



## Testing 1, 2, 3 Website Overview

Kendra Olsen | Outreach & Training Specialist – Statewide Testing

# Presentation Outline



1. Introduction and background
2. Assessment and Data Literacy Overview
3. Website Resources
4. Teacher involvement opportunities

[Testing123.education.mn.gov](https://Testing123.education.mn.gov)

# Data Quality Campaign Policy Brief - 2014

- States must do more to promote data literacy among teachers.
- States should do this by:
  1. Promoting data use skills
  2. Ensuring ease of access to data
  3. Adopting a common language around data literacy

- *The Data Quality Campaign: [Teacher Data Literacy: It's About Time](#), 2014*

# Why is data and assessment literacy important?

- Many teachers report feeling overwhelmed with data, rather than empowered by data as a tool for improving instruction and outcomes for students.
- There is an urgent need to support teacher data literacy through state support.
- Without it, data will continue to be a burden to teachers rather than a powerful tool for effective teaching.

- *The Data Quality Campaign: [Teacher Data Literacy: It's About Time](#), 2014*



# Background for State Testing Outreach

- 2016 – Implementation began of a federal grant (SLDS) to help build data use capacity among districts
- March 2016 – OLA evaluation of standardized testing in Minnesota
- June 2016 – MDE State Testing Division hired an Outreach Specialist
- March 2017 – OLA Report released
  - Part of OLA's Recommendation: MDE should further increase outreach and support to school districts and charter schools regarding the interpretation and use of test scores.

# Background for Website

- 2017 Winter – Focus Groups started to gather initial input from educators
- 2017 Spring and Summer – First draft of Testing 1,2,3 Website
- 2018 – Second round of teacher focus groups
- 2019 Winter – New outreach specialist hired
- 2019 Spring – website redesign using feedback from teachers and admin
- 2019 Summer – Website redesign and launch!

# Purpose of Site



[Testing123.education.mn.gov](https://Testing123.education.mn.gov)

1. Promote teacher data use skills related to assessment of student learning
  - *Outreach and support to school districts and charter schools regarding the interpretation and use of test scores.*
2. Provide easier access to data and assessment resources from state testing that are specific to teachers
3. Increase teacher involvement with State Testing Division at MDE

# Assessment and Data Literacy Overview



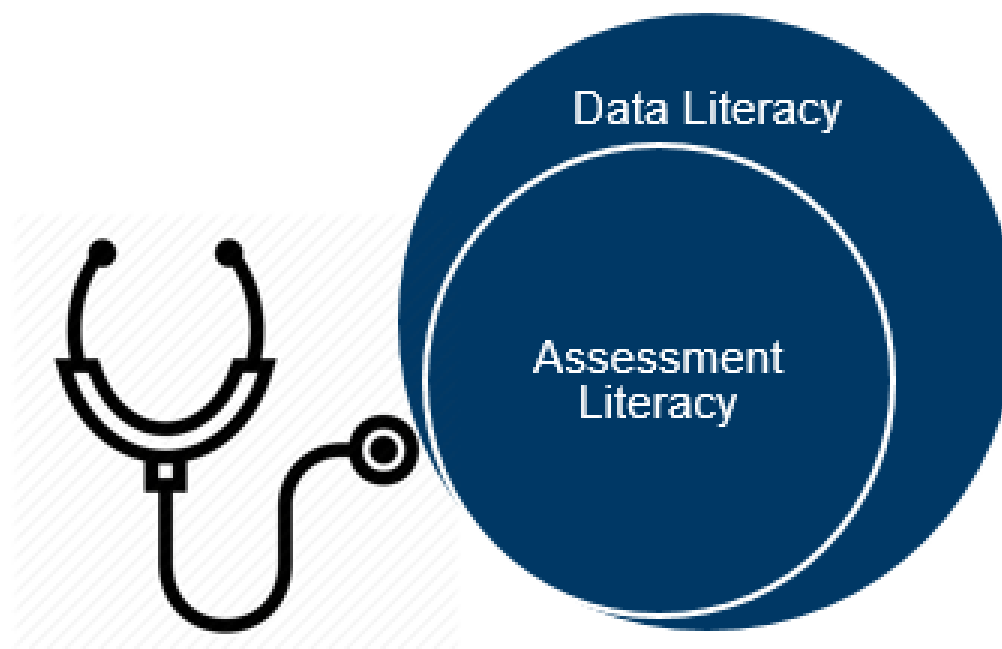
A grayscale background image showing a group of graduates in caps and gowns. One graduate in the foreground is smiling broadly.

# Ten Minnesota Commitments to Equity

1. Prioritize equity.
2. Start from within.
3. Measure what matters.
4. Go local.
5. Follow the money.
6. Start early.
7. Monitor implementation of standards.
8. Value people.
9. Improve conditions for learning.
10. Give students options.

# Assessment Literacy

- Assessment literate educators know **how**, **when**, and **why** to assess student learning.
- Assessment literate educators design and/or choose a variety of assessments that are able to elicit evidence of student mastery of the Minnesota Academic Standards.



