the DCAS summative items but may not be directly assessed on the EOC test.

	Numeric Reasoning	
1.1	Demonstrate an understanding of numbers as rational or irrational	
1.3	Estimate square roots	
1.4	Determine the appropriateness of an answer by using number sense or estimation	
1.5	Represent and operate with very large and very small numbers to include various representations of them	
1.7	Make generalizations about the effect of operations on rational numbers	
	Algebraic Reasoning	
2.11	Demonstrate an understanding of the difference between discrete and continuous data	
2.13	Determine if a given value is a solution to a given equation or inequality	
2.14	Make strategic selection of graphing calculator viewing window and scale to solve problems	
2.15	Determine symbolically the equation of a line given combinations of point, slope, and intercept information	
2.16	Convert between equivalent forms of linear functions	
	Geometric Reasoning	
3.2	Classify 3-dimensional figures according to the shapes of their base(s) and faces	
3.3	Use properties of triangles and quadrilaterals to construct them in the coordinate plane	
3.6	Compare the relationship between the volume of different shapes with the same base and height (e.g., cylinder and cone, prism and pyramid)	
	Quantitative Reasoning	
4.1	Describe and <b>explain</b> how the validity of predictions are affected by number of trials, sample size, and the population	
4.3	Find an appropriate mathematical <b>model</b> of a linear or exponential function and use the <b>model</b> to make predictions recognizing the limitations of the <b>model</b>	
4.4	Analyze the validity of statistical conclusions on both one- and two-variable data	
	Problem Solving	
5.1	Build new mathematical knowledge	
	Reasoning & Proof	
6.1	Understand that reasoning and proof are fundamental aspects of mathematics	
6.3	Develop and evaluate mathematical arguments and proofs	
	Communication	
7.1	Organize and consolidate their mathematical thinking through communication	
	Connections	
8.3	Recognize and apply mathematics in contexts outside of mathematics	

# **END-OF-COURSE SPECIFICATIONS FOR U.S. HISTORY**

## I. INTRODUCTION: DEFINITION OF THE TASK

Delaware's Secretary of Education, Lillian Lowery, in consultation with the Delaware Chief School Officers, approved the development of a high school end-of-course (EOC) exam for Social Studies. A Social Studies design team was charged with the task of formulating course expectations and alignment to the Delaware Content Standards.

Delaware has redesigned the student testing program to require specific end-of-course assessments aligned to the content standards. United States History was chosen as the Social Studies end-of-course assessment.

#### At what grade should the test be given to students?

The Delaware Department of Education recommends that U.S. History be offered to students in grade 11. This aligns with the Delaware Recommended Curriculum in Social Studies. Students should plan to take the U.S. History EOC upon completing the course.

#### What will the EOC Assessment in Social Studies be titled?

The EOC for Social Studies will be called U.S. History. No matter what the district/school decides to call its course, the EOC Assessment will be referred to as U.S. History.

#### II. THE PROCESS

The Social Studies Design Team consists of district-level specialists, the curriculum and assessment education associate from the Delaware Department of Education, and content specialists from the University of Delaware.

Lisa Prueter	Appoquinimink School District
Bartley Dryden	Christina School District
Franklin Read	Colonial School District
Preston Shockley	Delaware Department of Education
Renee Jerns	Indian River School District
Nancy Carnevale	Milford School District
Rebecca Reed	Red Clay School District
Barbara Emery	University of Delaware
Margaret Legates	University of Delaware
Bonnie Meszaros	University of Delaware
Fran O'Malley	University of Delaware

Delaware educators worked with Learning-Focused school consultants in 2009 to prioritize the Delaware Social Studies benchmarks. The Social Studies Design Team decided to target each high school benchmark in a specific high school course in order to set curricular and assessment expectations. The team selected benchmarks for an integrated instructional design. The Civics, Economics, and Geography benchmarks that best matched the context and content of a U.S. History course join the History benchmarks as learning targets. The team used the 1995 Social

Studies Curriculum Framework and the Social Studies Standards Clarifications to guide its decisions.<sup>1</sup>

## **III. RECOMMENDATIONS FOR THE ASSESSMENT DESIGN**

The EOC assessment is based on the Delaware Social Studies Content Standards and high school benchmarks, so the test is a transfer task assessment rather than an assessment based on specific course content.

The 11<sup>th</sup> grade course in the Social Studies Recommended Curriculum has a broad chronological scope. Instruction in American history uses Delaware and the United States as a context. Since Civics, Geography, and Economics instruction is expected during this grade, the historical time frame in which instruction takes place must have a wide range. Opportunities to apply the understandings contained within the benchmark will arise from this time frame.

A student should know historical chronology in such a way as to be able to place people, laws, and events. For example, from 1850 to 2000, there was a Civil War, Reconstruction in the South, the settlement of the West, the rise of industrialization and urbanization, a labor movement, imperialism, the rise of segregation, two world wars, a Cold War, the rise of the Third World, the end of colonialism, a Great Depression, a civil rights movement, a woman's movement, a war in Korea and Vietnam, increasing technological change, and globalization. Without knowing the exact years for an event, a student should still be able to place all these trends and events within the chronology, 1850 to 2000, in their approximate place. In other words, students should know the major events and their approximate time.

An organized mental framework of events, people, trends, and other historical phenomena is essential to understanding, evaluating, and constructing historical interpretations. Such a framework allows us to draw logical inferences concerning the continuing impact of the past on the present. Individual periods, regions, or events should not be studied in isolation but rather in comparison to one another. Nor should the broad sweep of events or an emphasis on leaders, great works, and pivotal events obscure the importance of seeking to understand the everyday life of ordinary people in other times and places.

