CDT Overview Training

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www.iu9.org/cdt

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CLASSROOM
DIAGNOSTIC TOOLS

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Why Am I Here?

- FREE to PA schools
- Designed for instructional planning
- Reliable, valid, correlated

DATA RECOGNITION
DRC
CORPORATION

25 million students in 38 states tested in a season

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Why are you here…

- You recognize the importance of diagnostic data in assisting students meet their potential.
- Data can be available and useful to all.
- Promotes cross-curricular discussion.
- Team effort
  - Shows Importance to Students
  - Connection/Student Buy In
  - Perceptions
  - Misconceptions
  - Motivation
- Something to build upon as CDT is available for math, science, reading, and writing at many different grade levels.

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Goals for the Session

- Provide CDT ***background***.
- Provide opportunity to ***experience assessment***.
- Provide brief ***overview of data*** available.
- Provide basic understanding of different ***reports*** and their purpose.
- Provide ***practical first steps*** to using the data.
- Provide strategies for ***preparing and motivating students*** for best results before, during, and after the assessment.
- ***Student Conferencing***/Next Steps

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Questions about CDTs? Current Experience?

Today is a guided conversation and all about meeting your needs, answering your questions, exploring your ideas.

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Background

What is the assessment, how was it developed, how does it work?

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Value Added: Transforming Instruction

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Pennsylvania Assessments

	Diagnostic	Formative	Benchmark	Summative
Purpose	Guide instruction specifically targeted to meet students' needs, including students' strengths and areas of need	Inform ongoing classroom instruction so that adjustments to instruction can be made	Determine how well students are progressing toward demonstrating proficiency on a set of designated grade-level curriculum content standards	Determine the degree to which students have mastered a designated set of curriculum content standards
Impact on Instruction	Tools that provide alignment to units, lesson plans, and other resources based on students' needs	Classroom-based activities integrated into instruction and learning with teachers and students receiving frequent feedback	Low-stakes assessments used to predict how students will do on the high-stakes summative assessments	Assessments used for accountability
Intended Users of the Results	Students, parents, and educators	Students, parents, and educators	Students, parents, and educators	Educators, parents, public at large, and district personnel
Examples	Classroom Diagnostic Tools (CDT) Teacher-created diagnostics	Teacher-selected Classroom assessments Response cards White boards Random selection	Acuity Assess2Know 4-Sight	PSSA Keystone Exams ACCESS for ELLs End of Unit/Chapter Tests District End of Course Exams
Type of Information Provided	Provides a more complete picture of a student's or group of students' strengths and areas of need so that instruction can be targeted directly at meeting student needs	Provides feedback related to a specific unit or lesson so that feedback can be used to inform classroom instruction and learning during the teaching/learning process	Provides information on the degree to which students have mastered a given concept or how students are progressing toward demonstrating proficiency on grade-level content standards	Provides information on students' mastery of a given set of content standards

What are the limitations of benchmark and summative assessments?

- Low-achieving students?
- High-achieving students?
- Individual backgrounds/experiences?

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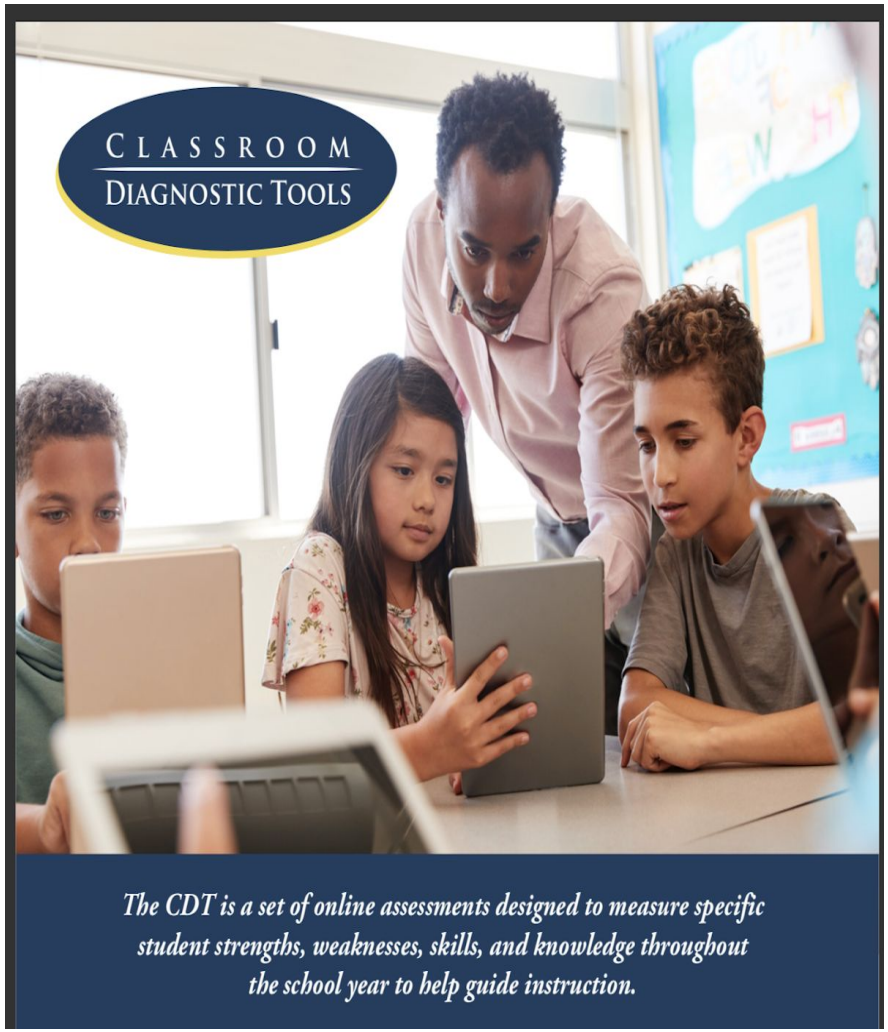
What are the PA Classroom Diagnostic Tools?



- available at ***no cost*** to districts
- integrated and aligned with the ***Standards Aligned System (SAS)***
- assist educators in identifying ***students' academic strengths*** *and* ***areas of need***

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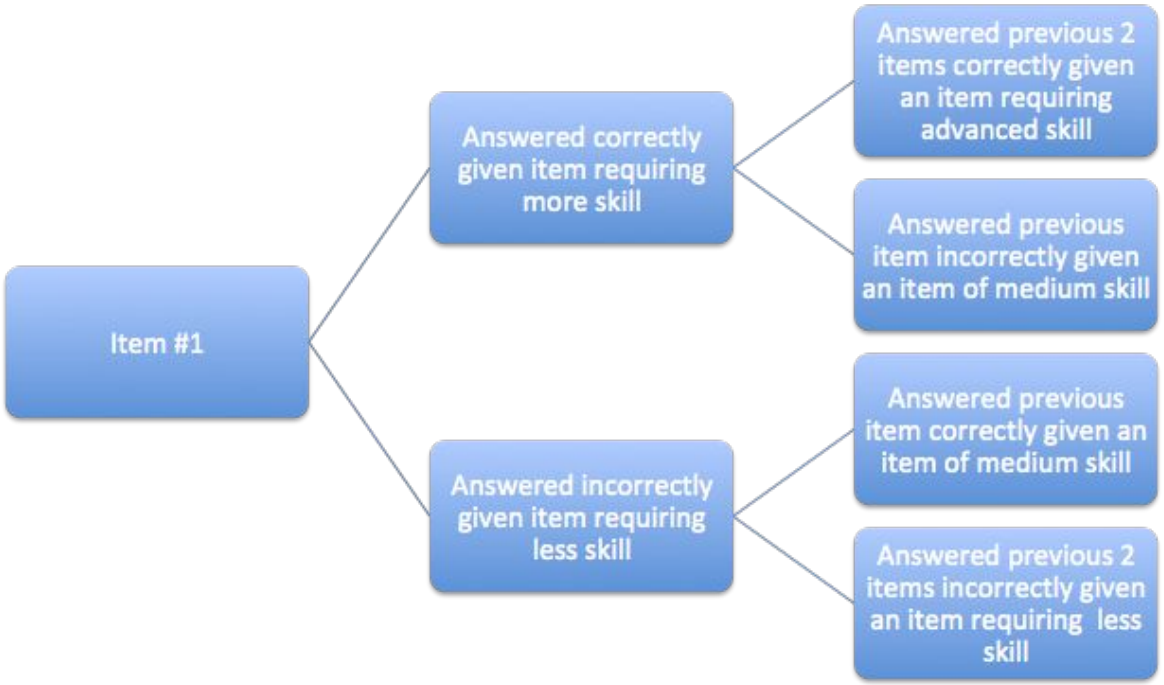
What are the PA Classroom Diagnostic Tools

- Offered to students in ***grades 3 through high school***.
- ***Available*** for use in the classroom ***throughout the school year*** on a **voluntary** basis multiple times per year.
- Based on content assessed by the ***Keystone Exams*** and the ***Pennsylvania System of School Assessment (PSSA)***.
- Composed of ***multiple-choice items*** (and Evidence-Based Selected-Response ***EBSR***)
- Delivered as an online ***Computer Adaptive Test*** (CAT), ensuring **valid** and ***reliable*** measures of a student's skills.
- Designed to provide ***real-time results*** for students and teachers with links to Materials and Resources in SAS.
- Can be administered by full content area or one or

Computer Adaptive Test



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Pennsylvania-Specific

- Test items **created to align to the PA Core** not back mapped
- **PA educators involved** in setting original benchmarks, review of items, field testing data review, and vetting links to SAS resources
  - Sign up to be a part of this work.
- CDT Core **uses feedback** from PA educators to make improvements

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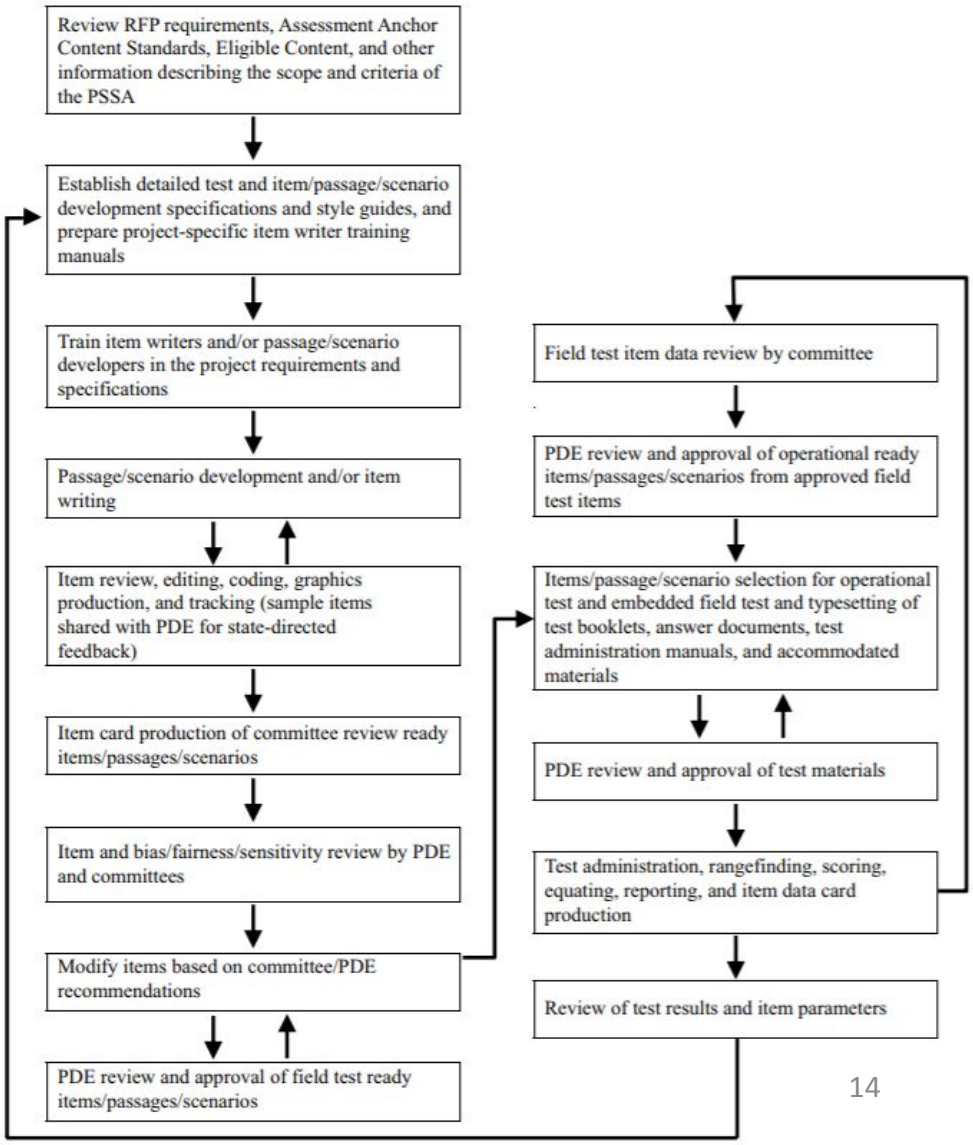
Question Development

Item Development (DRC/PDE)

Committee (Teachers…)

- Bias/Fairness/ Sensitivity
- Modifications
- Field Test
- Rangefinding
- Scoring

Figure 3–2. DRC Item and Test Development Process



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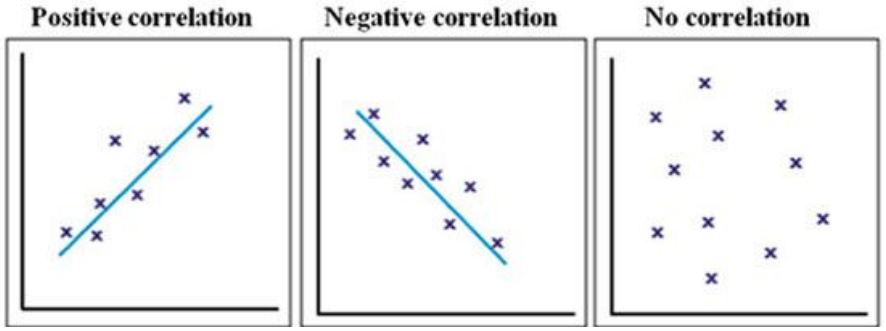
Correlation



Reading/Literature	PSSA ELA Grade 6	6	26166	0.81
Reading/Literature	PSSA ELA Grade 7	7	28420	0.80
Reading/Literature	PSSA ELA Grade 8	8	29193	0.77

Mathematics	PSSA Math Grade 6	6	31231	0.83
Mathematics	PSSA Math Grade 7	7	31965	0.83
Mathematics	PSSA Math Grade 8	8	25906	0.80

Science - Lower Grades	PSSA Science	4	11502	0.77
Science	PSSA Science	8	29080	0.76

6–12	Algebra I	Keystone Algebra I	37,633		0.777
6–12	Biology	Keystone Biology	48,408		0.810
6–12	Reading/Literature	Keystone Literature	41,321		0.762

Table 19–4. Correlations among Students' Performance Between PSSA and CDT Tests

CDT	PSSA	Grade	N	r
Mathematics - Lower Grades	PSSA ELA Grade 3	3	21385	0.70
Mathematics - Lower Grades	PSSA ELA Grade 4	4	23331	0.71
Mathematics - Lower Grades	PSSA ELA Grade 5	5	26543	0.73
Mathematics	PSSA ELA Grade 6	6	31240	0.74
Mathematics	PSSA ELA Grade 7	7	31958	0.73
Mathematics	PSSA ELA Grade 8	8	25942	0.71
Reading - Lower Grades	PSSA ELA Grade 3	3	19214	0.81
Reading - Lower Grades	PSSA ELA Grade 4	4	21214	0.82
Reading - Lower Grades	PSSA ELA Grade 5	5	23880	0.82
Reading/Literature	PSSA ELA Grade 6	6	26166	0.81
Reading/Literature	PSSA ELA Grade 7	7	28420	0.80
Reading/Literature	PSSA ELA Grade 8	8	29193	0.77
Science - Lower Grades	PSSA ELA Grade 3	3	2230	0.75
Science - Lower Grades	PSSA ELA Grade 4	4	11505	0.74
Science - Lower Grades	PSSA ELA Grade 5	5	2066	0.75
Science	PSSA ELA Grade 6	6	10742	0.73
Science	PSSA ELA Grade 7	7	17086	0.71
Science	PSSA ELA Grade 8	8	29195	0.70
Writing - Lower Grades	PSSA ELA Grade 3	3	2481	0.77
Writing - Lower Grades	PSSA ELA Grade 4	4	2914	0.78
Writing - Lower Grades	PSSA ELA Grade 5	5	3813	0.79
Writing - English Comp	PSSA ELA Grade 6	6	5917	0.79
Writing - English Comp	PSSA ELA Grade 7	7	8747	0.79
Writing - English Comp	PSSA ELA Grade 8	8	8952	0.76
Mathematics - Lower Grades	PSSA Math Grade 3	3	21387	0.78
Mathematics - Lower Grades	PSSA Math Grade 4	4	23362	0.80
Mathematics - Lower Grades	PSSA Math Grade 5	5	26551	0.80
Mathematics	PSSA Math Grade 6	6	31231	0.83
Mathematics	PSSA Math Grade 7	7	31965	0.83
Mathematics	PSSA Math Grade 8	8	25906	0.80
Reading - Lower Grades	PSSA Math Grade 3	3	19214	0.73
Reading - Lower Grades	PSSA Math Grade 4	4	21236	0.72
Reading - Lower Grades	PSSA Math Grade 5	5	23882	0.72
Reading/Literature	PSSA Math Grade 6	6	26154	0.73
Reading/Literature	PSSA Math Grade 7	7	28418	0.73
Reading/Literature	PSSA Math Grade 8	8	29137	0.69
Science - Lower Grades	PSSA Math Grade 3	3	2229	0.71
Science - Lower Grades	PSSA Math Grade 4	4	11524	0.68

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Test Time Analyses (Full CDT)

Table 1. Average Test Length across Content Areas and Grades

		2016-17 Data Set			2014-15 Data Set		
Content Area	Grade	N-count	Average Number of Questions	Average Test Time (minutes)	N-count	Average Number of Questions	Average Test Time (minutes)
Math	3	39,546	51.9	51.3	24,173	51.5	51.5
Math	4	43,502	51.5	58.1	23,326	51.1	57.3
Math	5	45,087	51.2	61.7	25,260	50.9	60.4
Math	6	54,442	51.9	69.3	28,097	51.9	71.3
Math	7	54,425	51.5	63.8	28,727	51.5	63.2
Math	8	46,407	51.6	59.1	21,344	51.6	58.1
Reading	3	33,109	55.1	80.1	24,158	55.1	77.0
Reading	4	35,704	55.0	82.8	24,421	55.2	82.2
Reading	5	39,135	54.9	84.2	25,126	55.2	82.0
Reading	6	46,377	54.8	84.7	27,462	54.9	83.3
Reading	7	50,264	54.9	73.6	29,333	55.1	71.2
Reading	8	50,711	55.3	64.4	30,136	55.3	63.4