# New videos

- <https://testing123.education.mn.gov/test/Video/?group=Educ&id=000228>

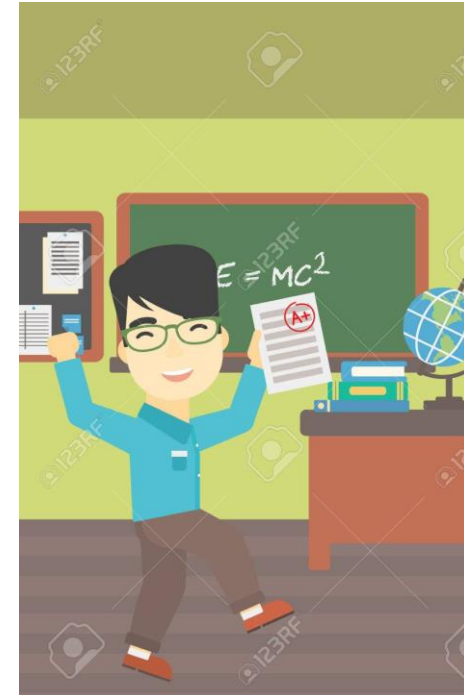


# A Comparison of Assessment Types

Type	Examples & Frequency	Evidence Produced	Level of Impact	Used by
<b>Formative</b>	<ul style="list-style-type: none"><li>• Daily Checks for Understanding</li><li>• Weekly Quizzes</li></ul>	<ul style="list-style-type: none"><li>• Lesson sized learning targets</li><li>• Retained learning across lessons and achievement level</li></ul>	Used to make immediate decisions about what students currently know, and where to go next	<ul style="list-style-type: none"><li>• Students</li><li>• Teachers in classroom</li></ul>
<b>Interim</b>	Midterm Exams that occur 2-3 times per year	Cumulative, longer-term learning retention	Evaluate curriculum effectiveness and used for macro-level planning	<ul style="list-style-type: none"><li>• Groups of Teachers</li><li>• School Leaders</li></ul>
<b>Summative</b>	<ul style="list-style-type: none"><li>• Unit Tests or Performance Tasks</li><li>• State Tests (MCA)</li></ul>	Proficiency of learning compared to the Minnesota Academic Standards and Achievement Level Descriptors	Used for accountability and evaluation of curriculum in regards to the standards	<ul style="list-style-type: none"><li>• Groups of Teachers</li><li>• School, District Leaders</li><li>• Policy Makers</li></ul>