The chart below shows benchmarks selected from the 9–12 grade cluster designated for a U.S. History course. It is expected that classroom instruction in a high school U.S. History course will target these essential benchmarks, and the DCAS will reflect that expectation on the EOC assessment.

	Grade 9-12 /Benchmarks Measured in the U.S. History EOC Assessment	
Civics 2a		Geography 3a
Civics 2b		History 1a
<b>Economics 1a</b>		History 2a
<b>Economics 2a</b>		History 2b
Geography 1a		History 3a

The curricular and assessment expectations of these benchmarks are outlined in Appendix A.

<sup>&</sup>lt;sup>1</sup> Both of these documents may be found at <u>www.doe.k12.de.us/ss</u>.

## **Cognitive Framework**

Norm Webb's Depth of Knowledge framework has been used to specify the cognitive levels expected within each benchmark assessed on the EOC. (Depth of Knowledge Levels for Four Content Areas, March 28, 2002).<sup>2</sup> *The Social Studies Design Team asserts that an accurate measurement of the Delaware Social Studies benchmarks assessed on the EOC will <u>not</u> include Level 1 items.* 

## Level 1 – Recall of Information

Level 1 asks the student to recognize or identify specific information contained in graphics. This level generally requires students to identify, list, or define. The items at this level usually ask the student to recall who, what, when, and where. Items that require students to "describe" and "explain" could be classified at level 1 or 2 depending on what is to be described and explained. A level 1 "describe or explain" item would recall, recite, or reproduce information. Items that require students to recognize or identify specific information contained in maps, charts, tables, graphs, or drawings are generally level 1.

#### Level 2 – Basic Reasoning

Level 2 includes the engagement of some mental processing beyond recalling or reproducing a response. This level generally requires students to:

- Contrast or compare people, places, events, and concepts;
- Convert information from one form to another;
- Give an example;
- Classify or sort items into meaningful categories;
- Describe, interpret, or explain issues and problems, patterns, reasons, cause and effect, significance or impact, relationships, points of view, or processes.

A level 2 "describe or explain" item would require students to go beyond a description or explanation of recalled information to describe or explain a result or "how" or "why."

#### Level 3 – Complex Reasoning

Level 3 requires reasoning, using evidence, and a higher level of thinking than the previous two levels. Students would go beyond explaining or describing "how and why" to justifying the "how and why" through application and evidence. The cognitive demands at level 3 are more complex and more abstract than levels 1 or 2.

Items at Level 3 include:

- Drawing conclusions;
- Citing evidence;
- Applying concepts to new situations;
- Using concepts to solve problems;
- Analyzing similarities and differences in issues and problems;

<sup>&</sup>lt;sup>2</sup> www.asccc.org/events/Curriculum/.../NormanWebbs4levels.pdf

- Proposing and evaluating solutions to problems;
- Recognizing and explaining misconceptions or making connections across time and place to explain a concept or big idea.

#### Level 4 - Extended Reasoning

Level 4 requires the complex reasoning of level 3 with the addition of planning, investigating, or developing that will most likely require an extended period of time. The extended time period is not a distinguishing factor if the required work is only repetitive and does not require applying significant conceptual understanding and higher-order thinking. At this level, the cognitive demands should be high and the work should be very complex. Students should be required to connect and relate ideas and concepts within the content area or among content areas in order to be at this highest level.

The distinguishing factor for level 4 would be evidence through a task or product that the cognitive demands have been met. A level 4 performance will require students to analyze and synthesize information from multiple sources, examine and explain alternative perspectives across a variety of sources, and/or describe and illustrate how common themes and concepts are found across time and place. In some level 4 performance, students will make predictions with evidence as support, develop a logical argument, or plan and develop solutions to problems.

Many on-demand assessment instruments will not include assessment activities that could be classified as level 4. However, standards, goals, and objectives can be stated so as to expect students to perform thinking at this level. On-demand assessments that do include tasks, products, or extended responses would be classified as level 4 when the task or response requires evidence that the cognitive requirements have been met.

# **IV. SUGGESTIONS AND CAUTIONS**

#### What is the role of History Standard Four?

- History Standard Four 9-12a: Students will develop an understanding of modern United States history, its connections to both Delaware and world history, including:
  - Civil War and Reconstruction (1850–1877)
  - Development of an industrialized nation (1870–1900)
  - Emergence of modern America (1890–1930)
  - Great Depression and World War II (1929–1945)
  - Postwar United States (1945–early 1970s)
  - Contemporary United States (1968–present)

Teachers should not be concerned as they examine the content description in History Standard Four above and think, "That's too much. I could never do that in a school year." Actually, it is too much to cover, and becomes more ponderous with each passing year. What teachers, schools, and districts must learn to do is selectively abandon certain topics in the course of history. Do not try to cover everything. It is impossible. Do not focus too much on early 20<sup>th</sup> century topics and leave no time for more contemporary study. Adopt an approach that could be called "post-holing." Dig deeply into some topics rather than trying to "cover" everything. It is better for a student to clearly understand a concept and to be able to use *something* in history in

an explanation than it is to have a limited understanding of a concept and know a lot of *"somethings"* in history. Students understand a standard when they can apply it in a new or different situation. The teacher does not have to "cover" every potential situation for the student to be prepared. The student who can apply understanding to a new situation is well equipped for any assessment of the Delaware History Standards and for life after school.