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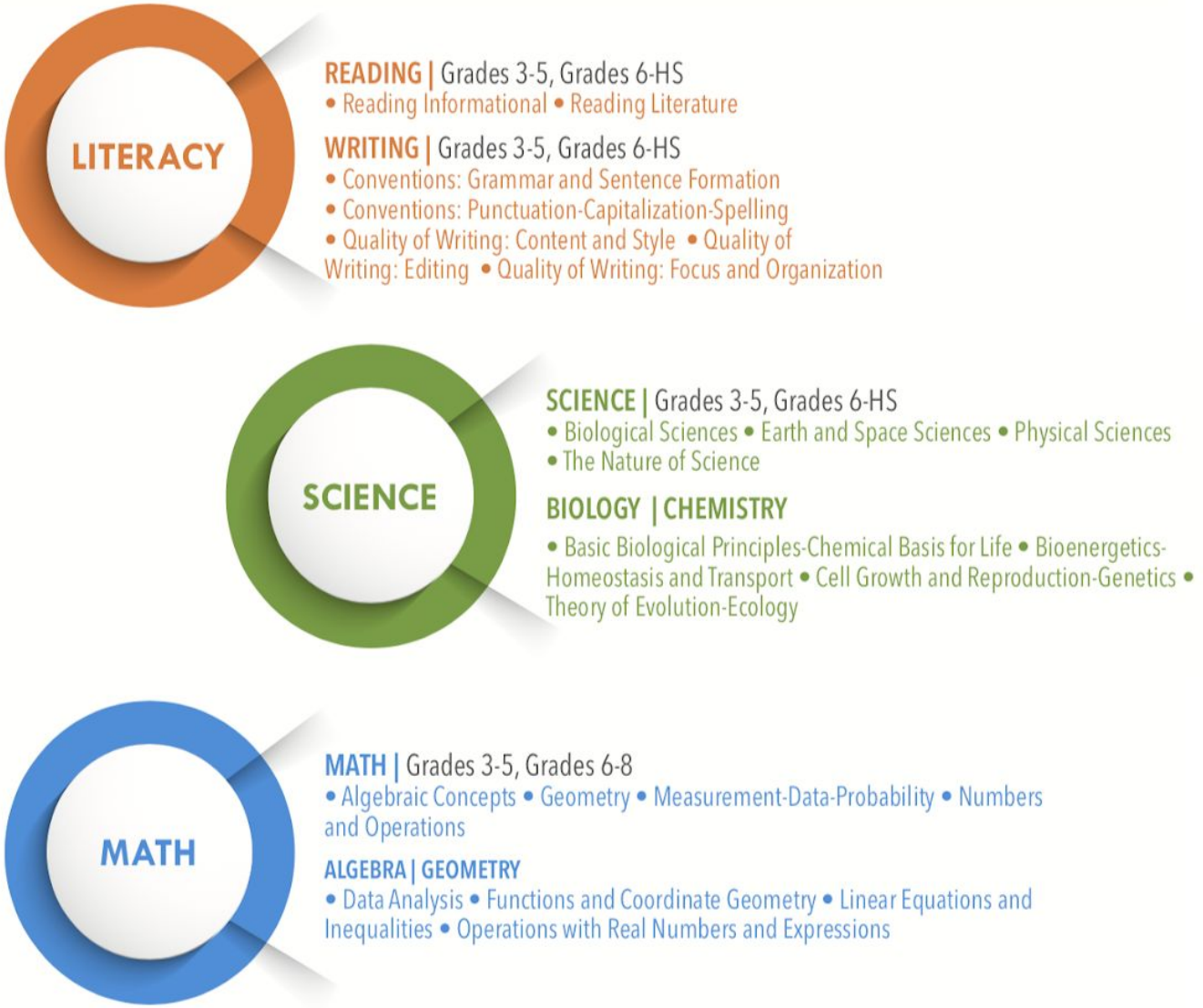
CDT Content Areas



Classroom Diagnostic Tools

CDT Diagnostic Category Testing

Content Area	Assessment	Diagnostic Category Tests
Mathematics	Math Grades 3-5	• Algebraic Concepts • Geometry • Measurement-Data-Probability • Numbers and Operations
	Math Grades 6-8	• Algebraic Concepts • Geometry • Measurement-Data-Probability • Numbers and Operations
	Algebra I	• Data Analysis • Functions and Coordinate Geometry • Linear Equations and Inequalities • Operations with Real Numbers and Expressions
	Algebra II	• Data Analysis • Functions • Non-Linear Expressions and Equations • Operations with Complex Numbers
	Geometry	• Congruence-Similarity-Proofs • Coordinate Geometry and Right Triangles • Geometric Properties • Measurement

NOTE: Each Diagnostic Category Test can be ***given up to 5 times*** within the school year.

Classroom Diagnostic Tools

CDT Diagnostic Category Testing

Content Area	Assessment	Diagnostic Category Tests
Literacy	Reading Grades 3-5	• Reading Informational* • Reading Literature**
	Reading/Lit Grades 6-HS	• Reading Informational* • Reading Literature**
	Writing Grades 3-5	• Conventions: Grammar and Sentence Formation • Conventions: Punctuation-Capitalization-Spelling • Quality of Writing: Content and Style • Quality of Writing: Editing • Quality of Writing: Focus and Organization
	Writing/Eng Comp Gr 6-HS	• Conventions: Grammar and Sentence Formation • Conventions: Punctuation-Capitalization-Spelling • Quality of Writing: Content and Style • Quality of Writing: Editing • Quality of Writing: Focus and Organization

***Reading Informational:** *Key Ideas and Details-Informational Text Craft and Structure, and Integration of Knowledge and Ideas - **Informational Text**, Vocabulary Acquisition and Use*
****Reading Literature:** *Key Ideas and Details-Informational Text Craft and Structure, and Integration of Knowledge and Ideas - **Literature Text**, Vocabulary Acquisition and Use*

NOTE: Each Diagnostic Category Test can be ***given up to 5 times*** within the school year.

CDT Diagnostic Category Testing

Content Area	Assessment	Diagnostic Category Tests
Science	Science Grades 3-5	• Biological Sciences • Earth and Space Sciences • Physical Sciences • The Nature of Science
	Science Grades 6-HS	• Biological Sciences • Earth and Space Sciences • Physical Sciences • The Nature of Science
	Biology	• Basic Biological Principles-Chemical Basis for Life • Bioenergetics-Homeostasis and Transport • Cell Growth and Reproduction-Genetics • Theory of Evolution-Ecology
	Chemistry	• Atomic Structure and The Periodic Table • Chemical Relationships and Reactions • Properties and Classification of Matter • The Mole and Chemical Bonding

NOTE: Each Diagnostic Category Test can be ***given up to 5 times*** within the school year.

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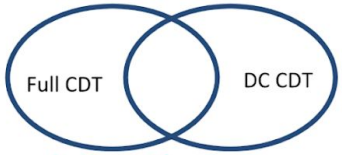
Summary

Full CDT

- 13 Computer Adaptive tests across 4 subjects; Rdg, Writing, Math & Science
- 4-5 separate diagnostic categories per test;
- and 50-60 items per test.

Comparison of Features: Full CDT & DC CDT



Demo script math
Demo script reading

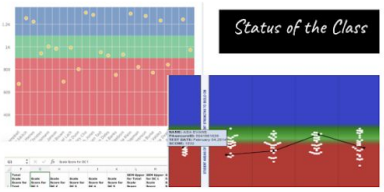
Diagnostic Category CDT:

- 50 tests (each Diagnostic Category is considered a test);
- 15-18 items for Diagnostic Category in math, science, writing;
- Reading Diagnostic Category for informational or literature shortens full CDT by ½ . (slide 3 & 4)

Full CDT Reports:

- Group Map
- Individual Map
- Group Learning Progression
- Individual Learning Progression
- Download CSV to create Growth Spreadsheet, Focus Group, etc...

Comparison of Reports: Group & Individual Maps



Screencasts:
DC CDT Group Map
DC CDT Individual Map
DC Learning Progression

Diagnostic Category CDT Reports:

- Group Map,
- Individual Map,
- Group Learning Progression,
- Individual Learning Progression
- Growth & Focus (new)

System will automatically calculate/populate Change in Scores, Standard Error, Significant Growth and Focus/All Group. *See slides 18-24

CDT DC FAQ

Educators want a snapshot of ***how*** and ***why*** students may be struggling or extending beyond course expectations.

Full CDT

- 50-60 items per test;
- 4-5 separate diagnostic categories per test

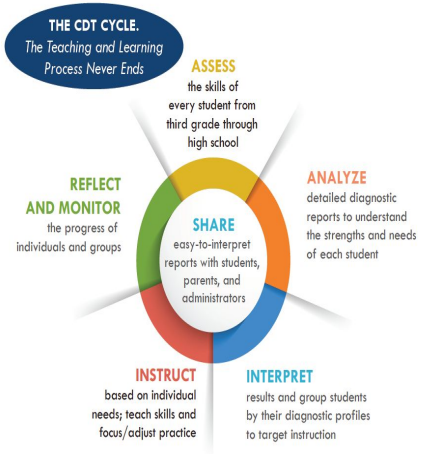
Full or DC CDT?

Diagnostic Category CDT

- 15-18 items per Math & Science DC Test;
- 30-36 items per Reading Informational or Literature test

Use **Total Score** to determine percent showing significant growth

Use **Pre-Test/Post-Test** format to determine percent of students showing significant growth



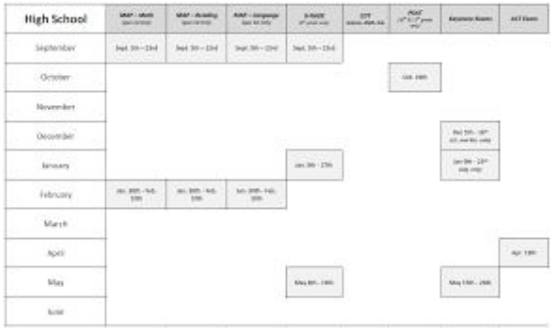
Use percent of students **On-Track to Proficiency** as an indicator

Use **Diagnostic Category Scores** to create **flexible instructional groups**

Efficient Use of Data

What do you want to know about students?

When do you want to know it?



How are you going to use the data?

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The Assessment

What does it look like and how does it function?

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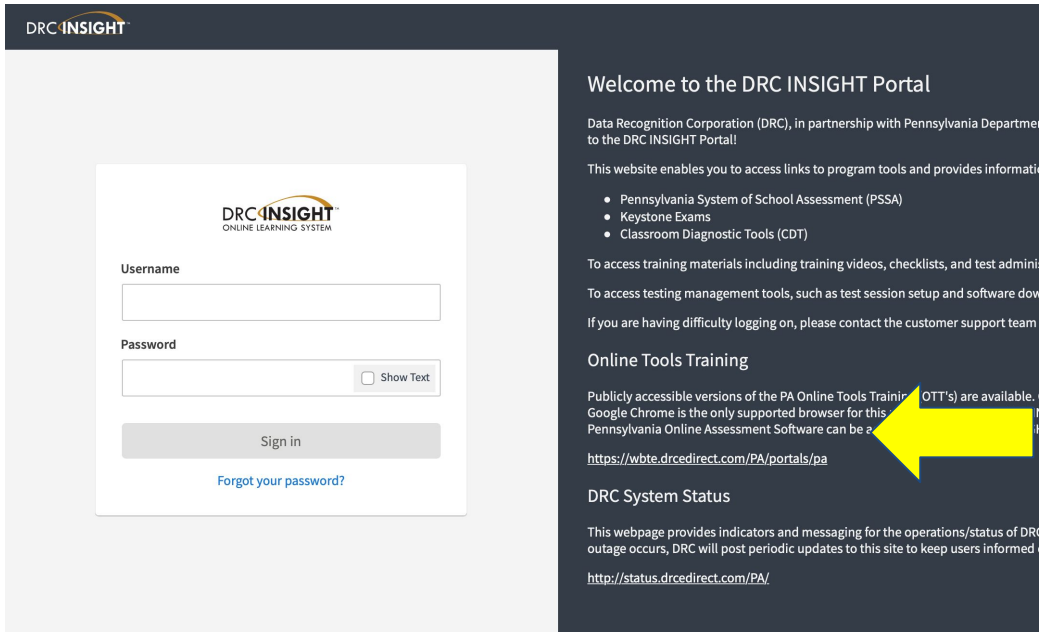
eDIRECT:

- Let's take a sample test:
- https://pa.drcedirect.com
- Middle of Right Side
- Online Tools Training link
- *"Be the Student"* - Explore a test)



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Thoughts about the Assessment

- Types of Questions?
- Tools?
- What will the students learn beyond content in taking this assessment?
- What will teachers learn in observing this assessment?

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Accommodations (IEP, GIEP, and 504 Plan) and Universal Design for Learning (all students) Using the Classroom Diagnostic Tools

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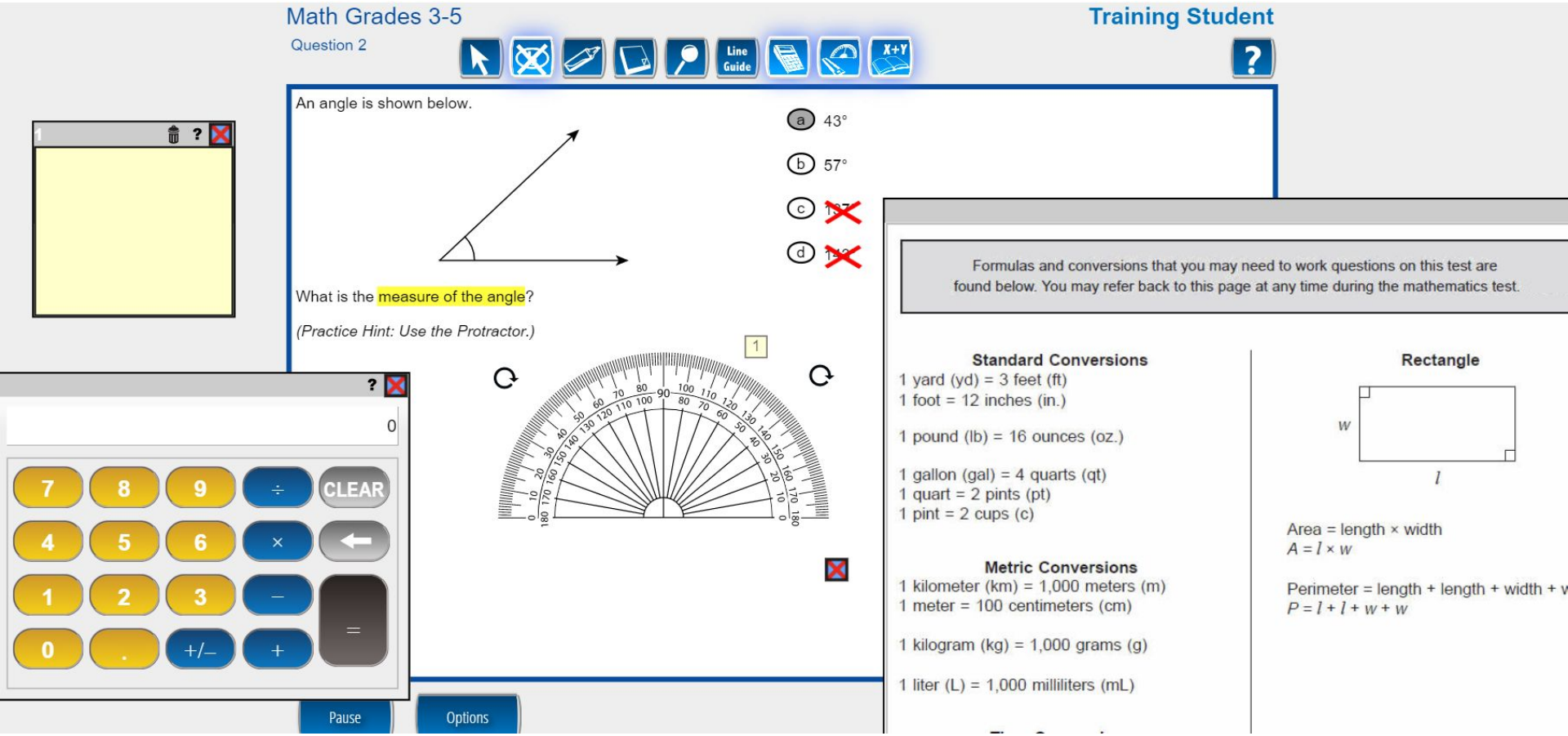
Tools for Success



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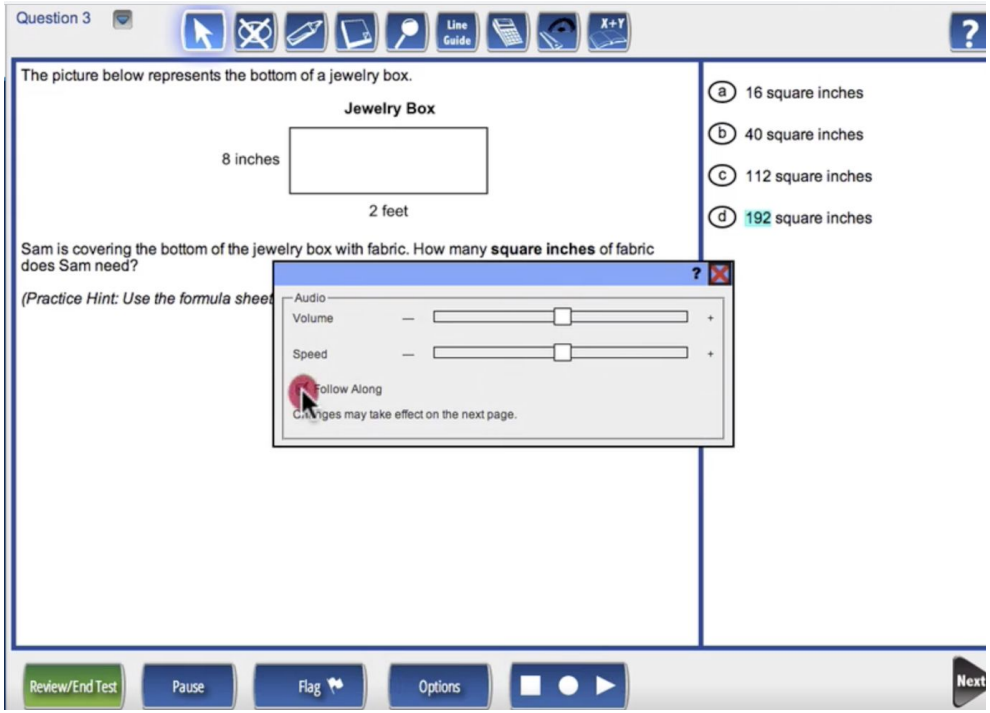
CDT Software Tools Accommodations

- Audio (Mathematics, Science)
- Audio for Visually Impaired (Mathematics, Science, and Literacy)