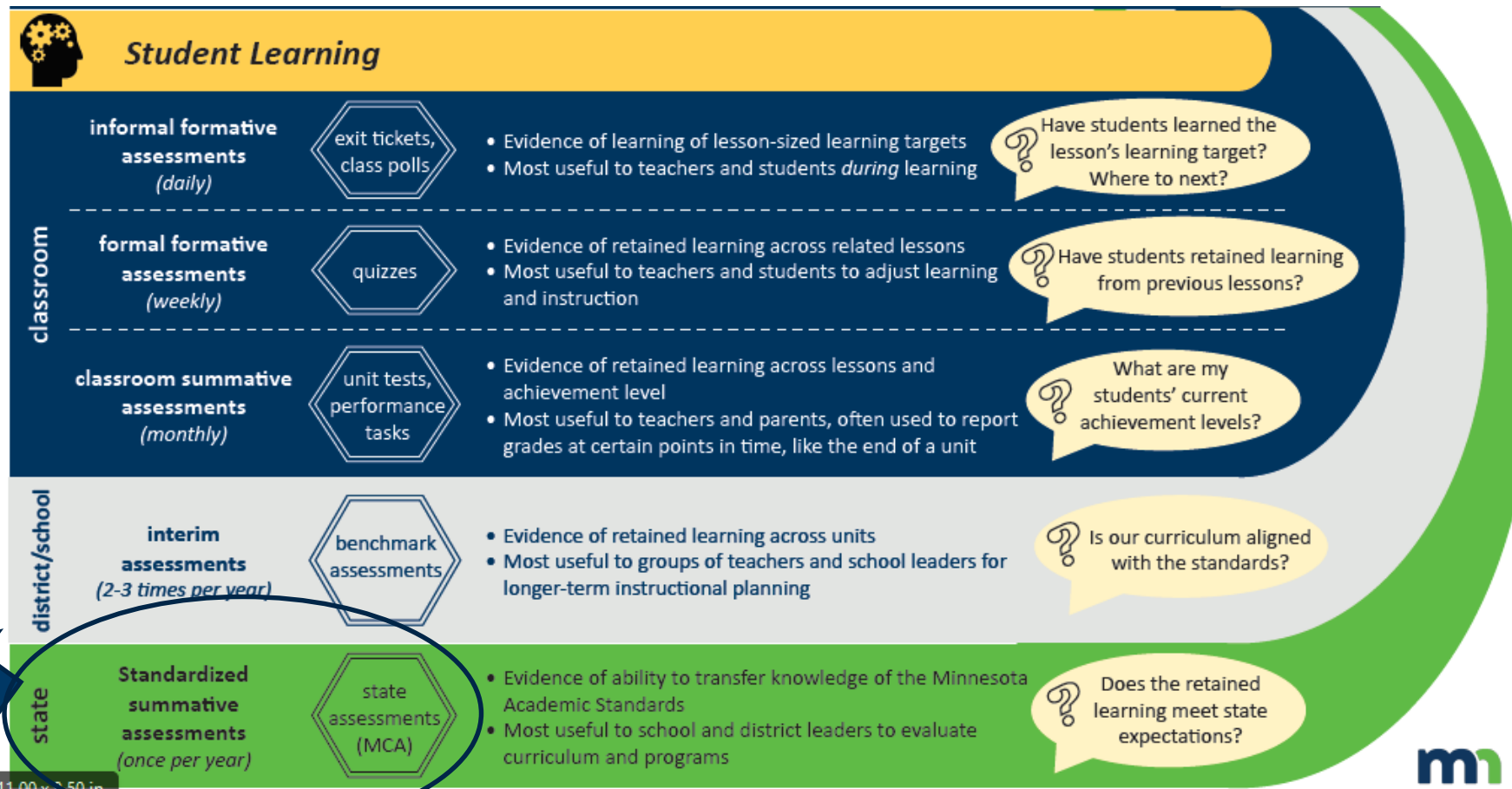
# Student Centered Assessment Systems

- Assessment systems, when implemented effectively, can cause students to learn, not just simply measure student performance.
  - Stiggins and Chappuis, *Theory into Practice* (2005)
- When students see evidence of their success on classroom formative assessments, they can watch themselves grow as learners. This cannot come from MCA results which are too infrequent.
- If students track their progress on learning targets aligned to Benchmarks and ALDs, they gain a better sense of control and confidence in their own learning.



MCA data should be used alongside formative and interim assessment data when making decision that impact individual students.

The MCA is the furthest away from impacting student learning



## Minnesota Assessments

Standards-Based  
Accountability Assessments

English Language Proficiency  
Accountability Assessments

**MCA**

**MTAS**

**ACCESS for  
ELLs**

**Alternate  
ACCESS for  
ELLs**

# Purposes of Minnesota Assessments

- ❑ To measure achievement
- ❑ To measure academic progress

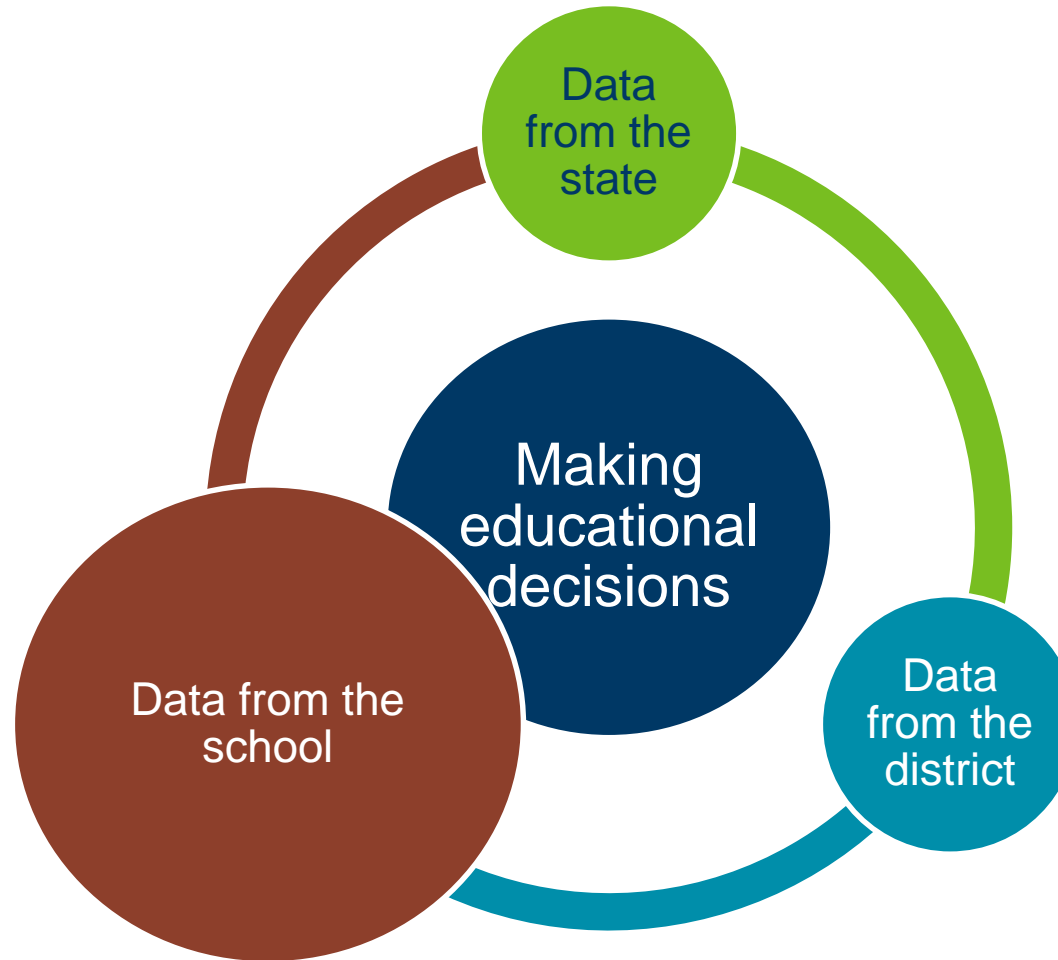


# Minnesota Assessments: Aligned to Standards

This is the “series number”

Test Names	Standards	Year Adopted
Reading MCA-III and MTAS	Minnesota K–12 Academic Standards in English Language Arts	2010
Mathematics MCA-III and MTAS	Minnesota K–12 Academic Standards in Mathematics	2007
Science MCA-III and MTAS	Minnesota K–12 Academic Standards in Science	2009
ACCESS and Alternate ACCESS for ELLS	WIDA English Language Development Standards	2011