Social Studies content should be about:

- Themes, broad historical trends, and topics that allow the four strands of the social studies to be integrated and provide a cultural context for the student.
- Relevant and important contemporary issues.
- Resources for education and not the scope and sequence contained in a textbook.

Students should know chronology in broad outlines and enough trends in history that they have a reservoir of information they can use to provide factual support and examples in their short, written responses. Students should have an understanding of trends and patterns in order to use that understanding as evidence when drawing conclusions or making inferences.

It is hard to imagine a Social Studies, History, Economics, Geography, Civics, or Government course or program that ignores events from 1950 to the present. For example, a student responding to a historian's writing published in the 1950s should be aware that the 1950s came after the Second World War or during the Cold War or during the beginning of a Civil Rights movement.

Consider these two sentences that the student might write:

- 1. He wrote this because Americans were angry at Russia.
- 2. This historian was influenced by the Cold War then taking place between the United States and Russia.

Obviously the second sentence is much stronger and reflects more understanding specifically the historical fact/content of the Cold War.

Select historical topics which are transferable, relevant, integrated, contemporary, and important. Students should study what resonates throughout history and prepares them for decisions they will face as adult citizens.

A student must know history; do not be fooled by Standard Four. The reason why specific people, laws, events, etc., are not listed in the History Standards is because no group of historians will ever agree on the essential and necessary facts that everyone should know. Remember, history does not exist until the historian looks at the sources and decides what is important and therefore what is history. This is why the initial History Standards committee decided not to produce a required list of people, laws, events, etc. The absence of a specific list does not mean students do not have to know anything. It means that a student is free to use whatever historical knowledge he or she gained in that classroom.

If students have a reservoir of historical knowledge and they understand the History Standards, they can do well on any assessment. If they lack either one—historical knowledge or an understanding of the standards—they will not do well. Make certain in your teaching that your students acquire an understanding of history and how it works as a discipline (Standards One, Two, and Three) and that they acquire knowledge of people, laws, and events and when these

historical specifics fall chronologically (Standard Four). The History Standards do not dictate a curriculum, but they do require students to have courses that equip them to bring some knowledge of history and an understanding of the standards and how to apply the standards. If the students learn information they can use it. Any assessment of the Delaware History Standards is not one to which a student can simply apply common sense or street-level knowledge. He or she must bring knowledge and an understanding of the standards to it to do well. Obviously, if he or she has little to recall (Standard Four), or if they do not understand history as a discipline (Standards One, Two, and Three), then he or she will have little to offer as a factually supported, accurate and relevant explanation.

## V. SUMMARY

Separate content standards for each discipline are not intended to imply that they should be taught in isolation, but to suggest each discipline's unique contribution to an understanding of the world. Instruction should not consist only of history, for example, without reference to geography or economics—interdisciplinary approaches are essential to reinforce students' comprehension. The individual standards should be viewed as building blocks which can be combined in any number of ways to create a solid foundation for effective citizenship.

Delaware schools are preparing our students to live in the 21<sup>st</sup> century, and while it is not possible to predict with certainty the issues that will concern Americans in the future, students prepare by learning the skills necessary to analyze contemporary issues. Some of these issues represent threats to our society: wars, poverty, or ecological disasters. Some affect the way we view ourselves: immigration, civil rights, and women's rights. Others suggest possible solutions to our most difficult problems: information technology, conservation efforts, or volunteer organizations tackling social concerns. By applying skills gained in the study of the core disciplines to contemporary issues, teachers prepare their students to deal with future challenges in their adult lives. Students learn that events are subject to different interpretations, and that they have to be capable of analyzing competing positions before making a decision. This also instills the expectation that every American citizen has both the responsibility and the right to take part in the decision-making process.

Learning in Delaware classrooms should be active rather than passive. The transfer of factual knowledge through formal presentation will always be necessary, but the Delaware high school standards also require an emphasis on critical analysis, problem solving, and application of knowledge. Assessments should center on students demonstrating understanding by transferring concepts into new contexts rather than recalling correct answers. Opportunities to teach the standards in depth should be identified in the curriculum. A teacher should use open-ended questions that have no definite right or wrong answers to invite the open debate and discussion that is most conducive to understanding. Instruction should be enhanced using the resources relevant to each content area and each standard within the content area. Students should demonstrate understanding, analysis, and application by using the tools of social studies "to think with"—maps, charts, graphs, diary and journal entries, photographs and drawings, newspaper headlines, political surveys, etc.

It is the intent of the U.S. History End-of-Course Assessment to represent essential understandings and skills (what all students should know and be able to do), not individual

discrete facts. Further, the assessment is designed to equitably measure knowledge and skills of all students with respect to the Delaware Social Studies Standards.

# APPENDIX A: Delaware Social Studies Benchmarks Assessed on the U.S. History EOC Test and Sample Items

Benchmark	<u>Civics Standard Two 9-12a</u> : Students will examine and analyze the extra- Constitutional role that political parties play in American politics.		
Sample Questions	• Why are political parties necessary to democracy? Why do two political parties dominate in America but other democracies have more?		
	• Under what conditions might political parties evolve or collapse?		
	• How might political parties provide a bridge between the people and government?		
	• How might political parties foster citizenship and participation?		
	• How do political parties help organize the government?		
	• Why would voting for presidents and congressional representatives be more difficult if political parties were not allowed?		
Cognitive Level	Level 3		

Benchmark	<u>Civics Standard Two 9-12b</u> : Students will understand that the functioning of the government is a dynamic process which combines the formal balances of power incorporated in the Constitution with traditions, precedents, and interpretations which have evolved over the past 200 years.
Sample Questions	• What problems would arise if a government failed to adapt to changing needs and desires of the people?
	• How do the structures and traditional processes of government minimize the dangers of change?
	• Why has the relative power of the Presidency increased since the early days of the country?
	• Why do many consider the Constitution a "living" document that needs to be reinterpreted from time to time to reflect new social realities?
	• Why are traditions not found in the Constitution or laws important for the conduct of government?
Cognitive Level	Level 3

For more information on the meanings and understandings in the above Civics benchmarks, please refer to the <u>Civics 9–12 Clarifications</u>.