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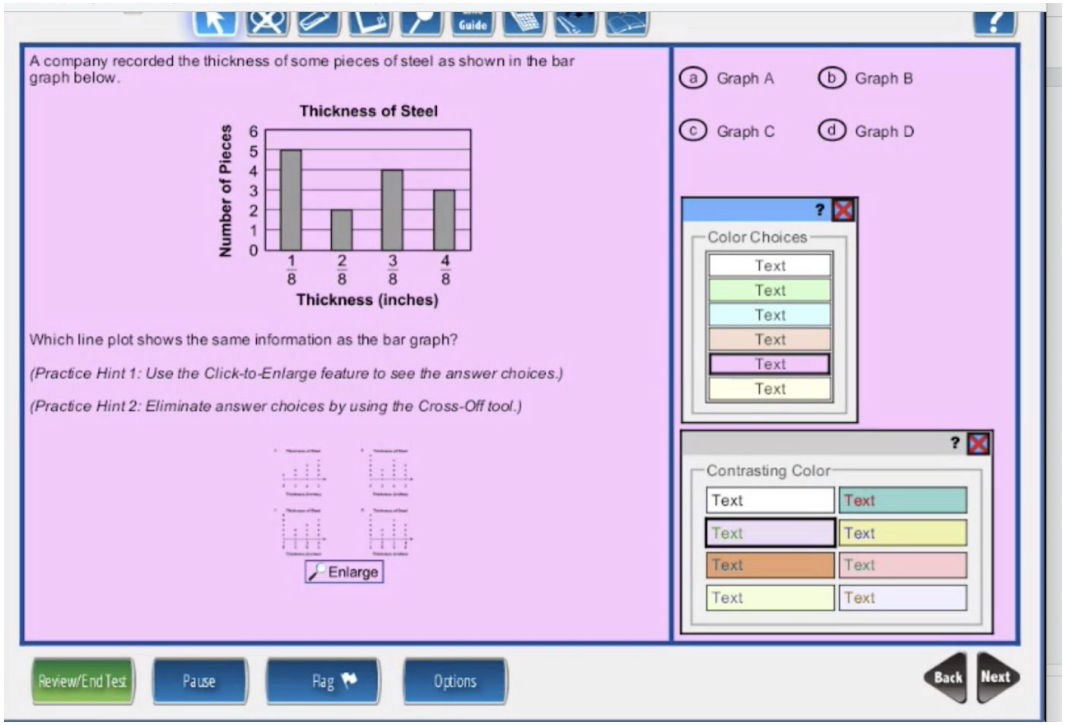
CDT Software Tools Accommodations

- Contrasting Text Chooser (All Colors and Subjects)
- Contrast Chooser (All Colors and Subjects)



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Perspective: Grade 5 Math Interventionist

Classroom Diagnostic Tools

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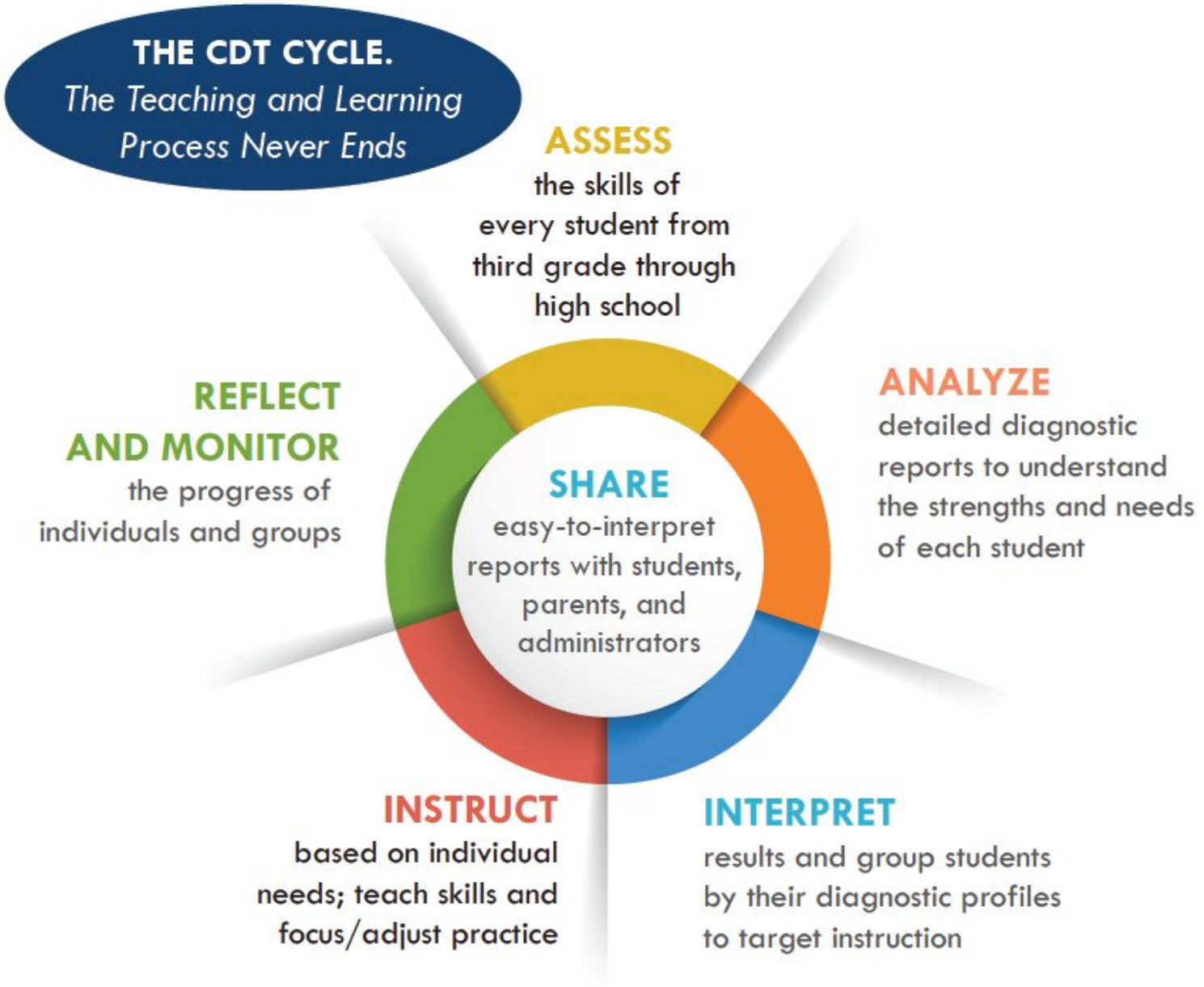

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- Thoughts You Have?
- Questions You Would Like to Ask?
- Concerns You Want to Discuss?

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The Data

How does the reporting work?

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How are Scale Scores Derived?

- Students' scores are converted into ***scale scores rather than points correct or raw scores***.
- Scale scores are transformed raw scores that allow for ***valid comparisons across students, grades, and administrations***, but only within the same subject.
- Scales scores take into consideration the fact that ***some questions on the test are more difficult than others***.
- CDT Minimum scale score of 200
- CDT Maximum scale score of 2000

Note: Item Response Theory (IRT), specifically the Rasch model, is used to determine the student's raw score

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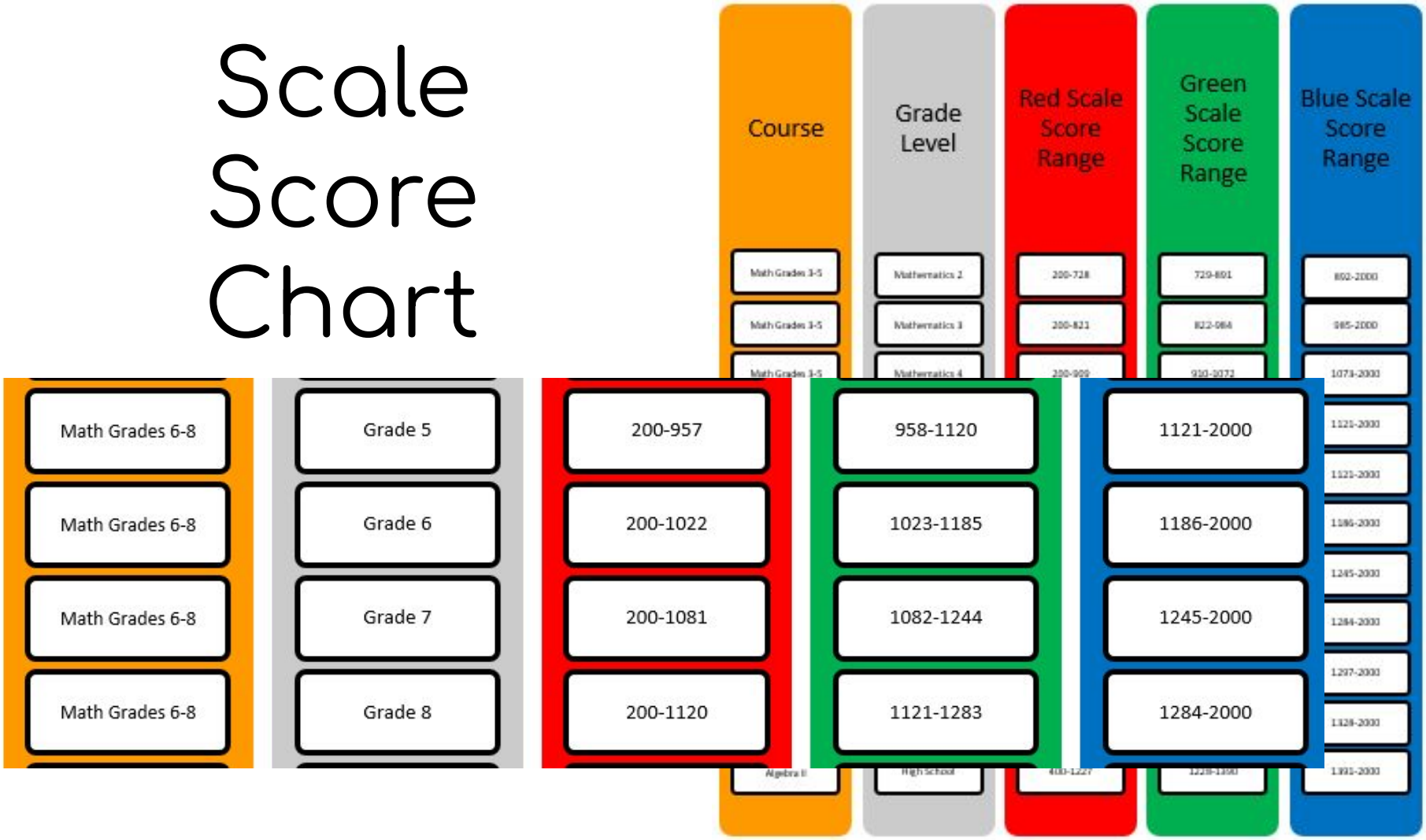
Scale Score Chart



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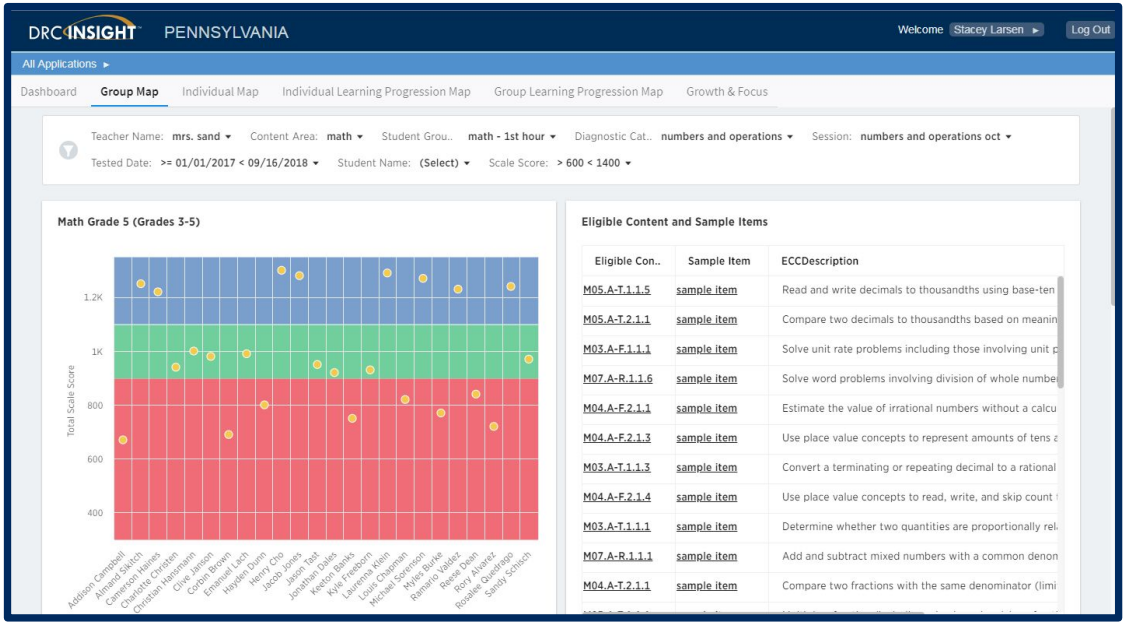
New CDT Diagnostic Category Reporting

- New reporting tool and navigation within the reports includes changes to:
  - Using Filters
  - Layout of reports
  - Available links
  - Resources
  - Formatting options
  - & MORE



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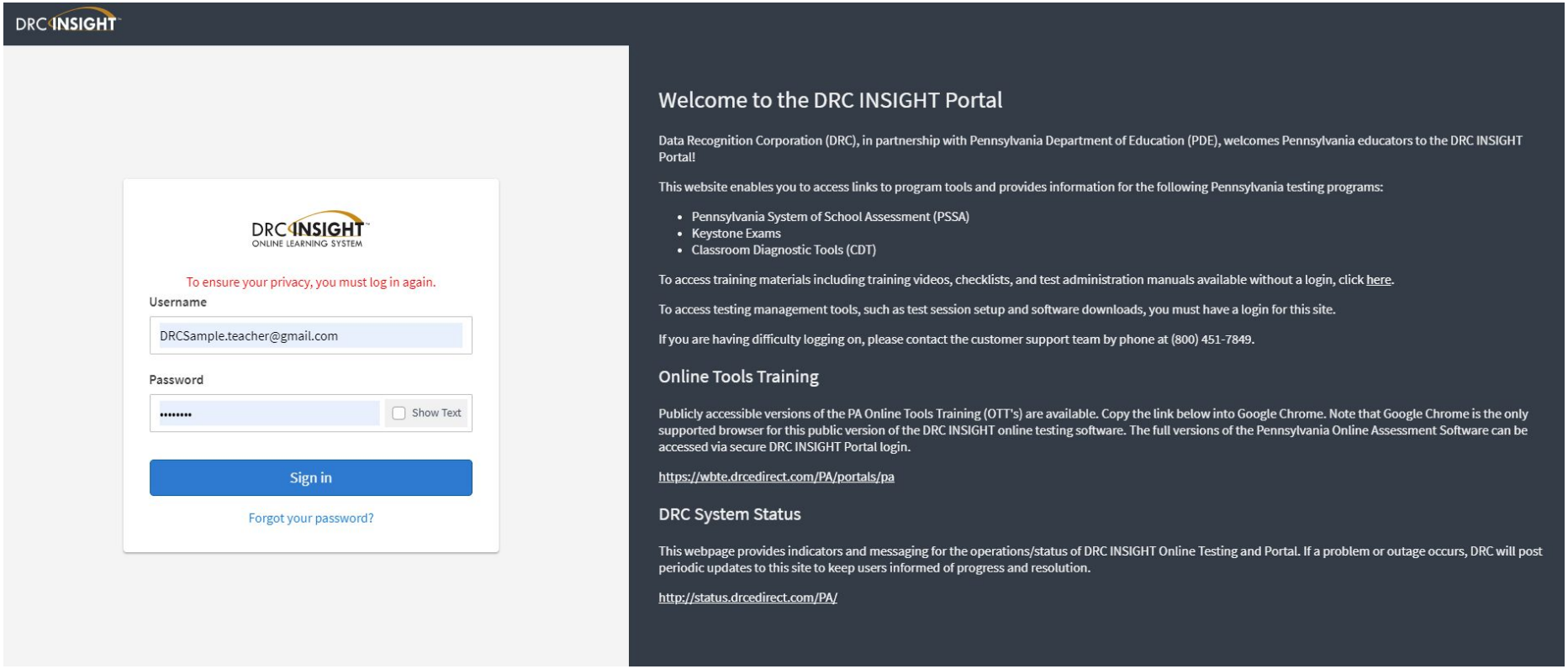
New Login Page



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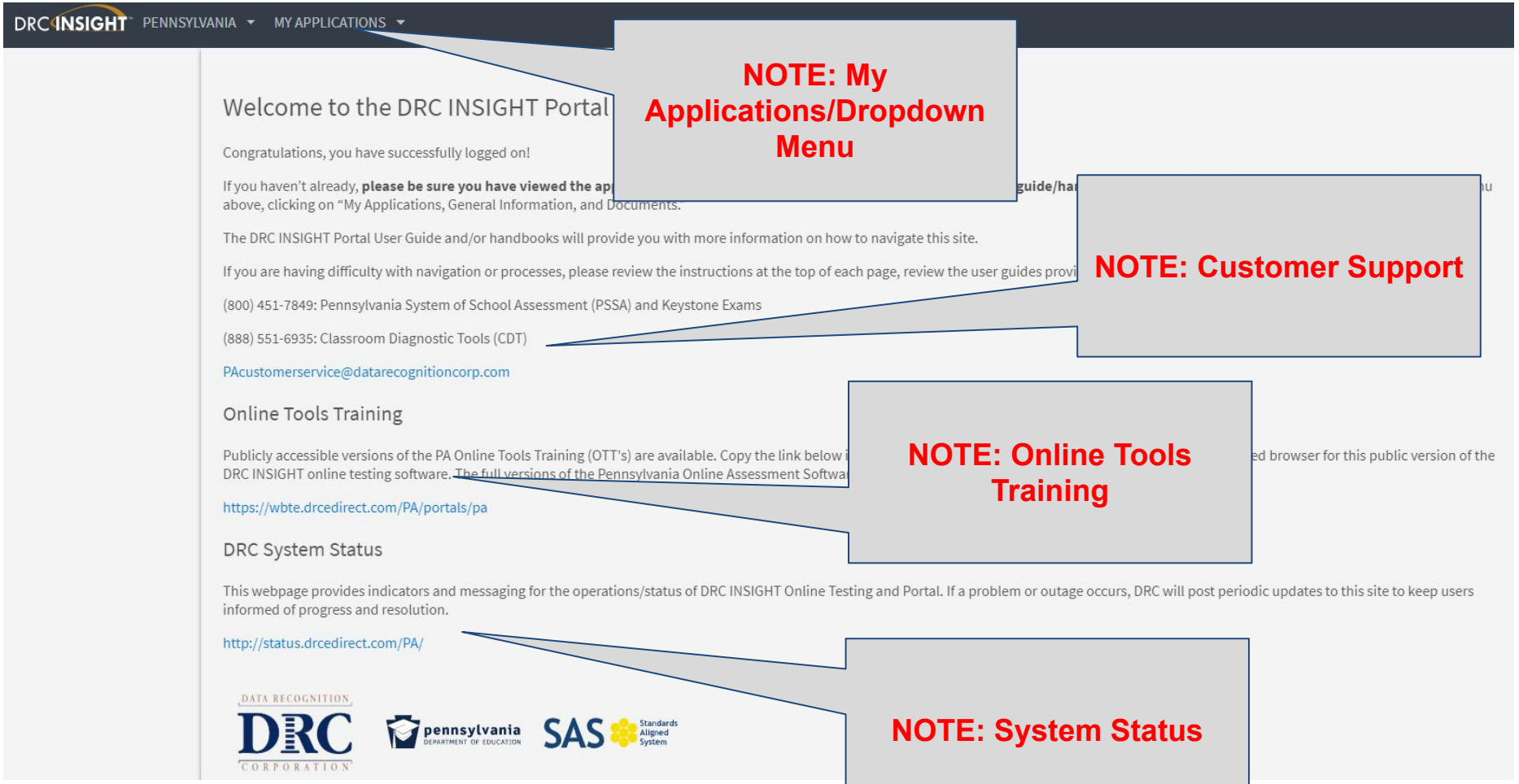
New Look - Portal Page