# Minnesota Assessment Data: One Component



# When are students tested?

- All public school students are assessed in the following subjects:

Subject area	When are they tested?
Reading	Grades 3-8, and 10
Mathematics	Grades 3-8, and 11
Science	Grades 5, 8, and once in high school


# Website Resources


# Testing 1-2-3: New look!


# TESTING 123

Test data in the classroom: Assessing, analyzing and taking action

[Plan and Teach](#) [1. Assess](#) [2. Analyze](#) [3. Take Action](#) [Get Involved](#)

1.   
Assess

2.   
Analyze

3.   
Take Action



## Testing 1, 2, 3: A Resource for Teachers

Educators empowered with reliable data use it to eliminate learning barriers and evaluate classroom instruction. This website is an effort to provide teachers with relevant assessment and data resources that support an equitable learning environment where all students can achieve at high levels.

1. Assess

2. Analyze

3. Take Action

[Glossary](#) |  [Search](#)

8/6/2019

Leading for educational excellence and equity, every day for every one. | [education.mn.gov](http://education.mn.gov)

21

# Standards based learning goals

- Resources for teachers in writing daily and long term learning goals
- Aligned to the Minnesota Academic Standards

## TESTING 123

Test data in the classroom: Assessing, analyzing and taking action

Plan and Teach ▼

1. Assess ▼

2. Analyze ▼

3. Take Action ▼

Standards Based Learning Goals

Success Criteria

MCA Test Structure

MCA Content Resources

Released MCA Questions

ce for Teachers

reliable data use it to eliminate  
the classroom instruction. This  
e teachers with relevant

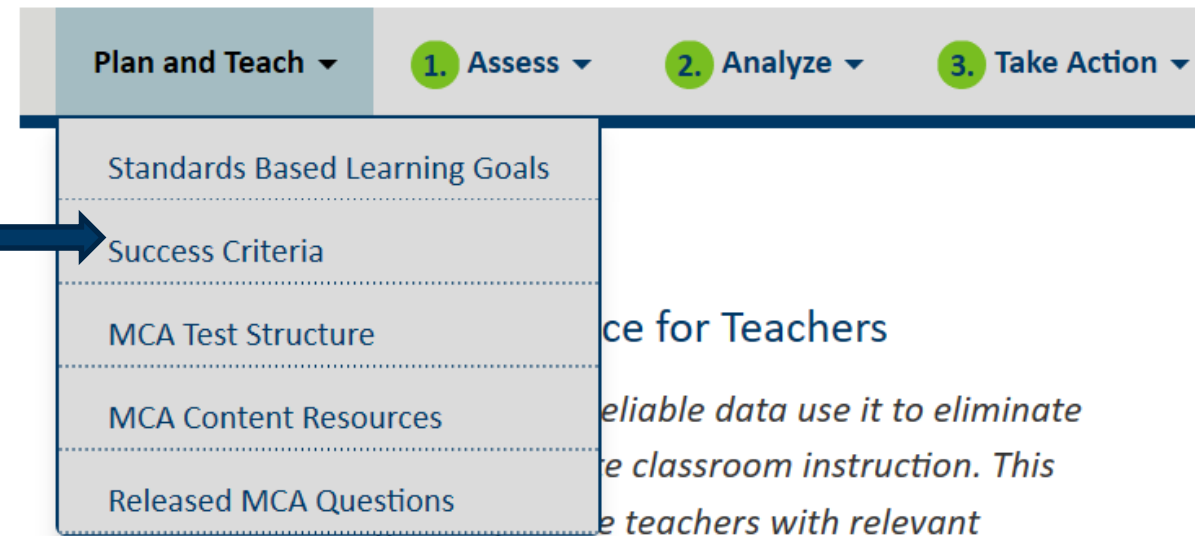
<https://testing123.education.mn.gov/test/plan/goals/>

# Success Criteria

- Use Achievement Level Descriptor (ALD) resources to analyze depth and breadth of curriculum
- The (ALDs) describe the four levels of achievement specific to grade-level for the Minnesota assessments, based on the standards.
- How, according to the test specifications, are students able to show their mastery of knowledge, skills, and abilities in the standards?

## TESTING 123

Test data in the classroom: Assessing, analyzing and taking action



<https://testing123.education.mn.gov/test/plan/success/>

# Success Criteria (2)

<https://testing123.education.mn.gov/test/plan/success/> > ALDs



## High School Science MCA-III Achievement Level Descriptors

These are supplementary materials to the Science MCA Achievement Level Descriptors. The overview for the MCA Achievement Level Descriptors and how to interpret them are on the MDE website at MDE > Districts, Schools and Educators > Statewide Testing > Achievement Level Descriptors.