Benchmark	<b>Economics Standard One 9-12a:</b> Students will demonstrate how individual economic choices are made within the context of a market economy in which markets influence the production and distribution of goods and services.	
Sample Questions	• How does economic self-interest (individual consumers and producers) contribute to the greater good?	
	• Does competition ensure efficiency?	
	• How do government policies affect markets?	
Cognitive Level	Level 3	

Benchmark	<b>Economics Standard Two 9-12a:</b> Students will develop an understanding of how economies function as a whole, including the causes and effect of inflation, unemployment, business cycles, and monetary and fiscal policies.	
Sample Questions	<ul><li>Why is our economy interdependent?</li><li>How might government policy decisions affect the stability of the economy?</li></ul>	
Cognitive Level	Level 3	

"Economic Stability," an instructional unit for the Delaware Recommended Curriculum that measures Economics Standard Two 9-12a, can be found at <u>http://www.doe.k12.de.us/infosuites/staff/ci/content\_areas/social\_studies/standards/pilot.shtml</u>.

For more information on the meanings and understandings in the above conomics benchmarks, please refer to the <u>Economics 9–12 Clarifications</u>.

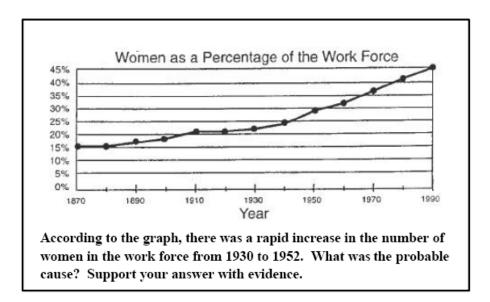
Benchmark	<b><u>Geography Standard One 9-12a</u>: Students will identify geographic patterns which emerge when data is mapped, and analyze mapped patterns through the application of such common geographic principles as "hierarchy," "accessibility," "diffusion" and "complementarity."</b>	
Sample Questions	• How is competition or interaction between places influenced by their relative location and accessibility?	
	• How might the position of a place in a settlement hierarchy affect the life of the people in that place?	
	• What makes it likely or unlikely that people and/or goods will flow between two points?	
Cognitive Level	Level 3	

Benchmark	<b><u>Geography Standard Three 9-12a</u>: Students should understand the processes which result in distinctive cultures, economic activity and settlement form in particular locations across the world.</b>	
Sample Questions	<ul> <li>Why are some places more culturally diverse or similar than others?</li> <li>How does the culture of a place change over time?</li> </ul>	
Cognitive Level	Level 3	

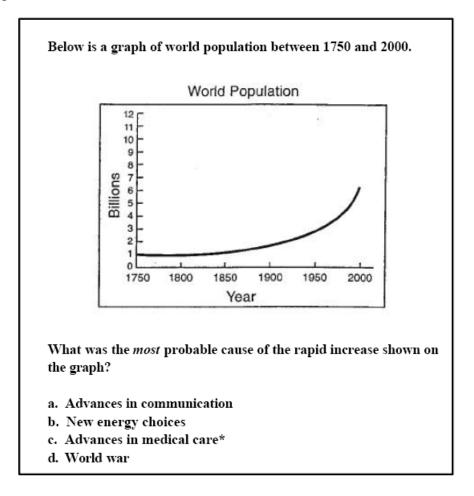
For more information on the meanings and understandings in the above geography benchmarks, please refer to the <u>Geography 9–12 Clarifications</u>.

Benchmark	<u>History Standard One 9-12a</u> : Students will analyze historical materials to trace the development of an idea or trend across space or over a prolonged period of time in order to explain patterns of historical continuity and change.
Sample Questions	• Were contemporary issues also problematic for past societies? Why are those issues difficult? Is there a pattern of continuity or change?
	• How much can we learn from studying historical responses to societal problems?
	• What factors explain the migration within the United States of population from the Frostbelt or Rustbelt to the Sunbelt? Were the attractions of retirement communities the only explanation?
Cognitive Level	Level 3

To illustrate the assessment of this benchmark, consider this sample item that focuses on the development of a trend over a period of time to explain the pattern of change. The item asks students to use information presented in a line graph (the number of women in the work force from 1870 to 1990) and to explain the rapid increase in the number of women in the work force from 1930 to 1952.

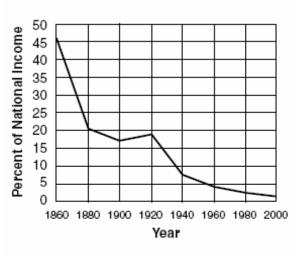


Here is another item that illustrates the assessment of this benchmark. This test item focuses on a trend in world population between the years 1750 and 2000. This trend is shown through data on a line graph.

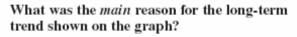


Students should recall events during that time period and analyze the effect of those events on world population in order to determine the correct answer.