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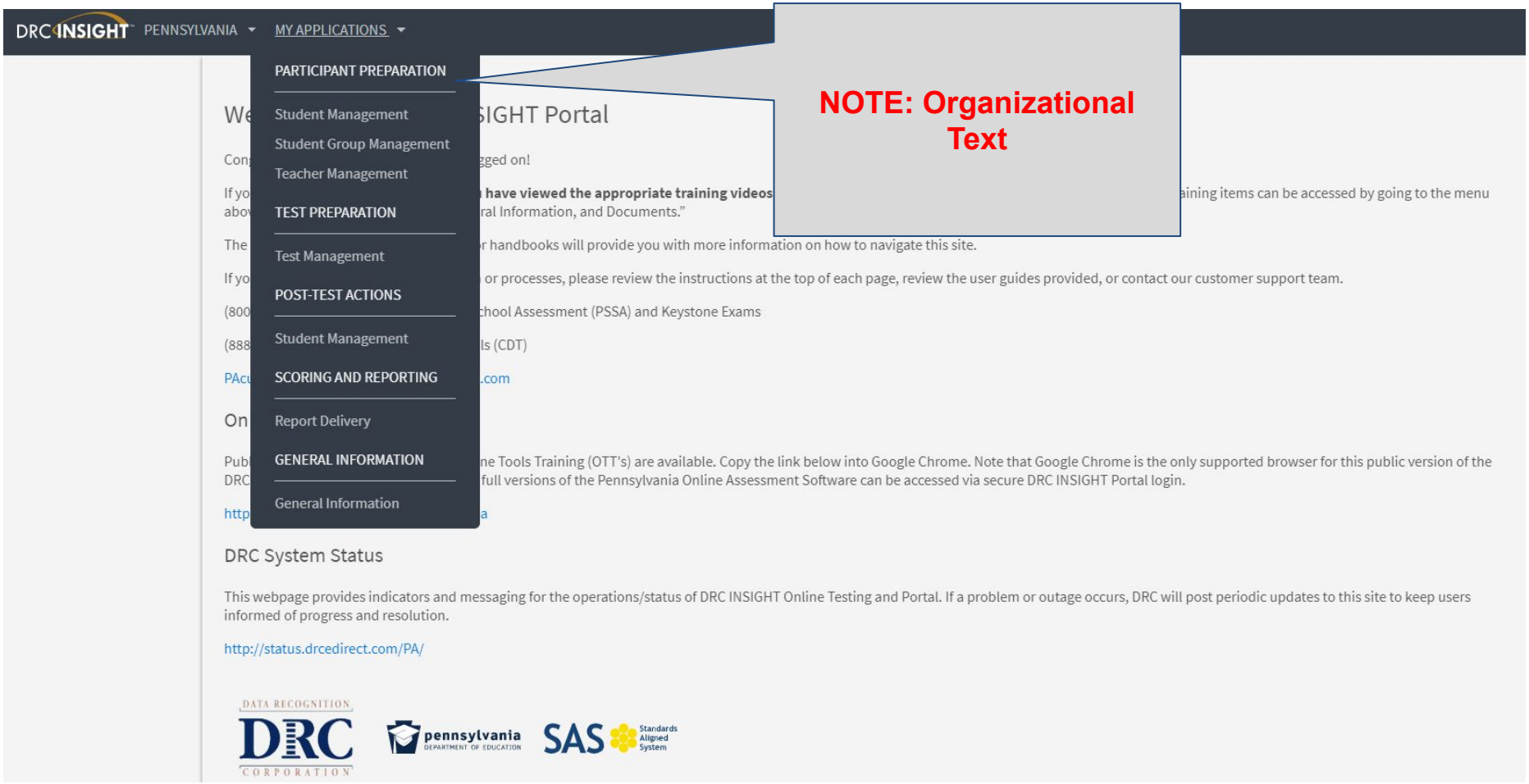
Vertical Dropdown



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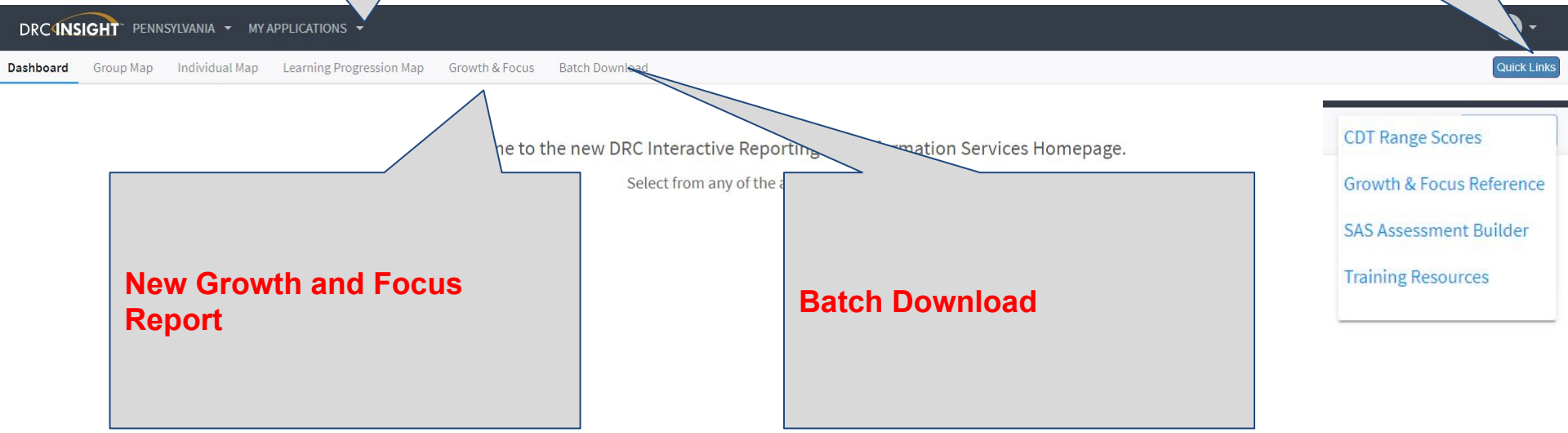
New Dashboard

New Combined Learning Progression Map

NEW QUICK LINKS



New Growth and Focus Report

Batch Download

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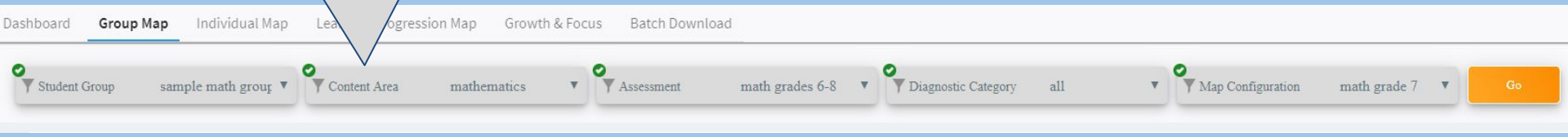
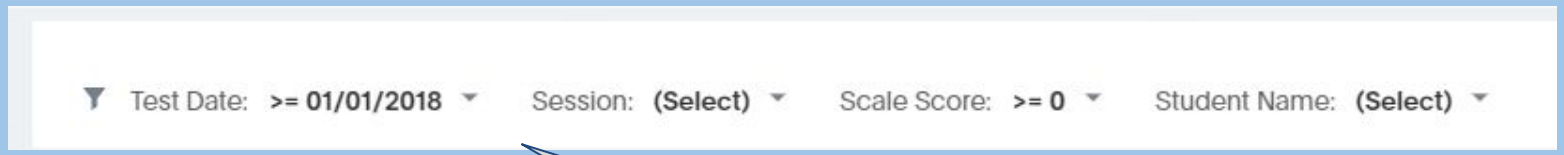
New Filters / Flexibility / Saves

New Filtering Structure





New Sub-Filtering Structure

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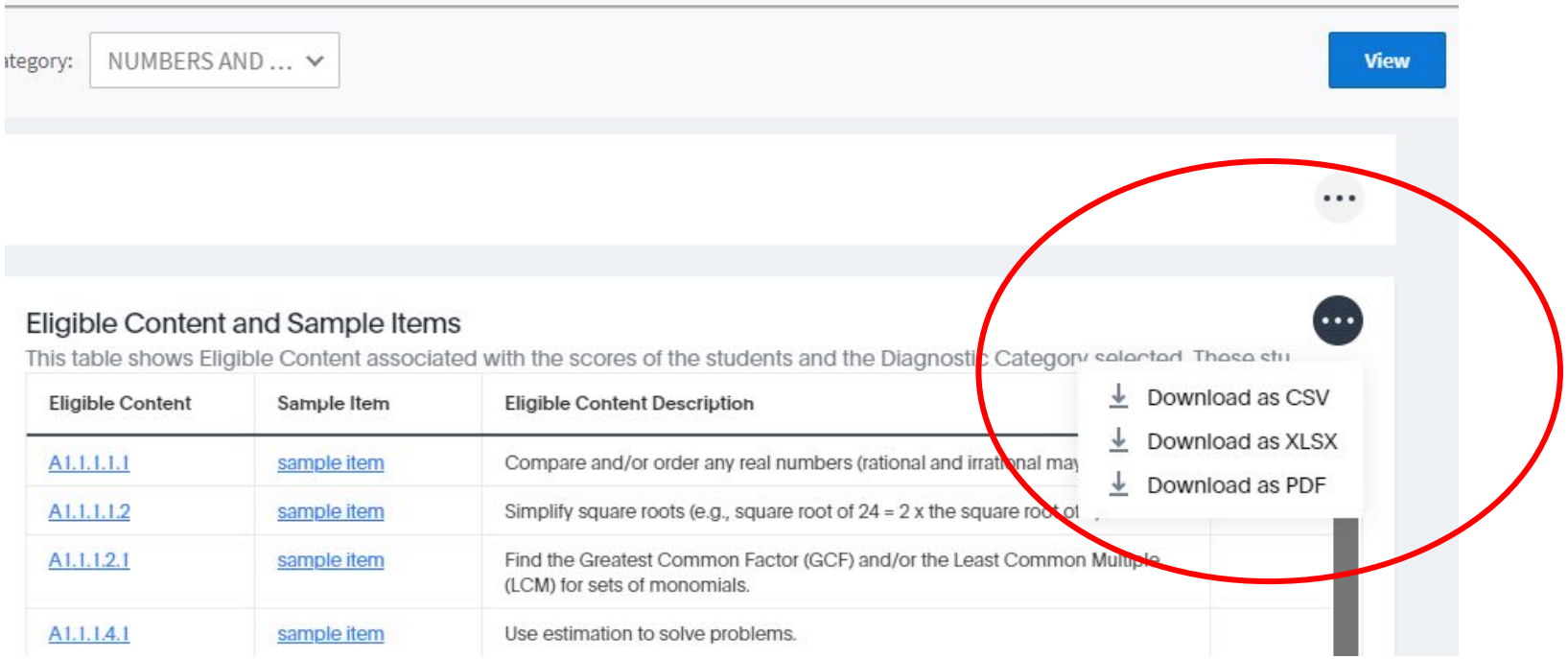
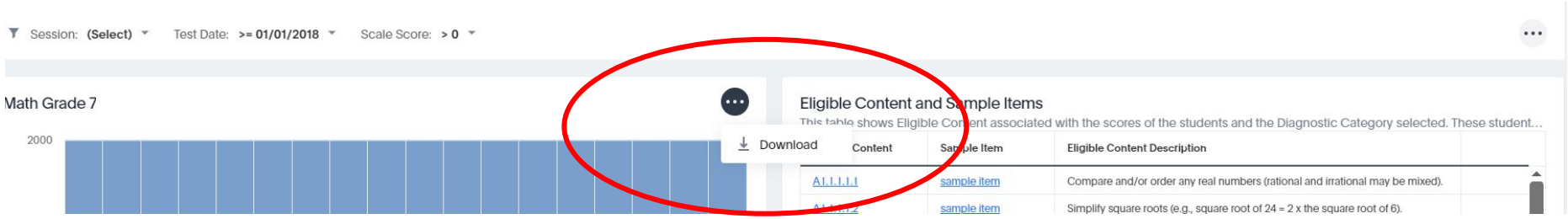
Hover & Click for Resources (Anywhere you see 3 dots/Drawer)





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Grid Format

Sort/ Filter/ Remove

Grid Format

Test Type	Student Group	Session	Diagnostic Category	Student Name	Total Scale Score	Daily (Test Date)	Grade	
DC	Sample Math Group	November 7 P1/2	Geometry	BOYD, GLENN	1122	11/14/2018	07	
DC	Sample Math Group	November 7 P1/2	Geometry	CARR, JANET	1147	11/14/2018	07	
DC	Sample Math Group	November 7 P1/2	Geometry	EVANS, FRANCES	1200	11/14/2018	07	
DC	Sample Math Group	November 7 P1/2	Geometry	GARCIA, JAMIE	1199	11/14/2018	07	
DC	Sample Math Group	November 7 P1/2	Geometry	GUTIERREZ, VICKI	1221	11/14/2018	07	green
DC	Sample Math Group	November 7 P1/2	Geometry	HALL, HARVEY	1173	11/14/2018	07	green
DC	Sample Math Group	November 7 P1/2	Geometry	MORRISON, ANGELA	1258	11/14/2018	07	blue
DC	Sample Math Group	November 7 P1/2	Geometry	OLIVER, TONYA	1142	11/14/2018	07	
DC	Sample Math Group	November 7 P1/2	Geometry	PIERCE, FLOYD	1207	11/14/2018	07	
DC	Sample Math Group	November 7 P1/2	Geometry	RAMIREZ, JUDY	1129	11/14/2018	07	
DC	Sample Math Group	November 7 P1/2	Geometry	ROBERTSON, MICHEAL	1104	11/19/2018	07	
DC	Sample Math Group	November 7 P1/2	Geometry	WHITE, KAREN	1106	11/14/2018	07	
DC	Sample Math Group	November 7 P1/2	Geometry	WILLIS, DOLORES	1126	11/14/2018	07	green

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Color Coded

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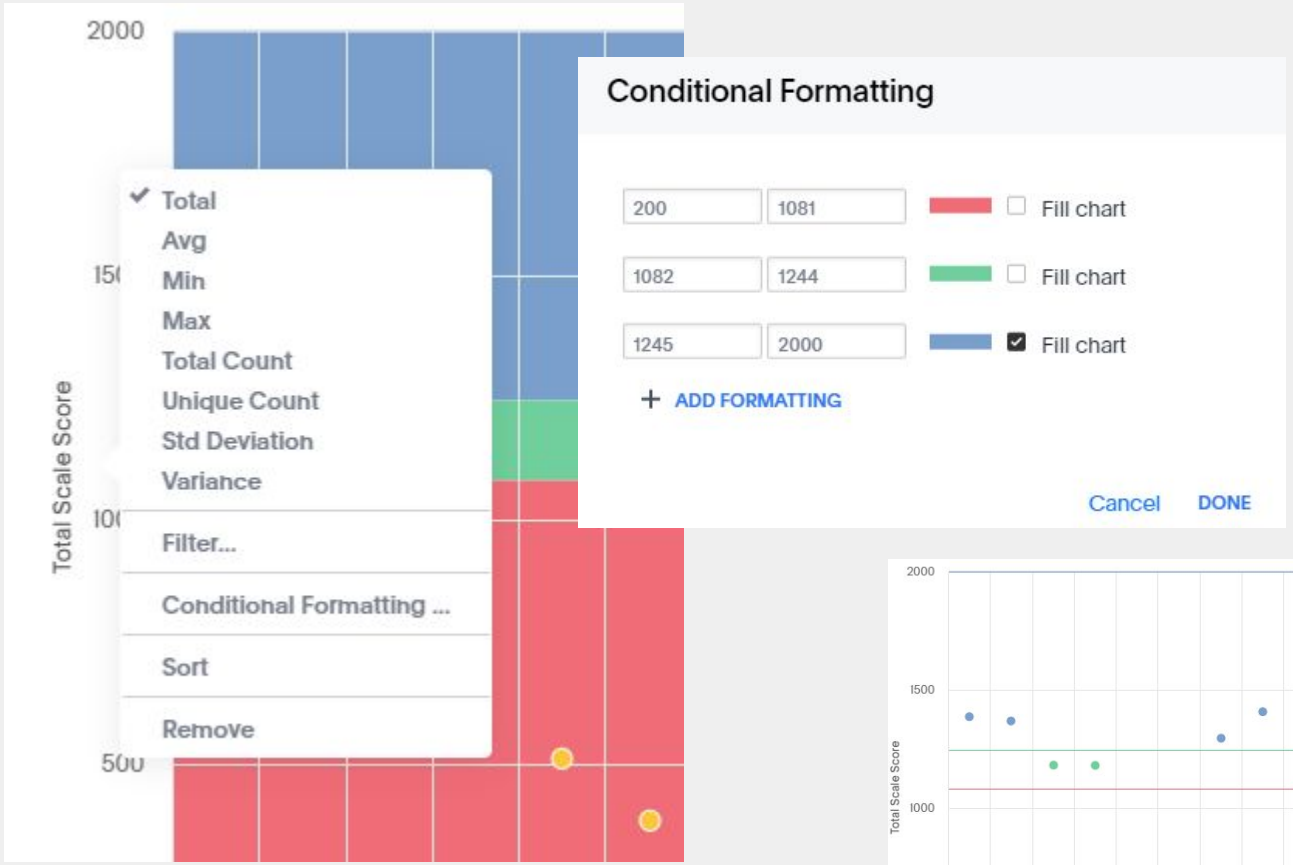
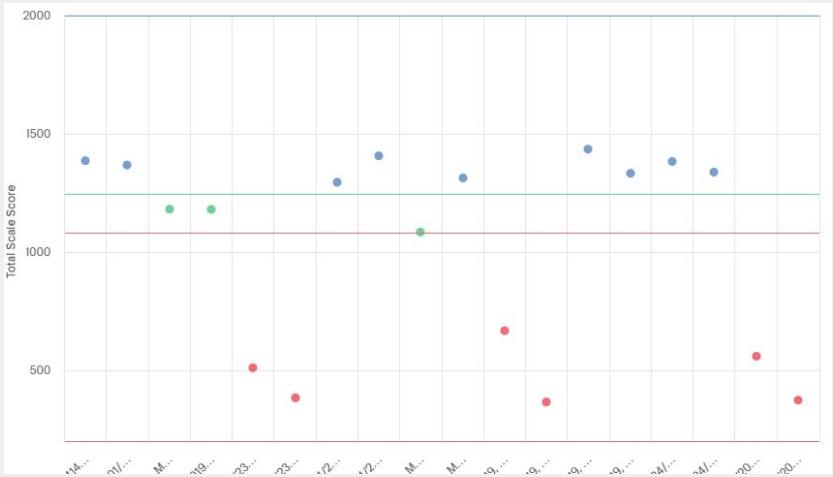
Options (Printing/Visual)





Training Scenario

Creating Flexible Student Group

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CLASSROOM
DIAGNOSTIC TOOLS

https://tinyurl.com/FlexibleStudentGrouping


break

Training Scenario

Individualized Instruction/Conferencing

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CLASSROOM
DIAGNOSTIC TOOLS

https://tinyurl.com/Instruction-Conferencing

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Demo Accounts

Diagnostic Category Testing Demo:
pa.drcedirect.com

DRC Sample Teacher (for training)
USER: PA.Sample.Teacher@mail.com PW: Lifeusa123$
DRC Sample School (for training)
USER: PA.Sample.School@mail.com PW: Lifeusa123$
DRC Sample District (for training)
USER: PA.Sample.District@mail.com PW: Lifeusa123$

TIP: Using the Chrome browser, save the user/pw for easy access in the future.