Strand	Does Not Meet Students at this level of science succeed at few of the most fundamental science skills of the Minnesota Academic Standards. Some of the skills demonstrated may include:	Partially Meets Students at this level of science partially meet the science skills of the Minnesota Academic Standards. Some of the skills demonstrated may include:	Meets Students at this level of science meet the science skills of the Minnesota Academic Standards. Some of the skills demonstrated may include:	Exceeds Students at this level of science exceed the science skills of the Minnesota Academic Standards. Some of the skills demonstrated very consistently may include:
Nature of Science and Engineering	<ul style="list-style-type: none"> <li>Determines the appropriate safety procedures for a scientific investigation</li> <li>Understands what a hypothesis is</li> <li>Identifies the benefits of using scientific models</li> </ul>	<ul style="list-style-type: none"> <li>Identifies sources of error in an investigation</li> <li>Understands that engineering designs are continually checked so that they can be improved</li> <li>Recognizes that scientific knowledge occurs in steps that build on prior knowledge</li> <li>Selects appropriate graphical representations to communicate results</li> <li>Identifies a scientific hypothesis</li> </ul>	<ul style="list-style-type: none"> <li>Describes how changes in scientific knowledge usually builds on earlier knowledge</li> <li>Explains how bias might influence how research is done and the interpretation of data</li> <li>Recognizes that risk analysis is used to evaluate consequences of an engineered solution</li> <li>Evaluates possible solutions to an engineering problem at a local and regional level</li> <li>Uses appropriate numeric, or graphical representations to communicate a scientific idea</li> <li>Suggests ways to improve data collection</li> <li>Designs and conducts an experiment to test a hypothesis</li> </ul>	<ul style="list-style-type: none"> <li>Formulates a hypothesis and conducts an experiment to test this hypothesis</li> <li>Supports a conclusion with evidence from the investigation</li> <li>Develops possible solutions to an engineering problem in a global context</li> </ul>



# MCA Test Structure

- Subject and grade level specific Documents
- Created from Test Specs and Test Blueprint

Grade Level Assessment Details

Reading	Mathematics	Science
<a href="#">Grade 3</a>	<a href="#">Grade 3</a>	N/A
<a href="#">Grade 4</a>	<a href="#">Grade 4</a>	N/A
<a href="#">Grade 5</a>	<a href="#">Grade 5</a>	<a href="#">Grade 5</a>
<a href="#">Grade 6</a>	<a href="#">Grade 6</a>	N/A
<a href="#">Grade 7</a>	<a href="#">Grade 7</a>	N/A
<a href="#">Grade 8</a>	<a href="#">Grade 8</a>	<a href="#">Grade 8</a>
<a href="#">High School</a>	<a href="#">High School</a>	<a href="#">High School</a>



Test data in the classroom: Assessing, analyzing and taking action

Plan and Teach ▾

1. Assess ▾

2. Analyze ▾

3. Take Action ▾

Standards Based Learning Goals

Success Criteria

MCA Test Structure

MCA Content Resources

Released MCA Questions

ce for Teachers  
reliable data use it to eliminate  
the classroom instruction. This  
e teachers with relevant

<https://testing123.education.mn.gov/test/plan/structure/>

# MCA Test Structure (2)

- Each document is content and grade specific from test specs
- Useful for planning Scope & Sequence, Pacing Calendars, curriculum alignment, etc.
- Caution: This is only *one* resource to help with pacing and should not be the only

## Grade 9-12 Science MCA-III (Operational Form)

Strand	Approximate Number of Points	Approximate Percent of Points
Nature of Science and Engineering (NSE)	24-28	38
Life Science (LS)	40-44	62
<b>Total</b>	68	100

# Grade 9-12 Points by Substrand (2)

## Grades 9–12 Points by Substrand

### **1. Nature of Science and Engineering (24–28)**

1. The Practice of Science (8–10)
2. The Practice of Engineering (8–10)
3. Interactions among Science, Technology, Engineering, Mathematics and Society (8–10)

### **4. Life Science (40–44)**

1. Structure and Function in Living Systems (9–11)
2. Interdependence Among Living Systems (8–10)
3. Evolution in Living Systems (11–13)
4. Human Interactions with Living Systems (7–10)

# MCA Content Resources

- Links to item samplers for each subject and grade
- Links to teacher guides

Reading	Mathematics
<a href="#">Grade 3 Item Sampler</a> <a href="#">Grade 3 Teacher Guide</a>	<a href="#">Grade 3 Item Sampler</a> <a href="#">Grade 3 Teacher Guide</a>
<a href="#">Grade 4 Item Sampler</a> <a href="#">Grade 4 Teacher Guide</a>	<a href="#">Grade 4 Item Sampler</a> <a href="#">Grade 4 Teacher Guide</a>
<a href="#">Grade 5 Item Sampler</a> <a href="#">Grade 5 Teacher Guide</a>	<a href="#">Grade 5 Item Sampler</a> <a href="#">Grade 5 Teacher Guide</a> <a href="#">Grade 5 Formula Sheet</a>

## TESTING123

Test data in the classroom: Assessing, analyzing and taking action

Plan and Teach ▾

1. Assess ▾

2. Analyze ▾

3. Take Action ▾

Standards Based Learning Goals

Success Criteria

MCA Test Structure

MCA Content Resources

Released MCA Questions

ce for Teachers

reliable data use it to eliminate  
the classroom instruction. This  
e teachers with relevant

<https://testing123.education.mn.gov/test/plan/res/index.htm>

# Released MCA Questions

- Explore test questions from past exams
- Released items and response data for math and reading

The table shows the cost of apples.

Apple Prices	
Pounds of Apples	Price
2	\$4
4	\$8
6	\$12
?	\$18

Ben paid \$18 for apples at the grocery store.

How many pounds of apples did Ben buy?