The following item that asks students to be aware of the chronology, impact, and consequences of industrialization and technology on agriculture over a long period, 1860 to 2000.<sup>3</sup> In order to answer this question a student must know that the introduction of more and more mechanization greatly increased output. The long-term effect was to reduce the number of farmers needed to feed the rest of us.



# This graph shows the U.S. farmers' share of the national income from 1860 to 2000.



- F Immigration
- G Global warfare
- H Natural disaster
- J Industrialization

This assessment item uses a graph that shows the long-term decline in the farmers' share of the national income. The correct response is option J. All four possible answers—immigration, global warfare, natural disasters, and industrialization—occurred within the dates for the graph, 1860 to 2000, but only industrialization explains this long-term decline in the farmers' share of the national income, the shift from an agricultural-based economy to an industrial-based economy.

An instructional unit for the Delaware Recommended Curriculum entitled "Pandemics" that measures History Standard One 9-12a in a World History course can be found at <a href="http://www.doe.k12.de.us/infosuites/staff/ci/content\_areas/social\_studies/standards/pilot.shtml">http://www.doe.k12.de.us/infosuites/staff/ci/content\_areas/social\_studies/standards/pilot.shtml</a>.

<sup>&</sup>lt;sup>3</sup> This is a released item from the Delaware Student Testing Program. Item Samplers with annotated student work can be found at <u>http://www.doe.k12.de.us/aab/social\_studies/default.shtml</u>

Benchmarks	<b><u>History Standard Two 9-12a</u>: Students will develop and implement effective research strategies for investigating a given historical topic. <u><b><u>History Standard Two 9-12b</u></b>: Students will examine and analyze primary and secondary sources in order to differentiate between historical facts and historical interpretations.</u></b>
Sample Questions	• What is the evidence for this argument? Is that <i>all</i> the evidence, or just what the author wanted me to read?
	• Why does differentiating between fact and interpretation matter?
	• Ask students to develop research strategies, given a particular historical problem, and examine the difficulties inherent in some research.
	• Ask questions of the person who advocates a particular position. Where did they get their information? What factors influenced their point of view? How much is based on facts and how much is based upon interpretation? An understanding of the role of documentary support behind an assertion is essential for future citizenship.
	• When does the historian base their argument solidly upon sources and when does the historian express an interpretation based upon their overall research on that topic?
Cognitive Level	Level 4

An instructional unit for the Delaware Recommended Curriculum entitled "Historical Research" that measures History Standard Two 9-12a can be found at

http://www.doe.k12.de.us/infosuites/staff/ci/content\_areas/social\_studies/standards/pilot.shtml.

Benchmark	History Standard Three 9-12a: Students will compare competing historical narratives, by contrasting different historian's choice of questions, use and choice of sources, perspectives, beliefs, and points of view, in order to demonstrate how these factors contribute to different interpretations.
Sample Questions	<ul> <li>How does the way research is conducted influence a historian's interpretation?</li> <li>To what degree is a historical investigation about the historian as much as the history? Why is it necessary to include an investigation of the writer in regard to what we read?</li> </ul>
	<ul> <li>What factors contributed to this historian's conclusion and how did these factors contribute to this historian's conclusions?</li> <li>What forces molded and shaped that historian? What did he/she live through?</li> </ul>
Cognitive Level	What were the major ideas floating in the air when they grew to intellectual maturity? Level 3

Here is an item that focuses on the research procedure a historian uses to arrive at a conclusion.

Stephen Ambrose wrote a history of the Allies' D-Day invasion of Europe during the Second World War. Unlike other historians, Ambrose interviewed only soldiers in the lower ranks of the military.

How might Stephen Ambrose's use of this source and the questions he asked lead to a perspective of the D-Day invasion that differed from other historians? Explain your answer.

Specifically, it focuses on two aspects of this benchmark—what sources are used and what questions are asked of these sources. Both can dramatically affect the historian's conclusion. Neither the historian nor the sources are neutral. The historian brings his or her background, personal bias, and political outlook to any research. For many relatively recent topics, a wide variety of potential sources exist. The historian decides to approach a topic from a particular angle, perhaps not even clearly articulated, to write an interpretation of a historical event. The foundation of this standard is the understanding that the design of the research influences the conclusion. In addition, the personal background, experiences, bias, and outlook of the historian impact the research strategy. The historical facts do not speak for themselves; a historian makes the facts speak by interpreting the facts. The context of this item is information about a book by the historian, Stephen Ambrose, who interviewed only the typically nameless soldiers, whose names appear more frequently on casualty lists than in history books. His resulting book tells the story of the D-Day invasion from the perspective of a soldier, but little or nothing about the thinking behind the detailed planning or the grand strategy.

For more information on the meanings and understandings in the above History benchmarks, please refer to the <u>History 9–12 Clarifications</u>.

# APPENDIX B: U.S. HISTORY SAMPLE COURSE OUTLINE

#### Appendix B U.S. History Sample Course Outline

The 11<sup>th</sup> grade course in the Social Studies Recommended Curriculum has a broad chronological scope. Instruction in American history uses Delaware and the United States as a context. Since Civics, Geography, and Economics instruction is expected during this grade, the historical time frame in which instruction takes place must have a wide range. Opportunities to apply the understandings contained within the benchmark will arise from this timeframe.