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Activity Works Well as a Pair

Person 1 displays presentation on computer.

Person 2 navigates the interactive reports.

Classroom Diagnostic Tools

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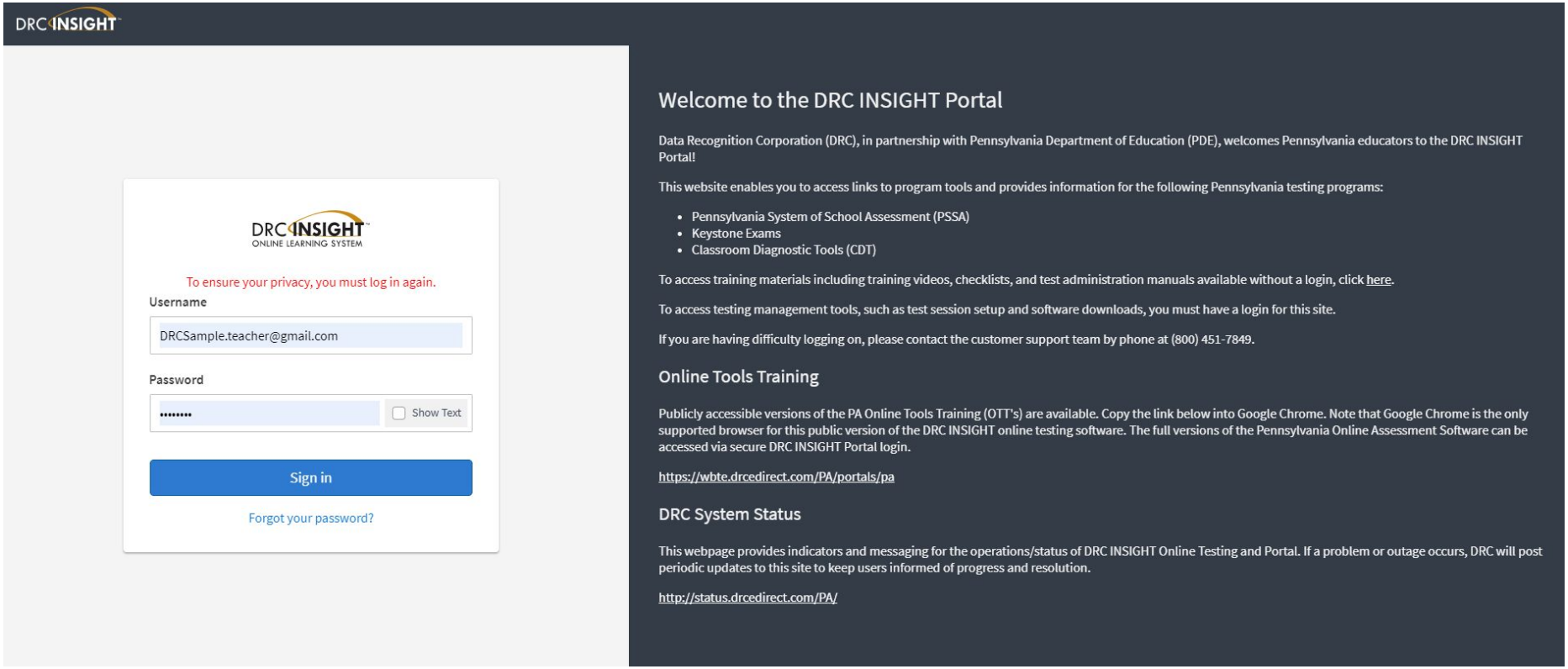
Login



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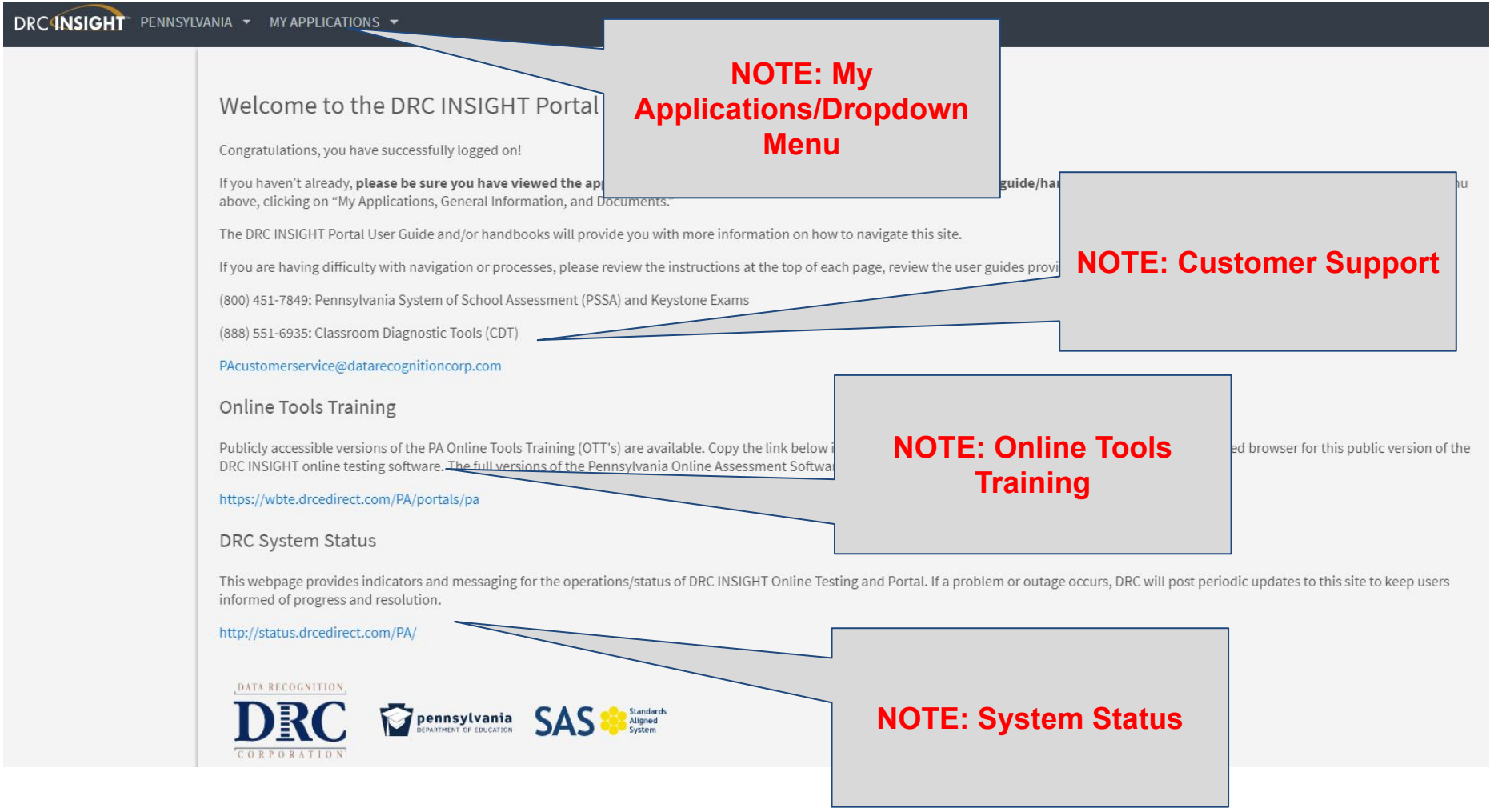
Portal Page - Choose My Applications/Dropdown Menu



NOTE: My Applications/Dropdown Menu

NOTE: Customer Support

NOTE: Online Tools Training

NOTE: System Status

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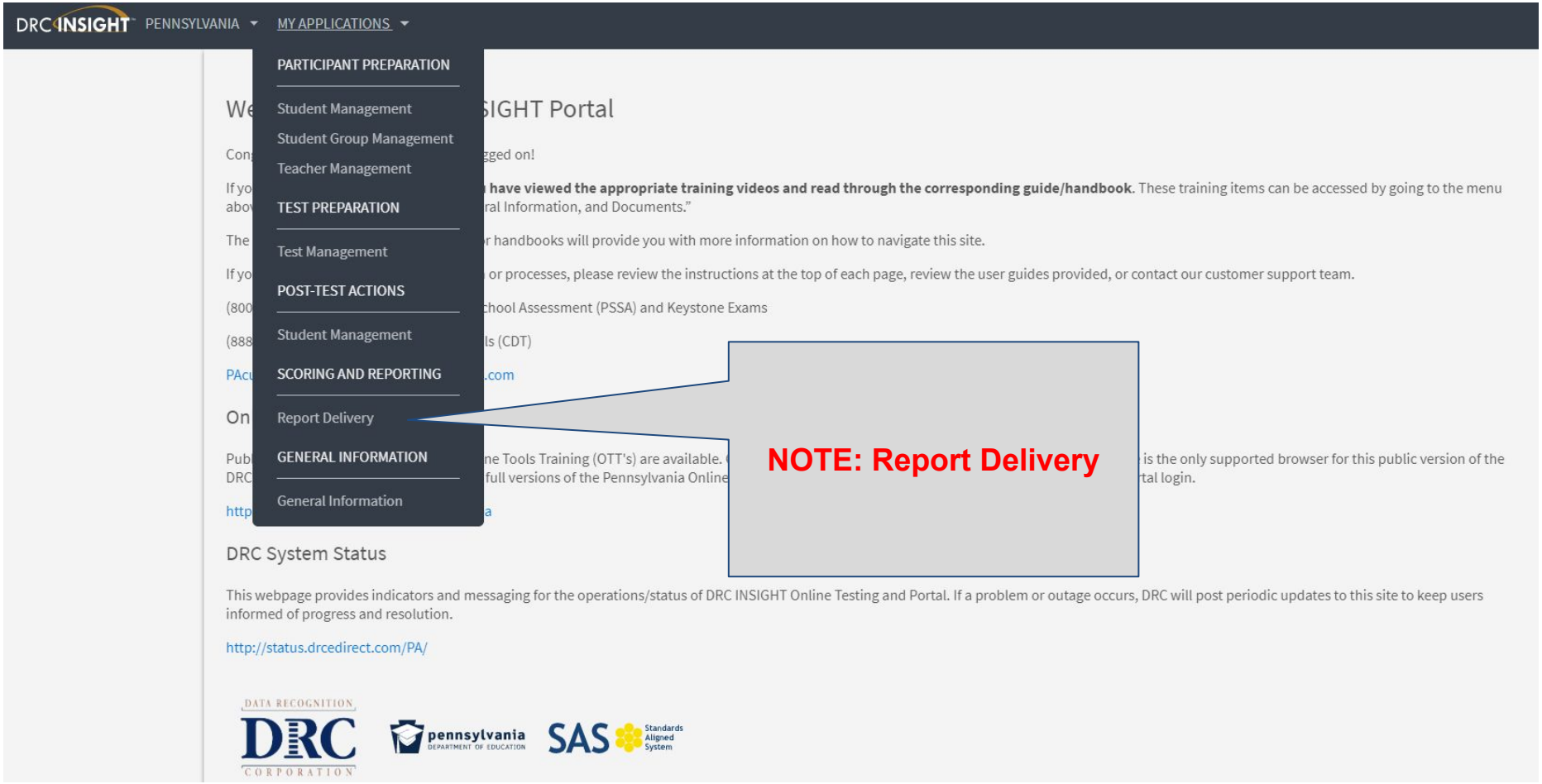
Select "Report Delivery"



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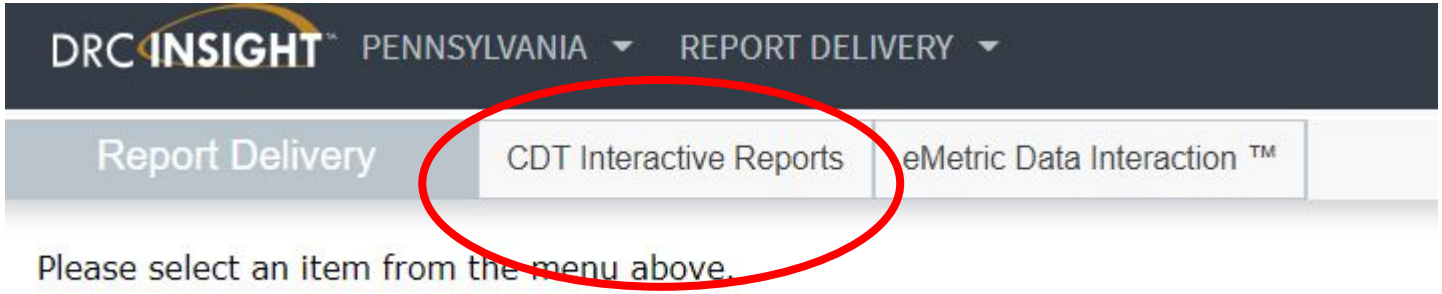
Choose "CDT Interactive Reports"



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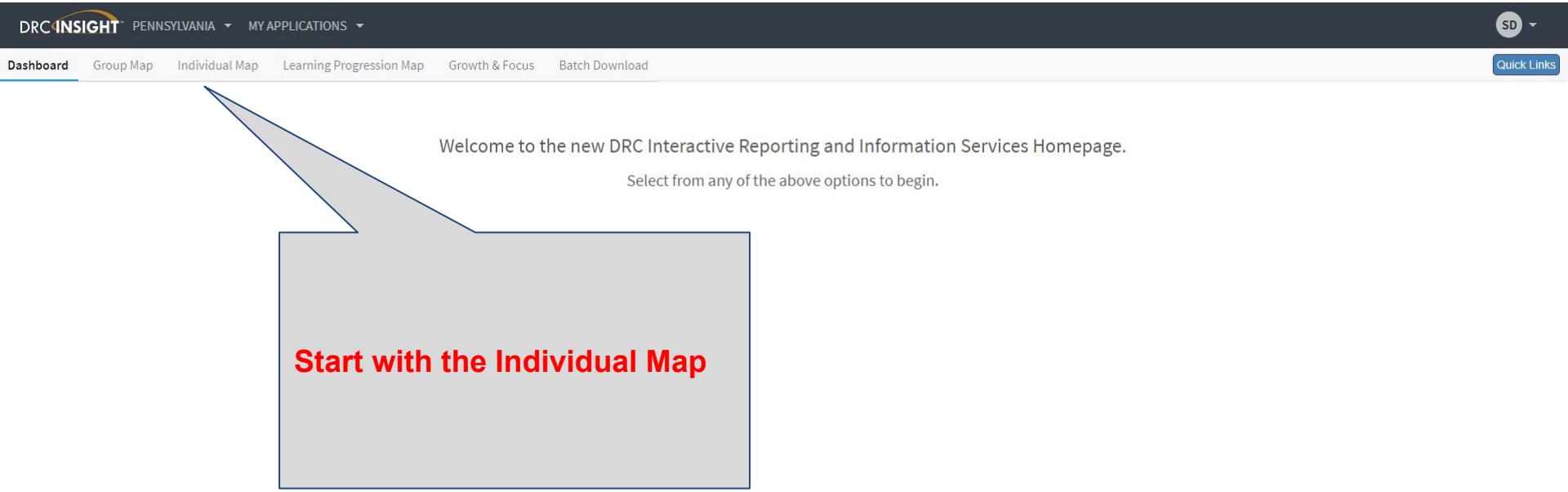
Dashboard - Choose "Individual Map"



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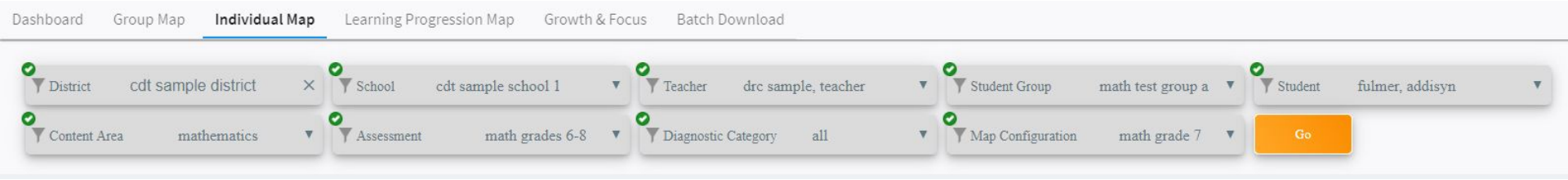
Choose Appropriate Filters

For the exercise, match the filters below.



- Depending on the login you used, select the appropriate "District", "School", and "Teacher". Using the sample data, this may fill in for you.
- Choose group "Math Test Group A"
- Choose student "Fulmer, Addisyn"
- Content Area "Mathematics"
- Assessment "Math Grades 6-8"
- Diagnostic Category "all"
- Map Configuration "Math Grade 7"
- Click "Go"

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Looking at All Categories

Choose a focus area? For this example, let's consider Algebraic Concepts. There are 3 DC sets of data, what do you notice? Ponder what has possibly happened to cause data trend? Let's instruct based on the last of the 3 assessments.