- ☐ A. 7
- ☐ B. 8
- ☐ C. 9
- ☐ D. 12

# TESTING123

Test data in the classroom: Assessing, analyzing and taking action

Plan and Teach ▾

1. Assess ▾

2. Analyze ▾

3. Take Action ▾

Standards Based Learning Goals

Success Criteria

MCA Test Structure

MCA Content Resources

Released MCA Questions

ce for Teachers

reliable data use it to eliminate  
the classroom instruction. This  
e teachers with relevant

<https://testing123.education.mn.gov/test/plan/ques/index.htm>

# MCA Grade 3 Sample Item

The table shows the cost of apples.

**Apple Prices**

<b>Pounds of Apples</b>	<b>Price</b>
2	\$4
4	\$8
6	\$12
?	\$18

Ben paid \$18 for apples at the grocery store.

How many pounds of apples did Ben buy?

☐ A. 7

☐ B. 8

☐ C. 9

☐ D. 12

<https://testing123.education.mn.gov/test/plan/ques/index.htm>

# Student Data Example

RATIONALE A	The student may have thought the table was going in consecutive numeric order and chose 7 pounds since 6 was the last number of pounds in the table.
RATIONALE B	The student may have thought that the number of pounds of apples has to be a "plus 2" pattern and may not have taken the output values into consideration.
RATIONALE C	Correct - The student recognized that the input value is multiplied by 2 to get the output value and therefore recognized that 9 pounds of apples costs \$18.
RATIONALE D	The student may have thought the pattern was to add 6 to the input value based on the last row of data in the table and therefore subtracted 6 from 18 to get an input value of 12.

Answer Selected	Percent of Students Who Selected It
A	2%
B	59%
C	35%
D	5%

# Formative Assessment

## TESTING123

Test data in the classroom: Assessing, analyzing and taking action

Plan and Teach ▾

1. Assess ▾

2. Analyze ▾

3. Take Action ▾

### Quick Links

Join an Educator  
Committee

Formative, Interim and Summative  
Assessment Design

Assessment Design at MDE

Andre, do you  
understand  
this?



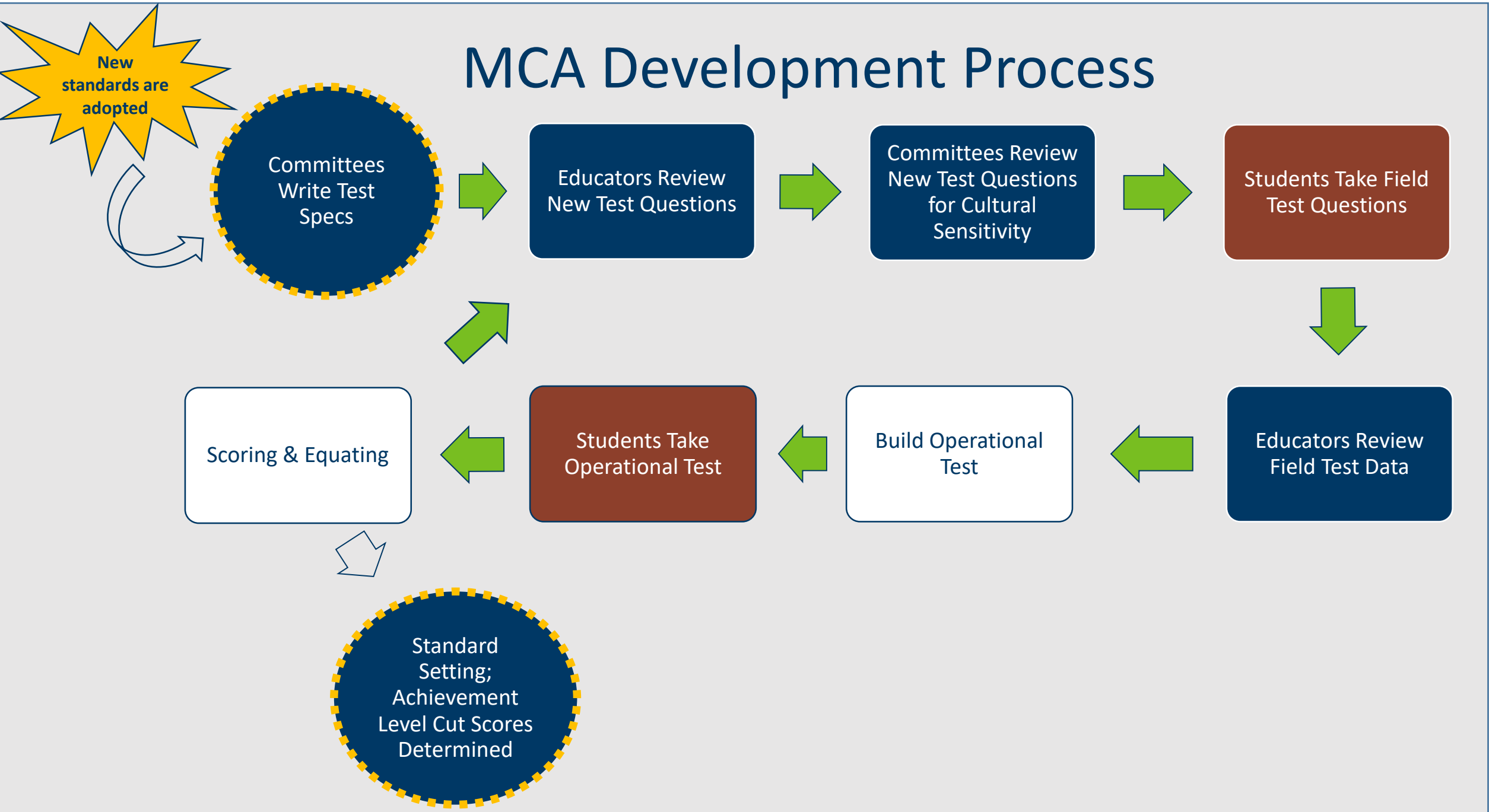
0:01:18

- Four new animated videos about assessment types
- Resources about balanced assessment systems and impact of assessment on various levels of education system