A student should know historical chronology in such a way as to be able to place people, laws, and events. For example, from 1850 to 2000, there was a Civil War, Reconstruction in the South, the settlement of the West, the rise of industrialization and urbanization, a labor movement, imperialism, the rise of segregation, two world wars, a Cold War, the rise of the Third World, the end of colonialism, a Great Depression, a civil rights movement, a woman's movement, a war in Korea and Vietnam, increasing technological change, and globalization. Without knowing the exact years for an event, a student should still be able to place all these trends and events within the chronology, 1850 to 2000, in their approximate place. In other words, students should know the major events and their approximate time. An organized mental framework of events, people, trends, and other historical phenomena is essential to understanding, evaluating, and constructing historical interpretations. Such a framework allows us to draw logical inferences concerning the continuing impact of the past on the present. Individual periods, regions, or events should not be studied in isolation but rather in comparison to one another. Nor should the broad sweep of events or an emphasis on leaders, great works, and pivotal events obscure the importance of seeking to understand the everyday life of ordinary people in other times and places.

Grade 9-12 Benchmarks Measured in U.S. History EOC Assessment		
Civics 2a	Geography 3a	
Civics 2b	History 1a	
Economics 1a	History 2a	
Economics 2a	History 2b	
Geography 1a	History 3a	

#### **Essential Question**

How can thinking like a historian help us draw credible conclusions?

#### Benchmarks

History 2ab, History 3a

#### Content

Civil War and Reconstruction

#### Model Unit Available

History 2ab - Historical Research

#### **Essential Question**

How might where and when events occur affect the way people live?

#### Benchmarks

Economics 1a, Geography 1a

#### Content

Development of an Industrial and Urban Nation

#### **Essential Question**

How can informed and active citizens help to create a well-governed society?

#### Benchmarks

Civics 2a, History 2b, Economics 2a, Geography 3a

#### Content

Immigration, Progressivism, Imperialism, Federal Reserve Model Units in production

#### Geography 3a – Migration Patterns History 2b – Analyzing Historical Data

#### **Essential Question**

How can historical sources help us understand Americans and their experiences?

Benchmarks Economics 2a, History 3a

Content Great Depression, the New Deal, U.S. entry into World War II

#### **Essential Question**

How might new experiences, ideas, and interactions change one's view of the world?

#### Benchmarks

History 1a, Civics 2b, Geography 3a

Content

Postwar United States, Cold War, and Containment, Expansion of Civil Liberties

#### **Essential Question**

How have advances in technology affected our lives?

#### Benchmarks

Economics 1a, History 1a

#### Content

Contemporary United States, Information Age, Changing American Demographics, Globalization



SPONSOR: Rep. Schooley & Rep. Scott & Rep. Miro & Sen. Sokola & Sen. Sorenson & Sen. Cloutier Reps. Bolden, Carson, Gilligan, Hudson, J. Johnson, Q. Johnson, Longhurst, Mitchell, Osienski, B. Short

#### HOUSE OF REPRESENTATIVES 146th GENERAL ASSEMBLY

#### HOUSE BILL NO. 205

AN ACT TO AMEND TITLE 14 OF THE DELAWARE CODE RELATING TO CHARTER SCHOOLS. BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF DELAWARE:

Section 1. Amend §504A, Title 14 of the Delaware Code by striking the language in the first sentence prior to the
punctuation ":" and inserting in lieu thereof: "Consistent with its charter and the provisions of its certificate of
incorporation, bylaws or membership agreements, the board of directors of a charter school or schools shall, as to each
charter that the board holds, have the power to".
Section 2. Amend §509(b)(1), Title 14 of the Delaware Code by adding the following after the last sentence of
that subsection:
"Notwithstanding the above, a charter school in its first year of operation shall receive 50% of the anticipated

8 funding pursuant to this subsection at the beginning of the fiscal year, provided that the charter school has provided the 9 Department of Education with a preliminary roster of its students on or before May 1st of such year. The charter school 10 shall receive an additional 25% of the funding due pursuant to this subsection on October 1st of its first year in operation 11 and shall receive the remaining 25% on February 1st of its first year in operation, provided that the school has completed 12 and posted the required Standardized Financial Report Forms and the Department has reviewed those forms and determined 13 that the school's finances will not at that time lead the Department to submit the school for formal review pursuant to 14 Section 515 of this title. A determination that the school will be submitted for formal review shall prompt the Department 15 of Education to advance a level of funding appropriate to pending administrative action. The percentage of funding to be 16 provided to charter schools on July 1st and October 1st pursuant to the above may be increased in the Secretary's 17 discretion."

Section 3. Amend §509, Title 14 of the Delaware Code by adding a new subsection (k) to provide as follows:
 "(k) A charter school shall display on its website all Standardized Financial Report Forms for the current fiscal
 year and the final monthly Standardized Financial Report Forms for each previous fiscal year of operation. Charter schools

that are required to file Internal Revenue Service Form 990 shall post the current and prior year Form 990 on the website as well."

23 Section 4. Amend § 511(b), Title 14 of the Delaware Code by renaming the existing subsection (b) as subsection
24 (b)(1) and adding the following subsections:

25 "(2) A request for modification to increase a charter school's total authorized enrollment by more than 15%
26 shall be considered a major modification, regardless of whether the additional students will attend school at the current
27 location or at a separate location.

(3) In addition to meeting the approval criteria established in §512 of this title, an authorizer considering an application for a modification as described in subsection (b)(2), in which the increased enrollment will occur less than 18 months from the date of application, shall also consider the impact of the proposed increase on the schools from which the charter school's new students will likely be drawn. In reviewing the impact, the authorizer shall consider factors to be

32 established by Department regulation.

(4) Information regarding impact shall be considered in conjunction with the factors in §512 of this title and
 shall not alone provide the basis for approval or disapproval of an application for a modification as described in subsection
 (b)(2). The information regarding impact may, however, by itself or in combination with other factors, form the basis for
 conditions being placed on the approval."