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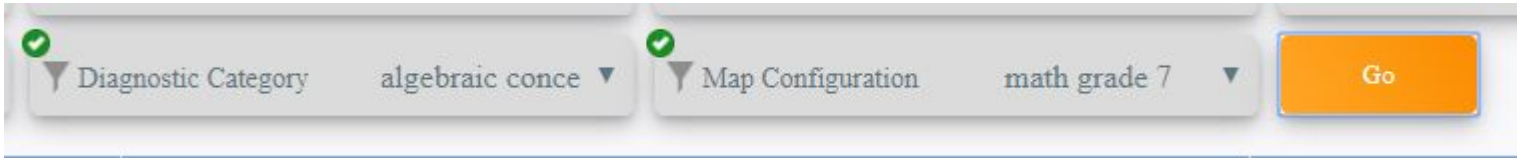
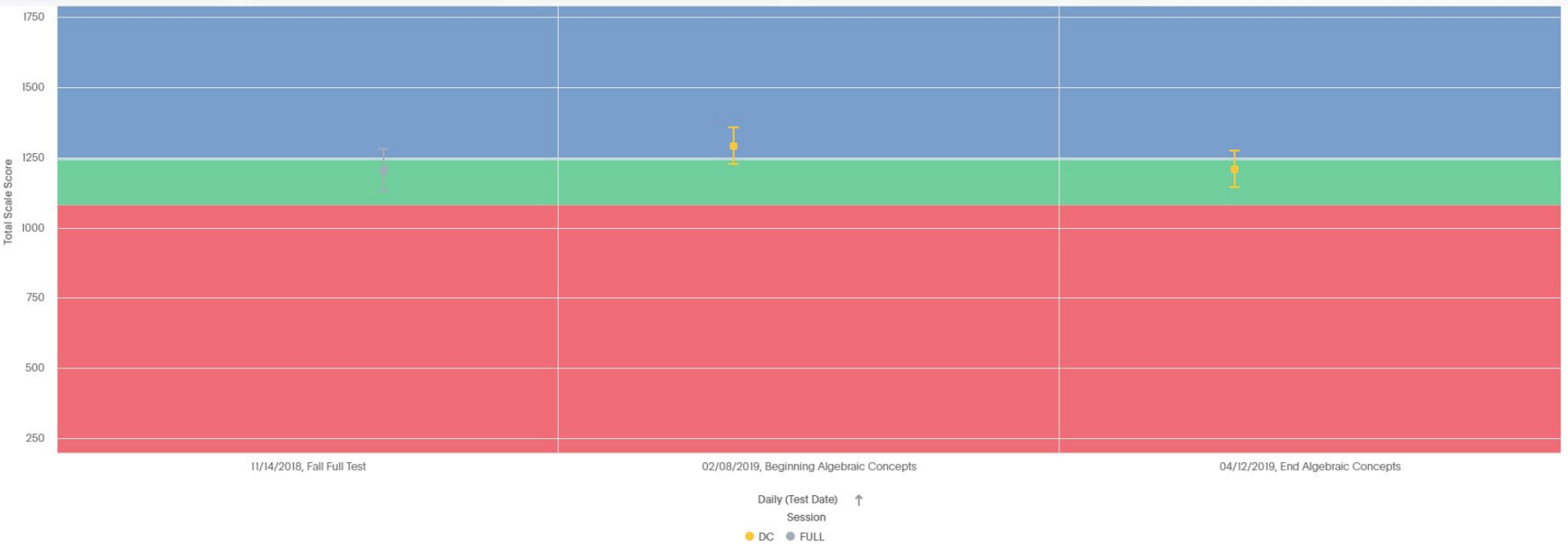
Filter to Algebraic Concepts





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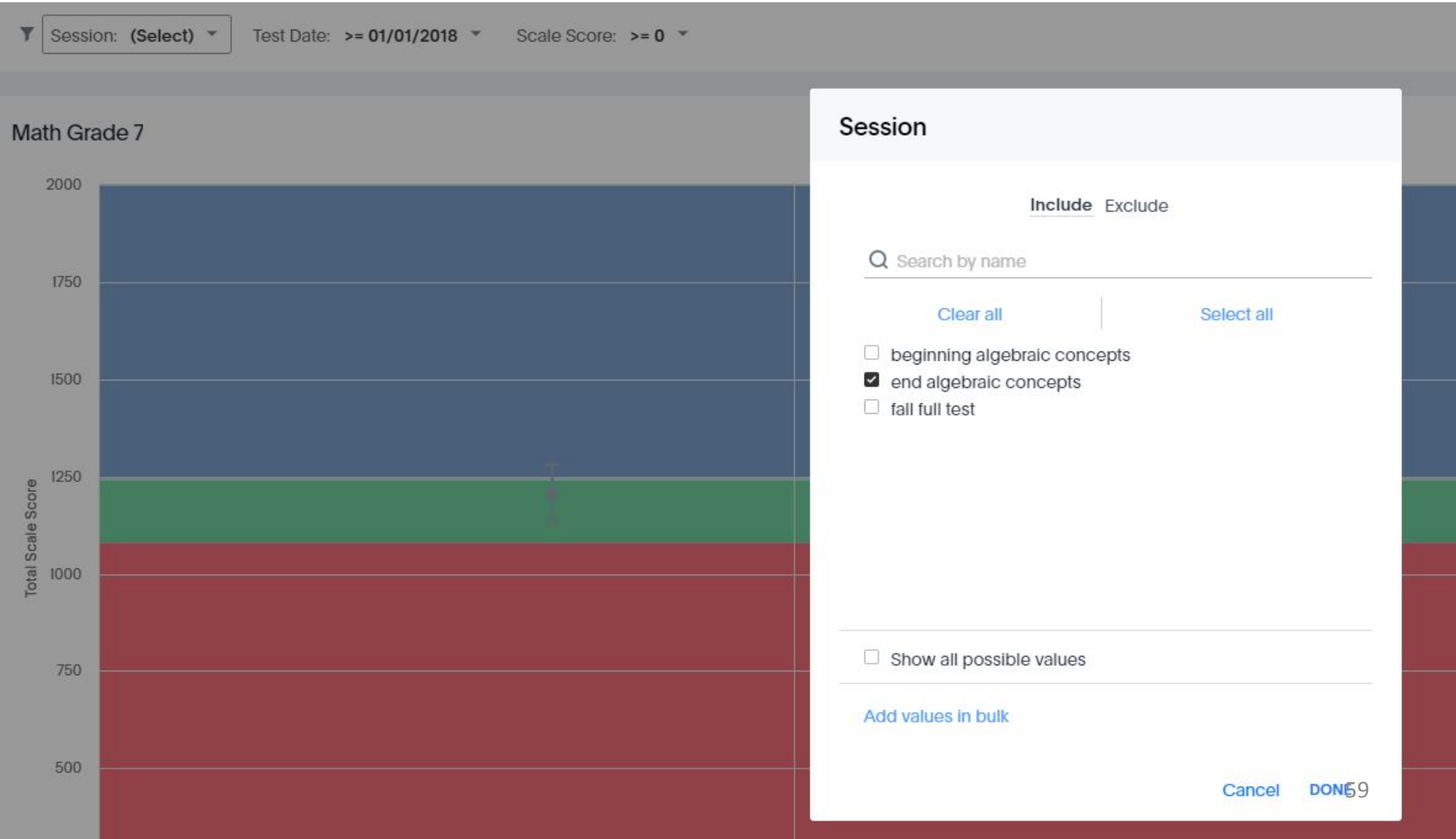
Filter to Most Recent Assessment



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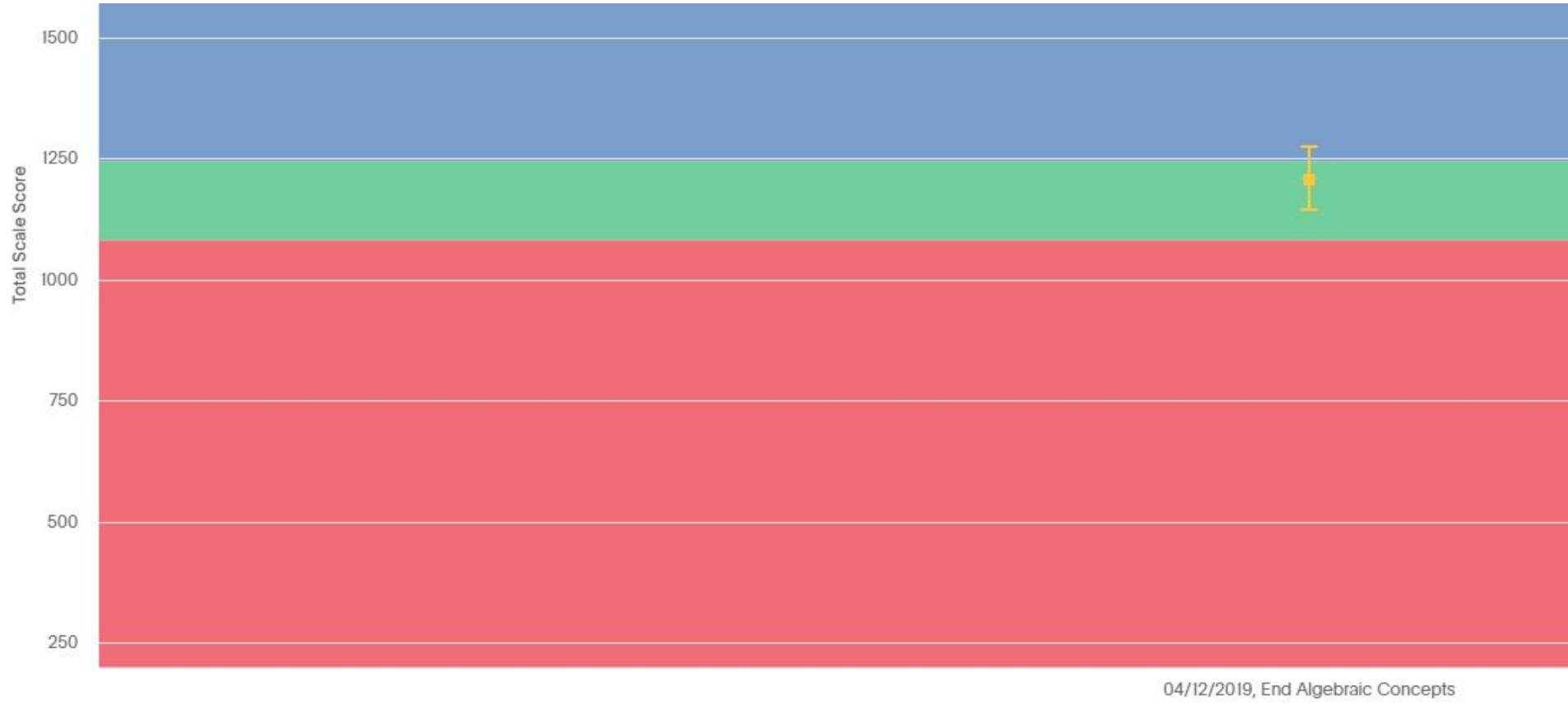
Single Point of Data



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Student Ready Eligible Content

Eligible Content and Sample Items

This table shows Eligible Content associated with the score of the student and the Diagnostic Category selected. This student may benefit from enrichment in the following:

Eligible Content	Sample Item	Eligible Content Description
M07.B-E.1.1.1	sample item	Apply properties of operations to add, subtract, factor, and expand linear expressions with rational coefficients.
M07.B-E.2.2.2	sample item	Solve word problems leading to inequalities of the form px + q > r or px + q
M07.B-E.2.3.1	sample item	Determine the reasonableness of an answer(s), or interpret the solution(s) in the context of the problem.

Digging Deeper

Can we identify content that the student hasn't mastered that possibly caused the decrease in score from DC1 to DC2?

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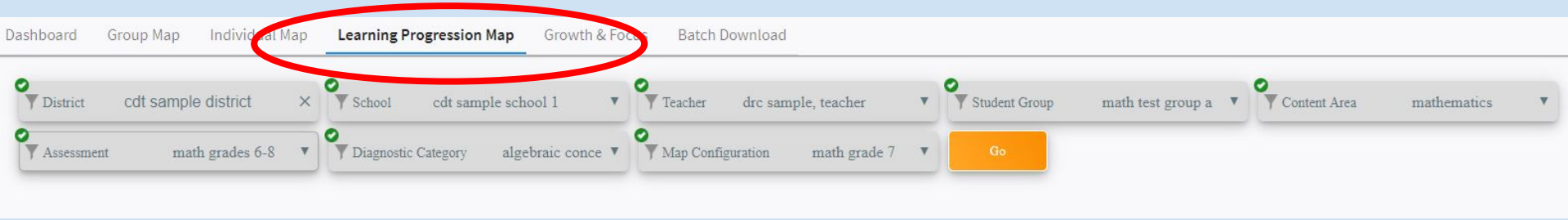
Let's Turn to the Learning Progression Map

Return to the top and select Learning Progression Map.



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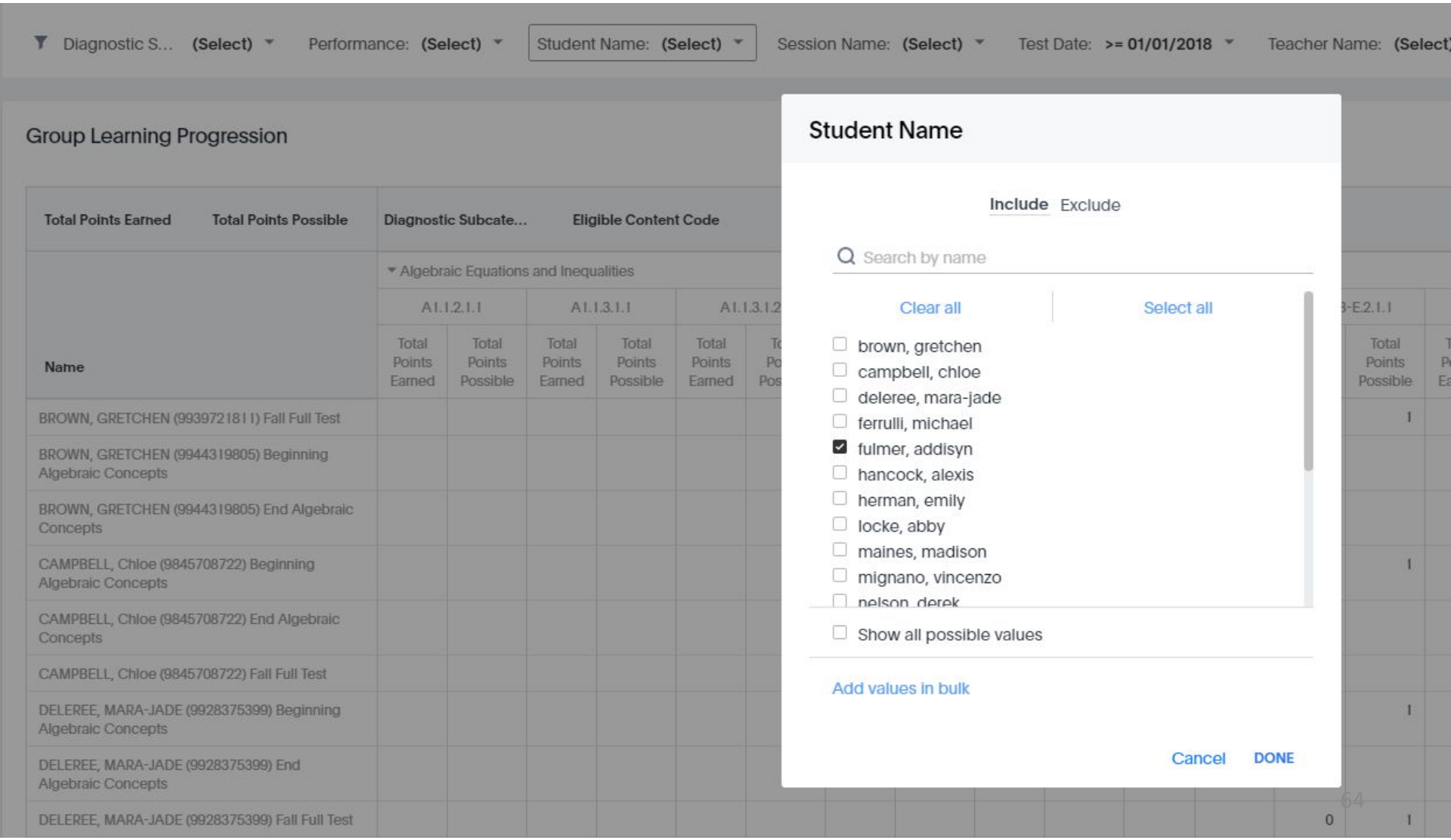
Filter to Student Name



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Can you identify specific content to address/enrich?

Group Learning Progression

Total Points Earned	Total Points Possible	Diagnostic Subcate...	Eligible Content Code																		
		Algebraic Equations and Inequalities																			
		A1.1.3.1.3		A1.1.3.2.1		M06.B-E.2.1.1		M06.B-E.2.1.4		M07.B-E.2.2.1		M07.B-E.2.2.2		M08.B-E.3.1.1		M08.B-E.3.1.3		M08.B-E.3.1.4		M08.B-E.3.1.5	
Name		Total Points Earned	Total Points Possible	Total Points Earned	Total Points Possible	Total Points Earned	Total Points Possible	Total Points Earned	Total Points Possible	Total Points Earned	Total Points Possible	Total Points Earned	Total Points Possible	Total Points Earned	Total Points Possible	Total Points Earned	Total Points Possible	Total Points Earned	Total Points Possible	Total Points Earned	Total Points Possible
FULMER, ADDISYN (9876047809) Beginning Algebraic Concepts		1	1	0	1															0	1
FULMER, ADDISYN (9876047809) End Algebraic Concepts						1	2			1	1					1	1	0	1		
FULMER, ADDISYN (9876047809) Fall Full Test				0	1			1	1			1	1	1	1					1	1

Look at/compare total points/earned points, grade levels, and eligible content.

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Identify Content for Continued Enrichment

Eligible Content and Sample Items

This table shows Eligible Content associated with the score of the student and the Diagnostic Category selected. This student may benefit from e

Eligible Content	Sample Item	Eligible Content Description
M07.B-E.1.1.1	sample item	Apply properties of operations to add, subtract, factor, and expand linear expressions with rational coefficients.
M07.B-E.2.2.2	sample item	Solve word problems leading to inequalities of the form px + q > r or px + q
M07.B-E.2.3.1	sample item	Determine the reasonableness of an answer(s), or interpret the solution(s) in the context of the problem.

M06.B-E.2.1.1

Total Points Earned	Total Points Possible	
1	2	

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Resources

Eligible Content and Sample Items

This table shows Eligible Content associated with the score of the student and the Diagnostic Category selected. This student may benefit from e

Eligible Content	Sample Item	Eligible Content Description
M07.B-E.1.1.1	sample item	Apply properties of operations to add, subtract, factor, and expand linear expressions with rational coefficients.
M07.B-E.2.2.2	sample item	Solve word problems leading to inequalities of the form px + q > r or px + q
M07.B-E.2.3.1	sample item	Determine the reasonableness of an answer(s), or interpret the solution(s) in the context of the problem.

SAS

Materials & Resources

Materials & Resources provides a way to locate standards-aligned content through a targeted searc
Course, or by one or more specific Content Types. Please select from the appropriate filters.