<https://testing123.education.mn.gov/test/assess/formative/>



# MCA Development Process



## CAT Item Bank

?

?

?

?

?

?

?

?

?

?

?

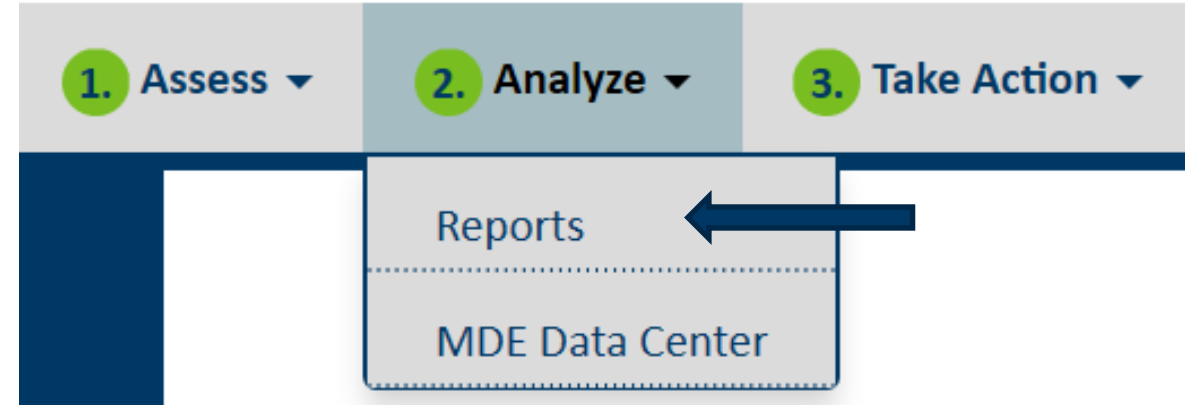
?

?

?

# Analyze Resources: Reports

- MCA Scale Score Resources
- Guides for Interpreting Various Score Reports (ISR, Benchmarks, etc.)
- Guide for Understanding MCA and MTAS Rosters
- Data Center Overview



## — Reports from Statewide Testing

### Reports available in PearsonAccess Next

- Preliminary [On-Demand Reports](#) are available for the Minnesota Comprehensive Assessment (MCA) and the Minnesota Test of Academic Skills (MTAS) within an hour after testing or data entry is completed. Preliminary student results provided in PearsonAccess Next can be printed for students, families, and staff for instructional purposes; however, it is up to the district to determine how preliminary student results are used. On-Demand Reports are available until final assessment data are released.
- [Historical Student Data](#) includes historical MCA and MTAS results for students who previously tested in the district, and for students enrolled in the district regardless of where they tested.
- [Longitudinal Reports](#) include historical MCA and MTAS results for review and comparison at the student, school, district, and/or state level.
- [Published Reports](#) include the final versions of reports provided to districts by MDE (Rosters, ISRs, and Benchmark Reports).

<https://testing123.education.mn.gov/test/analyze/report/>

# Scale Score Definitions

## Theta ( $\theta$ )

The estimate of “ability” (performance)

- Theta range for Minnesota Assessments [-3 to 3]

## Scale Score (SS)

The theta/ability estimate is transformed into the scale score via transformation

- MCA-III scale scores are from X01-X99 (X = grade)

## Achievement Level Descriptors (ALDs)

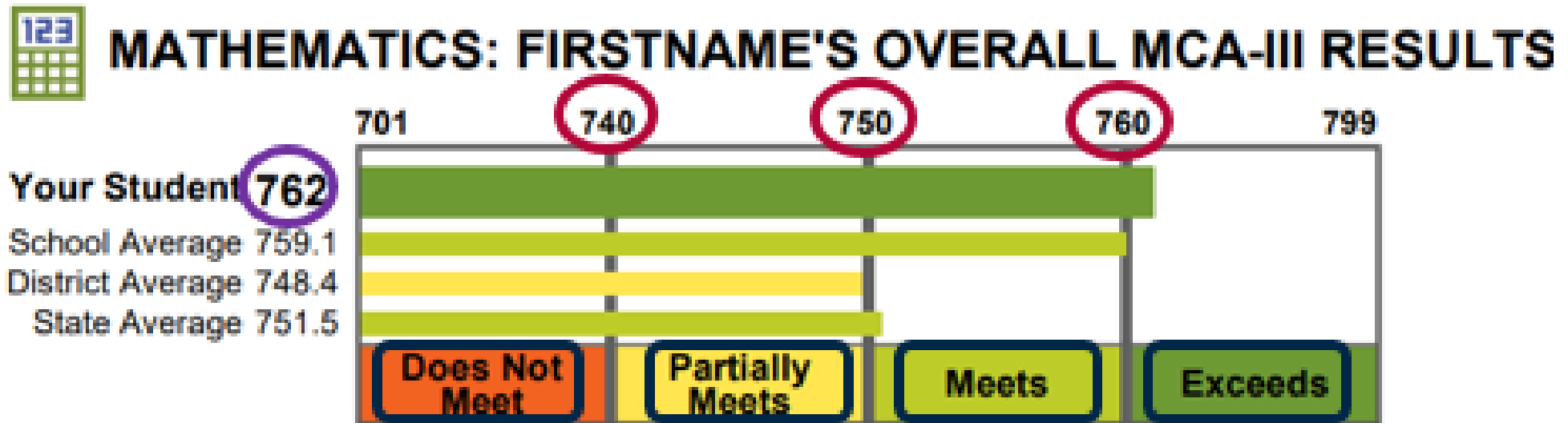
Describes the level of student achievement (Does not meet standards, Partially Meets Standards, Meets Standards, Exceeds Standards)