Section 5. Amend § 511, Title 14 of the Delaware Code by striking subsection (e) in its entirety and inserting in
lieu thereof:

39 "(e)(1) Except as noted in Subsection (e)(2), new charter school applications shall be submitted to an approving 40 authority between November 1 and December 31 for schools to be established and prepared to admit students on or after 41 the second August 1 thereafter.

42 (2) Applications by a highly successful charter school operator as described in subsection (n) of this section 43 shall be submitted to an approving authority between November 1 and December 31 for schools to be established and 44 prepared to admit students on or after the August 1 thereafter. The application submission dates in this subsection may be 45 amended by agreement of the authorizer and the applicant if necessary to allow the applicant to serve students who would 46 otherwise be displaced due to the closure of an existing charter school.

47 (3) Applications to renew a charter shall be submitted to the approving authority on or before September 1 of 48 the year immediately preceding the calendar year in which the school's current charter term will expire, except that all 49 applications to renew a charter that expires on or before December 31, 2012 shall be submitted to the approving authority 50 on or before October 15, 2011. 51 (4) Charter school applications which propose the conversion of an existing public school, or a part thereof to 52 charter school status must be submitted to an approving authority on or before October 30 if the application proposes that 53 the newly converted charter school is to be established and prepared to admit students for the next ensuing school year.

54

55

(5) If the date for submitting an application or commencing the school's instructional program shall fall on a weekend or state holiday, the time for such shall be continued to the first working day thereafter."

56 Section 6. Amend § 511(f), Title 14 of the Delaware Code by inserting "new charter school" in the first sentence 57 of that subsection after "number of" and before "applications it will consider", and by inserting "new charter school" in 58 each of the second and third sentences of that subsection after "accept any" and before "applications".

59 Section 7. Amend §511, Title 14 of the Delaware Code by adding the following subsections (n) through (r):

60 "(n) "Highly successful charter school operator" means an entity that currently operates or whose principals 61 currently operate one or more highly successful charter schools showing sustained high levels of student achievement and 62 sustained fiscal stewardship, as further defined by Department regulation. Notwithstanding the provisions of this chapter, for purposes of this definition the phrase "charter school" shall include public schools operated under a charter regardless of 63 64 whether the schools are located or organized in Delaware. A highly successful charter school operator may be authorized 65 to operate a charter school in the timeframe provided by subsection (e)(2) provided that the application is submitted for the 66 purpose of operating a charter school at the site of and serving students currently attending a charter school whose charter 67 has been revoked, has not been renewed, or whose charter is on formal review and whose board has agreed to abandon their 68 charter.

69 (0) The charter school application shall include a disclosure of any ownership or financial interest in the 70 charter school, including but not limited to the building and real property to be used in the operation of the charter school, 71 by the charter school founders and the board of directors of the proposed charter school. If the building and real property to 72 be used in operation of the charter school are not known at the time of application, disclosures pertaining to those interests 73 shall be made once the building and real property to be used in operation of the charter school become known. In addition, 74 the board of directors of the charter school shall have a continuing duty to disclose such interests to the approving authority 75 pursuant to this chapter during the terms of any charter. The charter school and the Department shall promptly disclose the 76 information required by this subsection to any member of the public upon request.

(p) Charter school board members and founders shall be required to complete the criminal background checks in the same manner as persons seeking employment with a public school pursuant to Section 8571(a) of Title 11. In addition, the authorizer shall complete a check of the Child Abuse Registry established by Section 921 of Title 16 for charter school founders and board members. The results of said background and Child Abuse Registry checks shall be 81 provided to the authorizer for review as part of the application process and on an ongoing basis if new board members are 82 seated or current board members are convicted of a crime or placed on the Child Abuse Registry. Any person convicted of 83 a felony offense or of any crime against a child in this State or any other jurisdiction shall not be permitted to serve as a 84 founder or member of a charter school board of directors. No individual shall be permitted to serve as a charter school 85 founder or board member if the individual would not be permitted to be employed in a public school pursuant to Section 86 8563 of Title 11 regarding the Child Abuse Registry. Other crimes may be considered disqualifying, in the discretion of the 87 authorizer. The State Bureau of Identification may release any subsequent criminal history to the authorizer. Individuals 88 currently serving as board members of a charter school must complete a criminal background check and the Department 89 shall complete a Child Abuse Registry check for such members on or before February 1, 2012.

90 (q) The founder or board member shall be provided with a copy of all information forwarded to the
91 authorizer pursuant to subsection (p). Information obtained under subsection (p) is confidential and may only be disclosed
92 to the chief officer and one additional person in each authorizing body.

93 (r) Costs associated with obtaining criminal history information and child protection registry checks shall be
94 paid by the applicant."

95 Section 8. Amend § 512(1), Title 14 of the Delaware Code by striking the phrase "at the school and a parent of a
96 student enrolled at the school as members" and inserting in lieu thereof the phrase "from at least one of the charter schools
97 operated by the board and at least one parent of a student enrolled in a charter school operated by the board."

98 Section 9. Amend § 513(a), Title 14 of the Delaware Code by adding the following sentence at the end of that
 99 subsection:

100 "The charter school shall contract to have an audit of the business and financial transactions, records, and accounts

after July 1 for the prior fiscal year. The results of the audit shall be shared with the Department of Education. A charter

102 school shall display on its website the annual report including financial statement and audit required by this subsection."