The Standards Aligned System includes content from several outstanding community, cultural, and

Title	
Math Design Collaborative: Solving Linear Equations	Web-based Resource
Math Design Collaborative: Using Positive and Negative Numbers in Context	Web-based Resource

Grade 7 Sample Item

1. Pencils come in two different-sized packages. Each of the smaller packages contains p pencils. The larger packages each contain $p + 4$ pencils. Jake bought some of the smaller packages, some of the larger packages, and 8 extra pencils as well. To represent the total number of pencils he bought, Jake wrote $4p + 2(p + 4) + 8$. Which expression is equal to the number of pencils Jake bought?

   A. $5p + 14$
   B. $5p + 16$
   C. $6p + 12$
   D. $6p + 16$

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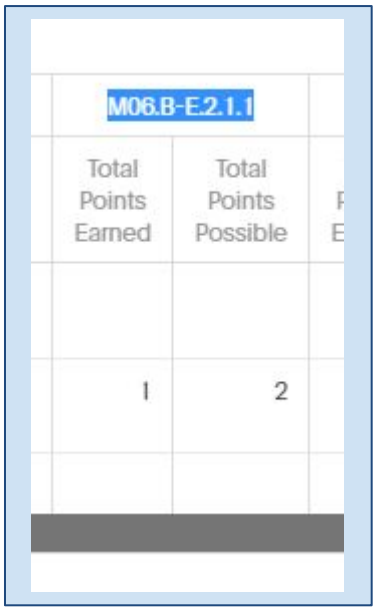
Assessment Builder

SAS



Assessment Builder

Classroom Diagnostic Tools

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M06.B-E.2.1.1

SAS

Standards | Assessments | Curriculum Framework | Instruction | Materials & Resources | Safe & Supportive Schools

Mathematics - 6th Grade

2016

Kylie made 2 identical stacks of blocks. Each block is a rectangular prism, and each stack of blocks is in the shape of a rectangular prism. Each stack is x blocks long, x blocks wide, and 8 blocks high. Kylie used a total of 576 blocks to make the two stacks. The equation below can be used to find the length and width of each stack of blocks.

$$2(8x^2) = 576$$

How many blocks long is one stack of blocks?

(A) 3

(B) 6

(C) 12

(D) 18

+ Add To My Assessment

0 Items In My Assessmen

View My Asses

Start New Asse

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Reflect

- How can I use this information?
- When do I have time to work with separate individual students?
- What other supports exist in the daily routine that might be able to assist in this process? (People, Times, etc.)
- Where else is this data applicable?
- Where can I find resources to support this student's needs?

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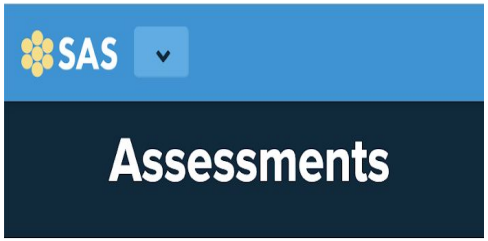
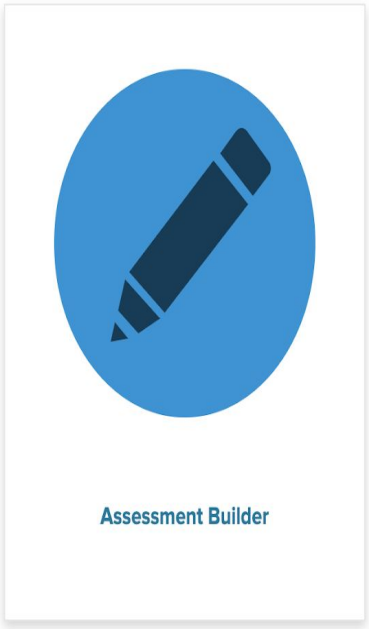
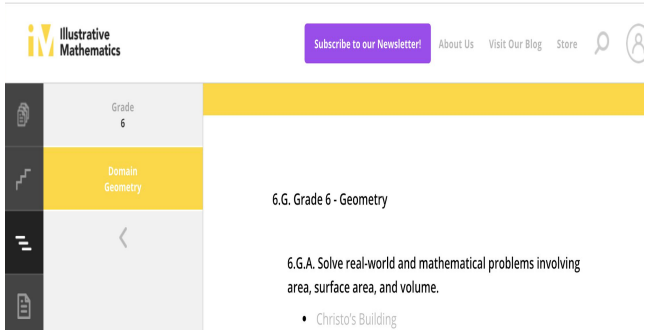
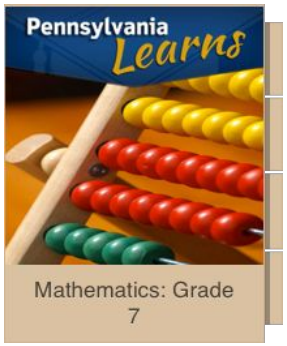
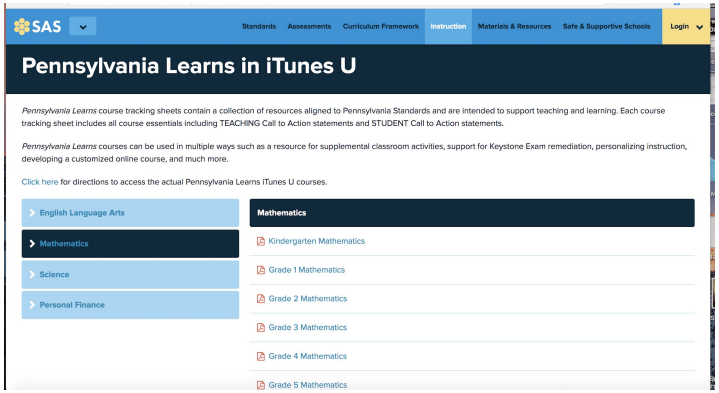
Math Resources











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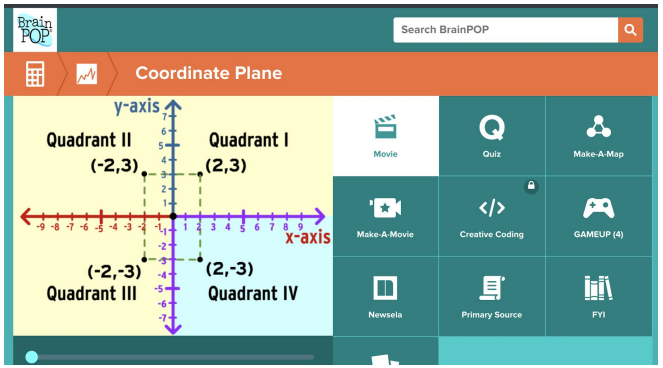
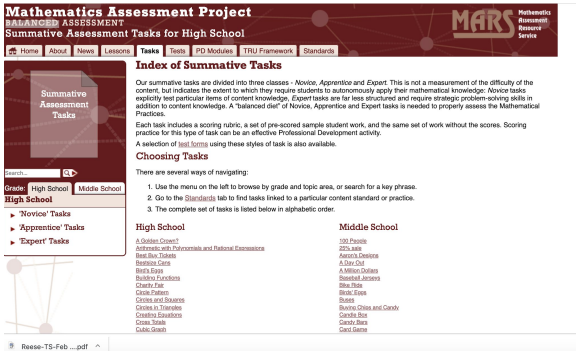
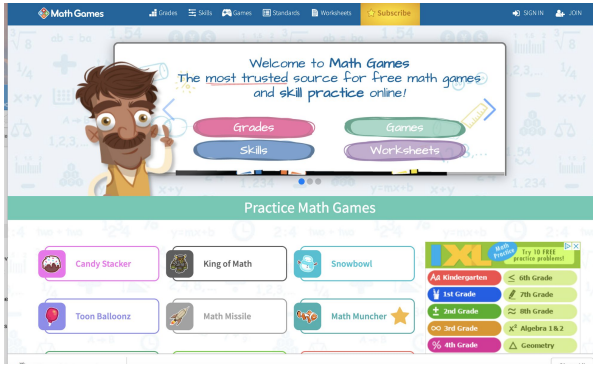
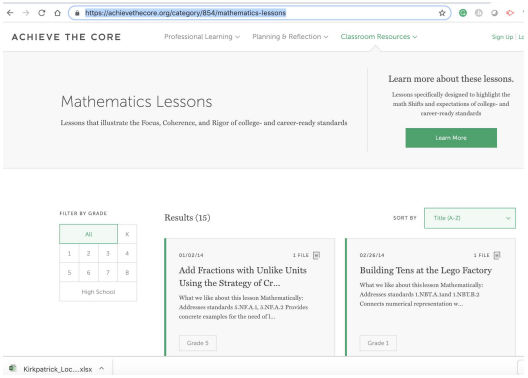
More Math Resources

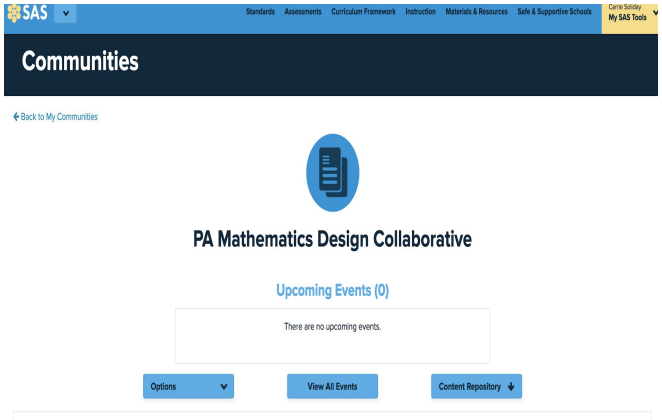


KHANACADEMY









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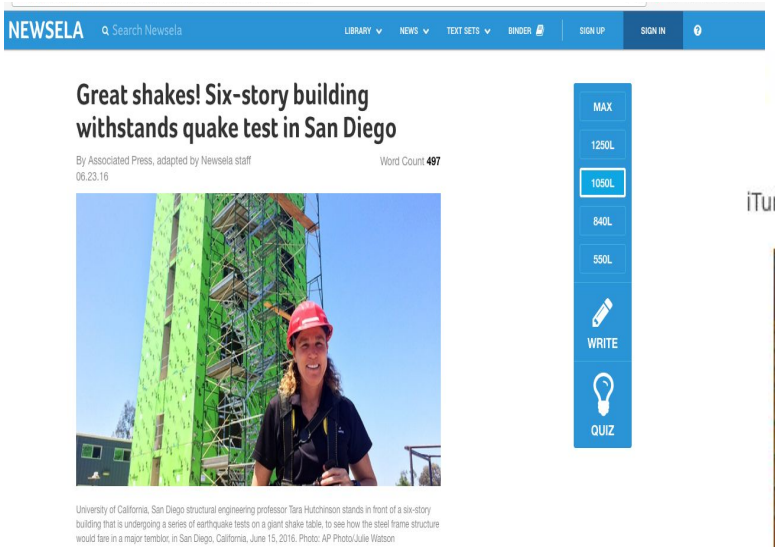
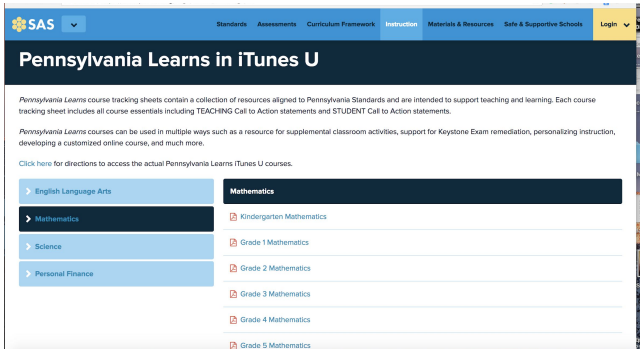
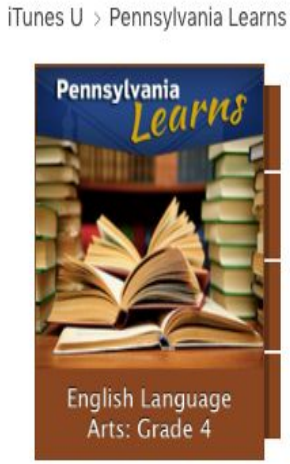
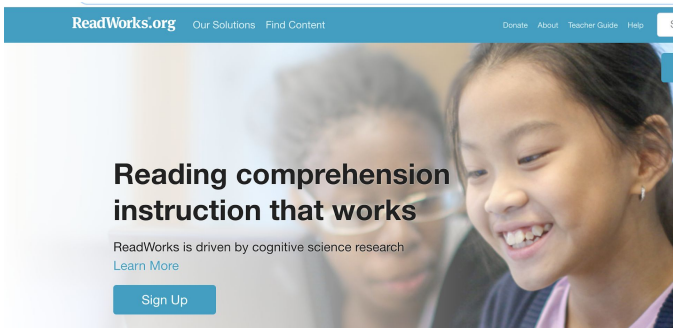
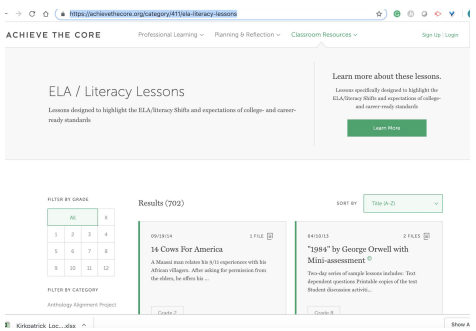
ELA Resources

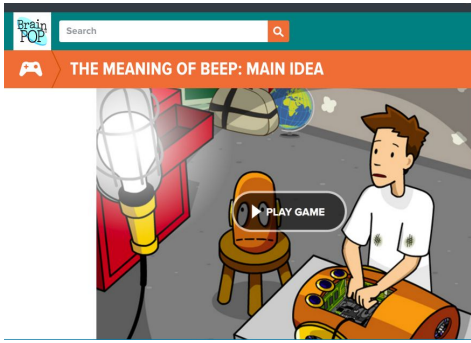












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More ELA Resources

word generation

readwritethink

VOCABULARY SPELLING CITY®

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Math, Science, ELA Resources

https://www.oercommons.org/

Plan for a Conference

- When will you have time to conference?
- What questions will you ask?
- What resources are available?

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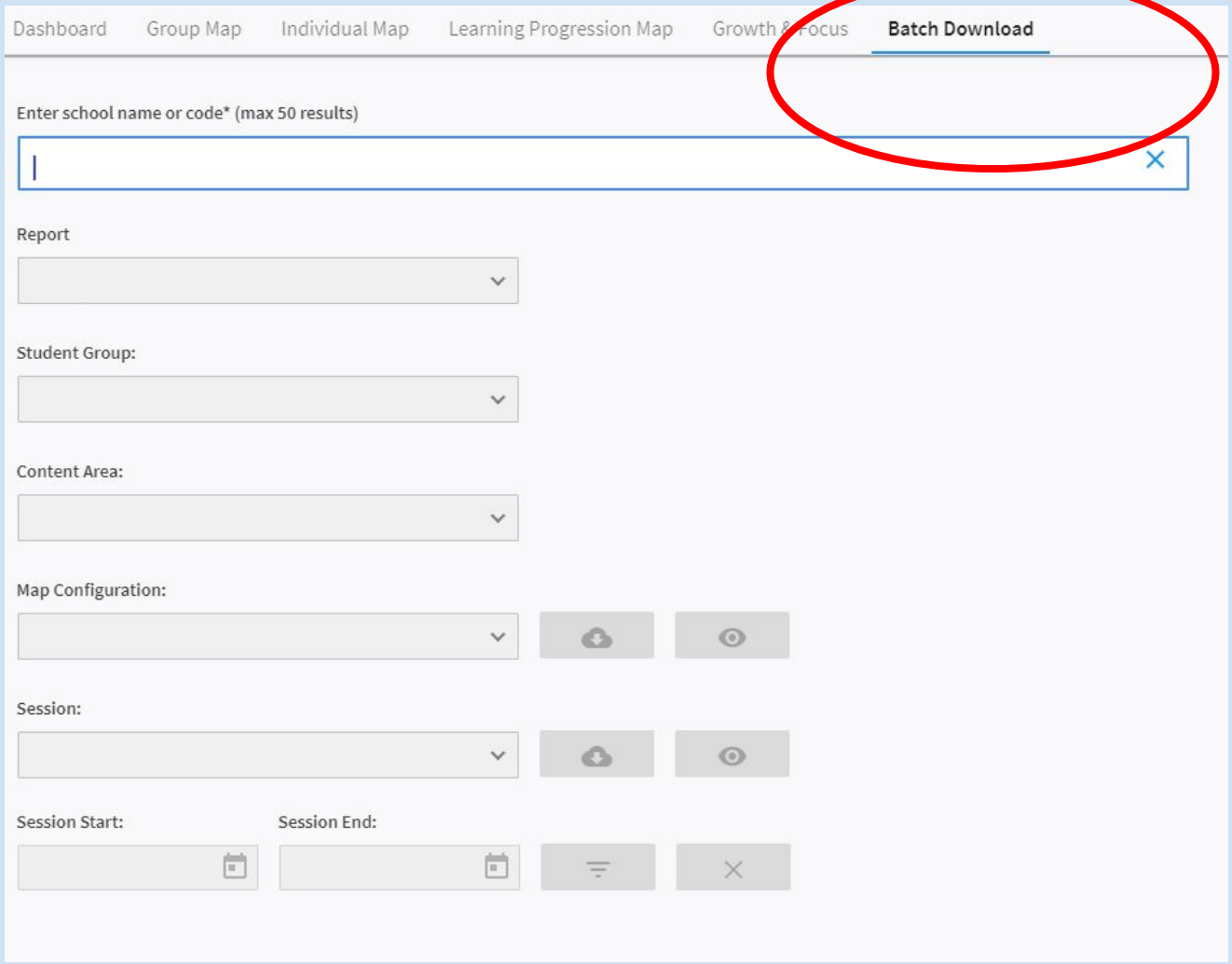
Batch Download
Select and Export/Print



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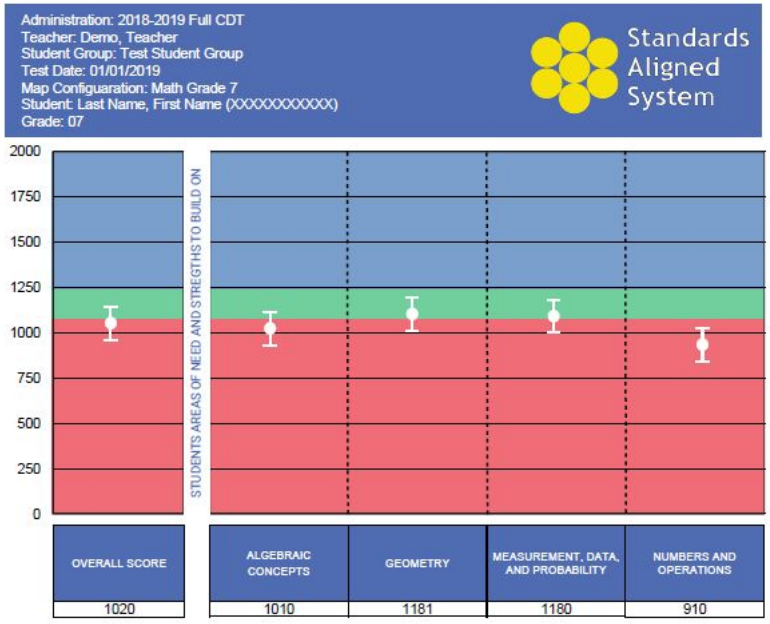
Batch Download Individual Reports with EC



ALGEBRAIC CONCEPTS	
M06.B-E.1.1.3	Identify parts of an expression using mathematical terms (e.g., sum, term, product, factor, quotient, coefficient, quantity).
M06.B-E.1.1.5	Apply the properties of operations to generate equivalent expressions.
M06.B-E.2.1.4	Write an inequality of the form x > c or x c to represent a constraint or condition in a real-world or mathematical problem and/or represent solutions of such inequalities on number lines.
M06.B-E.3.1.1	Write an equation to express the relationship between the dependent and independent variables.
M06.B-E.3.1.2	Analyze the relationship between the dependent and independent variables using graphs and tables, and/or relate these to an equation.
GEOMETRY	
M05.C-G.1.1.1	Identify parts of the coordinate plane (x-axis, y-axis, and the origin) and the ordered pair (x-coordinate and y-coordinate). Limit the coordinate plane to quadrant I.
M05.C-G.1.1.2	Represent real world and mathematical problems by plotting points in quadrant I of the coordinate plane, and interpret coordinate values of points in the context of the situation.
M05.C-G.2.1.1	Classify two-dimensional figures in a hierarchy based on properties.