103 Section 10. Amend Title 14, Chapter 5 by adding a new §517 to read as follows:

104 "§517. Charter Transfer to Different Authorizer

105 Transfer of a charter, and of oversight of that public charter school, from one authorizer to another before the

106 expiration of the charter term shall require a petition by the public charter school or its authorizer to the new authorizer. A

107 petition to transfer is considered a major modification and will follow the same timelines and hearing process as a major

108 modification."

109 Section 11. Amend Title 14, Chapter 5, by adding a new Section 518 to read as follows:

110 "§ 518. Oversight and Revocation for Multiple Charter Holders

HD : MPM : CMG 4141460161

- 111 For purposes of §§ 515 and 516 of this title, each charter held by a common board of directors shall be treated
- separately and individually."
- Section 12. Amend § 1802, Title 14 of the Delaware Code by deleting that section in its entirety and replacing itwith the following:
- 115 "§ 1802. Financial Recovery Team.
- 116 Upon the recommendation of the Secretary of Education ("Secretary") that a school district or charter school is in
- 117 financial distress as provided in paragraph (1) of this section, the Director of the Office of Management and Budget
- 118 ("Director"), with the consent of the Controller General, may appoint a Financial Recovery Team ("Team"), and the
- 119 Department of Education is hereby authorized to secure technical assistance and other resources as necessary to ensure the
- 120 effective operations of the Team.
- (1) For the purposes of this section a local school district or charter school shall be considered in financial distresswhen 1 or more of the following criteria are met:
- 123

124

- a. The district financial position report required to be submitted on May 1, pursuant to § 1507(a) of this title, projects less than 1 month's carryover; or
- b. It is projected at any time during the course of the fiscal year that local payroll expenses will exceed
   projected local revenues; or
- 127 c. The charter school has been placed on formal review based, at least in part, on concerns regarding the
   128 charter school's finances: or
- d. Whenever a school district or charter school projects that it cannot fund 1 or more scheduled payroll
  disbursements.
- 131 (2) During any period of time when it is determined that a school district or charter school is in financial distress, 132 the Financial Recovery Team shall be empowered to exercise, subject to the approval of the Secretary, control over the 133 expenditure of funds appropriated to a school district or charter school as deemed necessary by the members of the Team. 134 Control shall include, without limiting the foregoing, the right to approve the school district's or charter school's annual 135 budget and any subsequent material amendment thereto, the right to approve district tax rates, the right to request 136 drawdown of state financial assistance if applicable, the right to approve financial reporting to the local board of education 137 or charter school board, the right to approve accounting policies, procedures and reports, the right to require a Financial 138 Responsibility Committee be established by the local school board or charter school comprised of 1 or more members of 139 the said board and/or residents of the district or, in the case of a charter school, parents of students attending the school. 140 The Committee shall examine and report on the financial status of the district or charter school and shall have the right to

- 141 pre-approve any obligation or contract that would require the expenditure of funds by the school district or charter school.
- 142 Notwithstanding any provision of either this Code or any applicable rule or regulation to the contrary, the authority
- 143 extended under this section shall apply to the expenditure of all funds received by a school district or charter school.

144 (3) The Financial Recovery Team shall report at least monthly to the Governor, the General Assembly, Director

- and the Controller General regarding the district's or charter school's current and projected financial position.
- 146 (4) The district or charter school shall reimburse the State for all salary and related costs of the Financial Recovery
- 147 Team.
- 148 (5) Upon the recommendation of the Secretary that a school district or charter school is no longer in financial
- distress as defined in this section, the Director, with the consent of the Controller General, may elect to remove the
- 150 members of the Financial Recovery Team."

#### **SYNOPSIS**

This legislation will assist the State to better ensure that charter schools being approved are of high quality, and to respond more appropriately when issues arise. To help ensure that individuals governing our charter schools have the appropriate background and qualifications, this legislation requires criminal background and child abuse registry checks for charter school board members, and it will prohibit individuals who have felony convictions or convictions for a crime against a child from serving on a charter board. Charter school board members will be required to disclose any financial interest they may have in the charter school, so that parents and others may learn and inquire about any financial arrangements benefiting a school board member. In addition, new charter schools would receive less funding at the start of the year, with the remainder of the funding provided throughout the year after a review by the Department to ensure that the finances of the school are sound. The legislation also requires an annual external audit of charter schools and adds charter schools to the Finance Recovery Team portion of the Delaware Code, which currently applies only to school districts, authorizing the Director of the Office of Management and Budget to appoint a team to assess the financial status of a charter school that is on formal review, to provide information to parents and teachers regarding status, and to make certain decisions regarding payments by the charter school.

The legislation also moves up the deadline by which charter renewal decisions must be made so that, if a charter is not going to be renewed, that decision is made prior to the school choice deadline. And it creates a mechanism for permitting a high performing charter operator to open a school that would serve students at a charter school that is slated for closure, providing greater opportunities and avoiding significant disruption for the students. Using this provision, a highly successful charter school operator could apply for a new charter to serve the students at the closing charter school, and the applicant could be permitted to begin operating in less than the 18 months currently required between the filing of the application and the opening of the charter school. To facilitate this action, the legislation adds flexibility to board composition requirements, so that governing boards continue to have teacher and parent representation but are not required to have such representation from every school for which a charter is held.

This legislation would also clarify that a request to change a charter school's authorizer (from the Department to a district or vice-versa) or to increase by more than 15% the number of students that may be served by a charter school is a major modification. Since modifications to increase the number of students served by a school can be implemented in 7 to 8 months, the legislation allows the authorizer to consider the impact that expanding enrollment of a charter school in the shortened timeframe will have on the traditional schools from which the students will be drawn.