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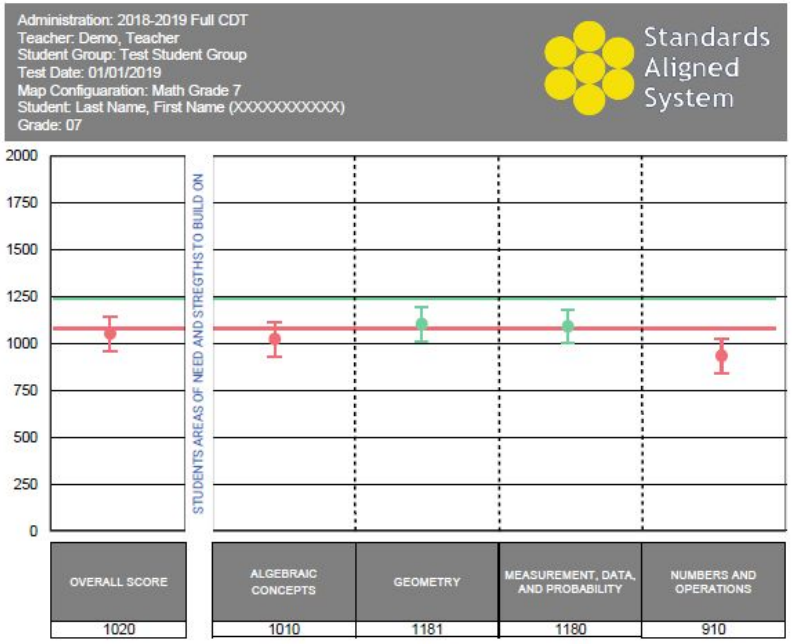
Batch Download
Individual Reports with EC (Printer Friendly)



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M06.B-E.3.1.2	Analyze the relationship between the dependent and independent variables using graphs and tables, and/or relate these to an equation.
GEOMETRY	
M05.C-G.1.1.1	Identify parts of the coordinate plane (x-axis, y-axis, and the origin) and the ordered pair (x-coordinate and y-coordinate). Limit the coordinate plane to quadrant I.
M05.C-G.1.1.2	Represent real world and mathematical problems by plotting points in quadrant I of the coordinate plane, and interpret coordinate values of points in the context of the situation.
M05.C-G.2.1.1	Classify two-dimensional figures in a hierarchy based on properties.

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Growth & Focus - Training Scenario
Coming Soon

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Growth & Focus

Growth & Focus

THIS IS A PROTOTYPE THAT UTILIZES MOCK DATA. A new report is being developed for the CDT Diagnostic Category tests that will capture student growth information. Users will have the opportunity to ch

Diagnostic Category	Student Group Main	Student Name	Total 10/11/2017 Scale Score	Total 2/10/2018 Scale Score	Total Change in Scale Score	Total SEM	Significant Growth	Group
Numbers and Operations	Math - 1st Hour	Charlotte Christen	868	1026	158	75	Yes	FOCUS
Numbers and Operations	Math - 1st Hour	Sandy Schisch	898	929	31	75	No	FOCUS
Numbers and Operations	Math - 1st Hour	Rosalee Quedrago	1168	1167	-1	75	No	all
Numbers and Operations	Math - 1st Hour	Keeton Banks	750	751	1	75	No	FOCUS
Numbers and Operations	Math - 1st Hour	Michael Sorenson	1198	1203	5	75	No	all
Numbers and Operations	Math - 1st Hour	Jason Tast	878	904	26	75	No	FOCUS
Numbers and Operations	Math - 1st Hour	Louis Chapman	820	897	77	75	No	FOCUS
Numbers and Operations	Math - 1st Hour	Jonathan Dales	848	1004	156	75	Yes	FOCUS
Numbers and Operations	Math - 1st Hour	Jacob Jones	1208	1254	46	75	No	all

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Completing the Student Learning Objective (SLO) Process Template

<table>
<tr><th colspan="5">4. Performance Indicators (PI)</th></tr>
<tr><td>4a.
PI Targets:
All Student Group</td><td colspan="4">The following criteria assigns students to the "All Student Group":
[First Administration: Overall scale score is 1037 or higher (Grade 8 Bottom of Green)]
Note: Each student must participate in all assessments (September and May CDT administrations and end-of-year constructed-response assessment) to be included in the SLO results.
• PI Target #1 Classroom Diagnostic Tools – Algebra I
Final administration: Overall score is no less than the Alg. 1 Bottom of Green (1134).
• PI Target #2 Algebra I End-of-Year Constructed Response Assessment
Student will achieve a minimum score of 12 points out of 16 based upon the Keystone Reference: Algebra I General Description of Scoring Guidelines</td></tr>
<tr><td>4b.
PI Targets:
Focused Student Group
(optional)</td><td colspan="4">The following criteria assigns student to the "Focused Student Group";
[First Administration: overall scale score is 1036 or lower (in the red, based on Grade 8 cut score)]
• PI Target #1 Classroom Diagnostic Tools – Algebra I
Final Administration: Overall scale score shows growth of a minimum of one standard error above the first administration score.
• PI Target #2 Alg. I End of Year Constructed Response Assessment
Student will achieve a minimum score of 8 points out of 16 based upon the Keystone Reference: Algebra I General Description of Scoring Guidelines</td></tr>
<tr><td>4c.
PI Linked
(optional)</td><td></td><td>4d.
PI Weighting
(optional)</td><td></td><td><table><tr><th>PI</th><th>Weight</th></tr><tr><td>#1</td><td></td></tr><tr><td>#2</td><td></td></tr><tr><td>#3</td><td></td></tr><tr><td>#4</td><td></td></tr><tr><td>#5</td><td></td></tr></table></td></tr>
</table>

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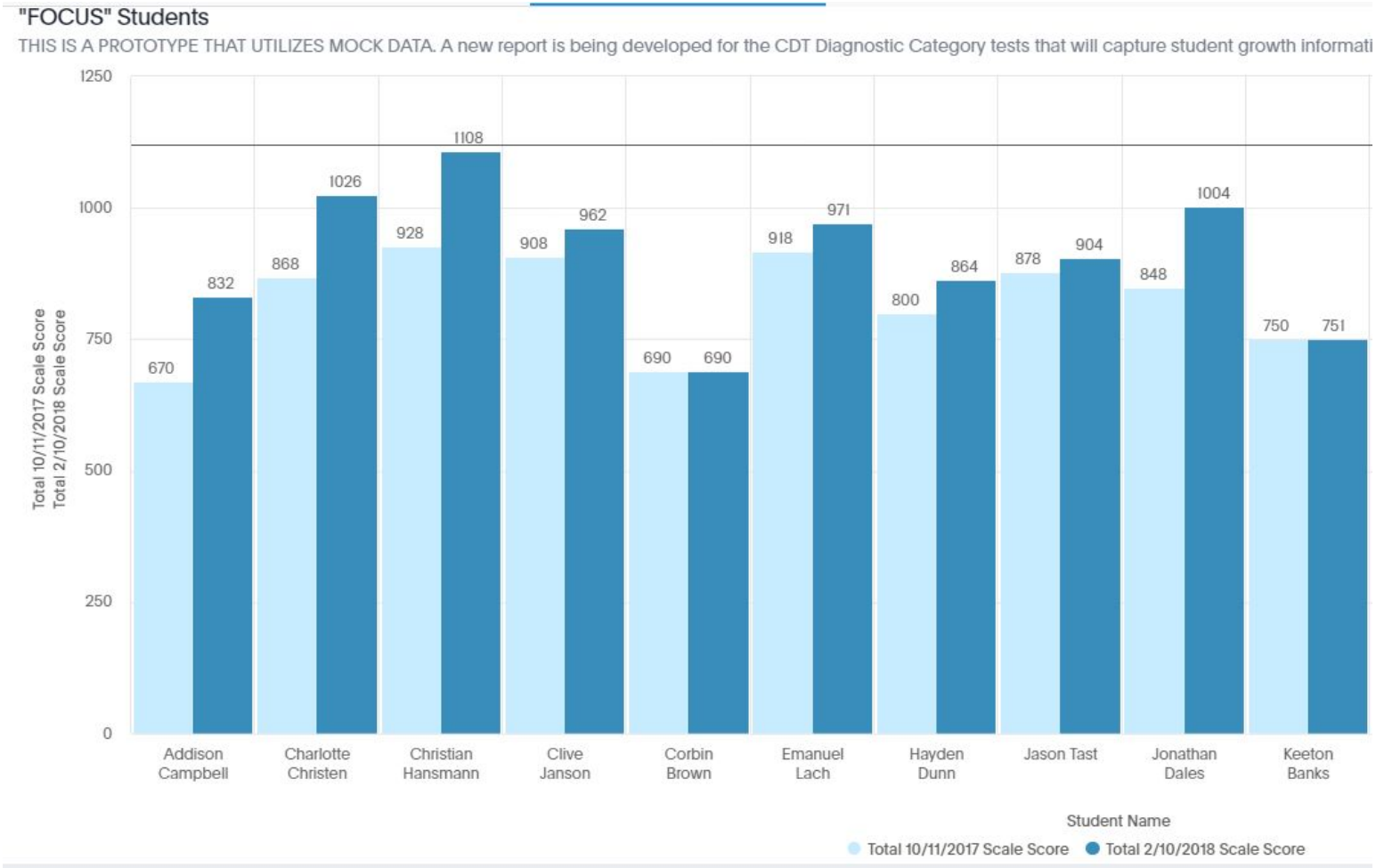
Growth & Focus - Visual



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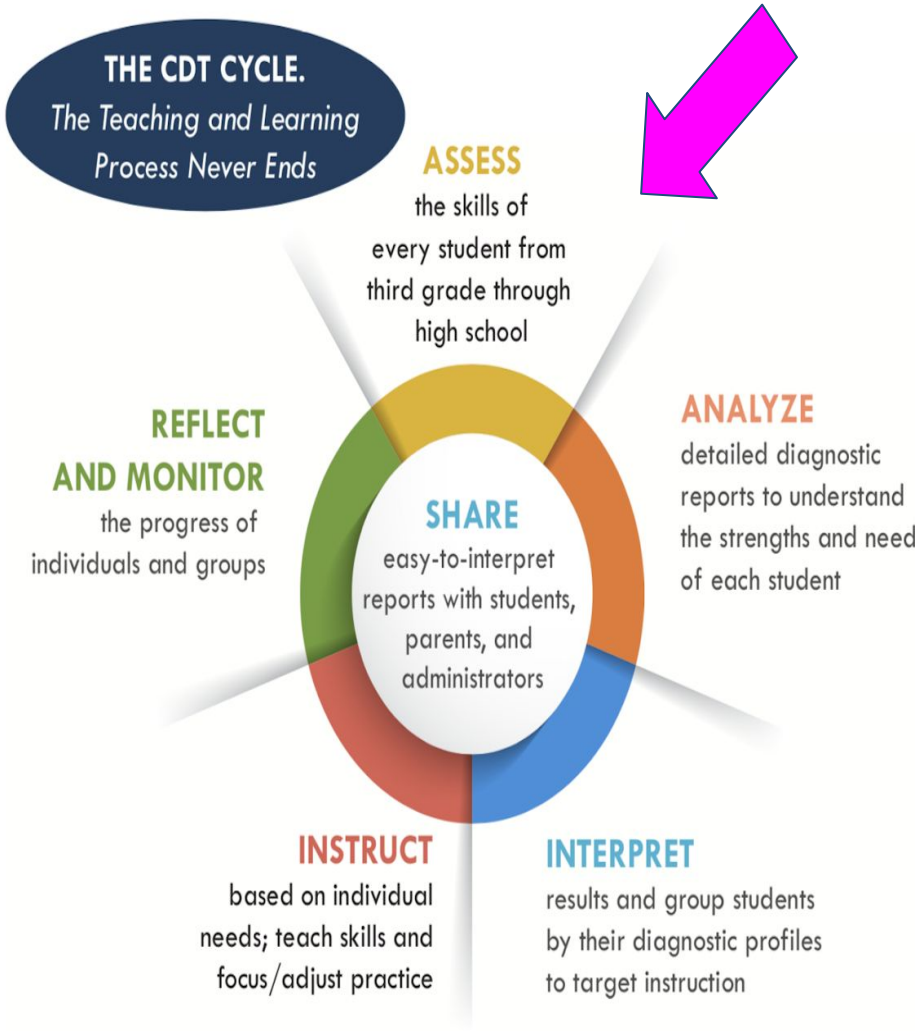
Preparing for the Test

What are the best practices?

Classroom Diagnostic Tools



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Schools who report positive effects of CDT usage see it as…

An assessment done ***with*** the students, **not** ***to*** the students

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Before the Test: Purpose of the CDT

- This test will tell both ME and YOU what you know about material you:
  - Should already know
  - Will learn this year
  - Will learn next year
- This will help me adjust how I instruct you so you are neither lost or bored.
- This test has built in tools and supports to assist you, here are what they are and how they work…

Before the Test: The Diagnostic Nature of the Test

- This is an adaptive test, meaning it changes the questions it gives you based on your answers
- Correct answers can lead to more challenging questions
- Eventually you will fail to answer correctly (this is unlike most classroom assessments!)

Before the Test: The Diagnostic Nature of the Test

- Use the 'Treadmill Example'.

Before the Test: What WE Will Do With The Results

- You will reflect on your performance
- We will examine your results and compare it to past/present/future content
- You will set goals based on what you learn about yourself

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During the Test: Don't Randomly Click

- The computer software examines your answers to determine what you know and don't know
- If you randomly click, it has a more difficult time doing this which often leads to more questions than average
- In other words, clicking random answers to finish early usually leads to a longer test!

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During the Test: Try Your Best But Don't Dwell on a Question

- This test is not graded
- Read a question and answers carefully, and give it some thought, but if you have to consider a question for more than two minutes, even if you answer it correctly, you haven't mastered the content yet!

After the Test: Conferencing

- Teacher sits with student and reviews performance on this test vs previous
- Examines performance on questions
- Sets goals based on the results

After the Test: Reflection and Goal-Setting

- The ideal document is one that works best for a given teacher and her students
- Most metacognition documents include:
  - How did you perform in each reporting category? (Reflect on this)
  - What goals will you set based on the data?
- Samples from across the state

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Perspective: Elementary Principal

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Setting up the Test

What's the process?

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Additional Presentations

- **Tech Readiness and Setup**
  - https://tinyurl.com/CDTs-IndianaASD
    - 2019 Technology Setup Resources
    - 2019 General Info
  - Older Resources but still applicable
    - Online Technology Readiness
    - Site Readiness Overview
    - Site Administration and Testing Flow Chart for CDTs

Logistics & Permissions

With the addition of Diagnostic Category Assessments and flexibility, who should/could be deciding on assessment windows, creating the sessions, printing tickets, etc.?

Could a Teacher?

- Assuming that all students plus new additions have been added at an administrative level.
  - Create a Student Group
  - Edit the Student Group
  - Create a Test Session
  - Print Test Tickets
  - Check Status of Session

Classroom Diagnostic Tools

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DOMAIN 1: Planning and Preparation

1a Demonstrating Knowledge of Content and Pedagogy
- Content knowledge • Prerequisite relationships • Content pedagogy

1b Demonstrating Knowledge of Students
- Child development • Learning process • Special needs
- Student skills, knowledge, and proficiency
- Interests and cultural heritage

1c Setting Instructional Outcomes
- Value, sequence, and alignment • Clarity • Balance
- Suitability for diverse learners

1d Demonstrating Knowledge of Resources
- For classroom • To extend content knowledge • For students

1e Designing Coherent Instruction
- Learning activities • Instructional materials and resources
- Instructional groups • Lesson and unit structure

1f Designing Student Assessments
- Congruence with outcomes • Criteria and standards
- Formative assessments • Use for planning

DOMAIN 2: The Classroom Environment

2a Creating an Environment of Respect and Rapport
- Teacher interaction with students • Student interaction with students

2b Establishing a Culture for Learning
- Importance of content • Expectations for learning and behavior
- Student pride in work

2c Managing Classroom Procedures
- Instructional groups • Transitions
- Materials and supplies • Non-instructional duties
- Supervision of volunteers and paraprofessionals

2d Managing Student Behavior
- Expectations • Monitoring behavior • Response to misbehavior

2e Organizing Physical Space
- Safety and accessibility • Arrangement of furniture and resources

DOMAIN 4: Professional Responsibilities

4a Reflecting on Teaching
- Accuracy • Use in future teaching

4b Maintaining Accurate Records
- Student completion of assignments
- Student progress in learning • Non-instructional records

4c Communicating with Families
- About instructional program • About individual students
- Engagement of families in instructional program

4d Participating in a Professional Community
- Relationships with colleagues • Participation in school projects
- Involvement in culture of professional inquiry • Service to school

4e Growing and Developing Professionally
- Enhancement of content knowledge and pedagogical skill
- Service to the profession

4f Showing Professionalism
- Integrity/ethical conduct • Service to students • Advocacy
- Decision-making • Compliance with school/district regulations

DOMAIN 3: Instruction

3a Communicating With Students
- Expectations for learning • Directions and procedures
- Explanations of content • Use of oral and written language

3b Using Questioning and Discussion Techniques
- Quality of questions • Discussion techniques • Student participation

3c Engaging Students in Learning
- Activities and assignments • Student groups
- Instructional materials and resources • Structure and pacing

3d Using Assessment in Instruction
- Assessment criteria • Monitoring of student learning
- Feedback to students • Student self-assessment and monitoring

3e Demonstrating Flexibility and Responsiveness
- Lesson adjustment • Response to students • Persistence

Classroom Diagnostic Tools

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