# Where you see scale scores and ALDs

(Individual Student Report – ISR)

**Scale Score (SS)**  
(theta transformed)

**Cut Scores (based on the ALDs)**



## Achievement Levels

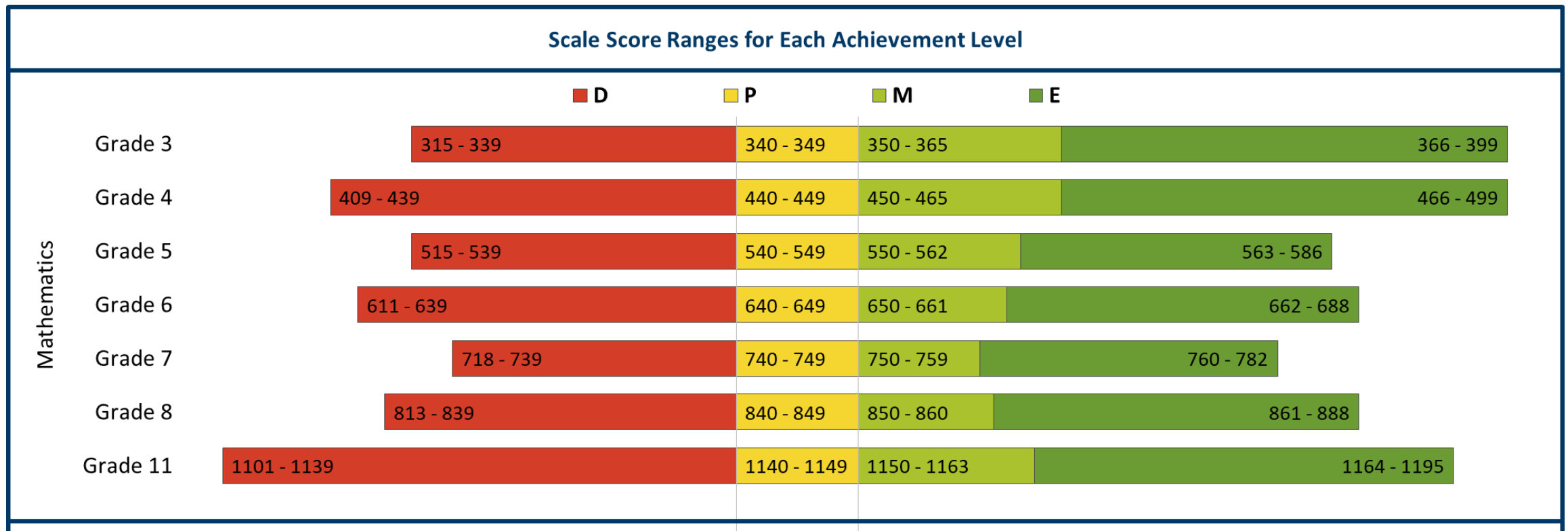
# Scale Scores Continued

<https://testing123.education.mn.gov/test/analyze/report/> > Resources > Understanding MCA Scale Scores

Scale Score Ranges for Each Achievement Level				
		D	P	M E
Science	Grade 5	501 - 539	540 - 549	550 - 569 570 - 599
	Grade 8	801 - 839	840 - 849	850 - 861 863 - 899
	HS	1001 - 1039	1040 - 1049	1050 - 1062 1063 - 1099

# Scale Scores Continued

<https://testing123.education.mn.gov/test/analyze/report/> > Resources > Understanding MCA Scale Scores



# Appropriate use of Scale Scores

- MCA scale scores are based on grade-level specific content
- In technical terms, this means the scores are not “vertically aligned”
- Scale scores should never be compared across the grades for a particular student, especially when determining if a student has no growth, remained the same, or improved.
- The achievement levels CAN be used to assess whether student growth across grades is demonstrated.

<https://testing123.education.mn.gov/test/analyze/report/> > Resources > Where do Scale Scores Come from?



# Overview of Resources in MDE Data Center

1. Assess ▼

2. Analyze ▼

3. Take Action ▼

Reports

MDE Data Center

Minnesota Report Card  
(K – 12<sup>th</sup> Grade)

Early Childhood  
Longitudinal Data  
System (ECLDS)  
(Birth – 12th Grade)

Statewide Longitudinal  
Education Data System  
(SLEDS)  
(Pre-K through Work  
Force)

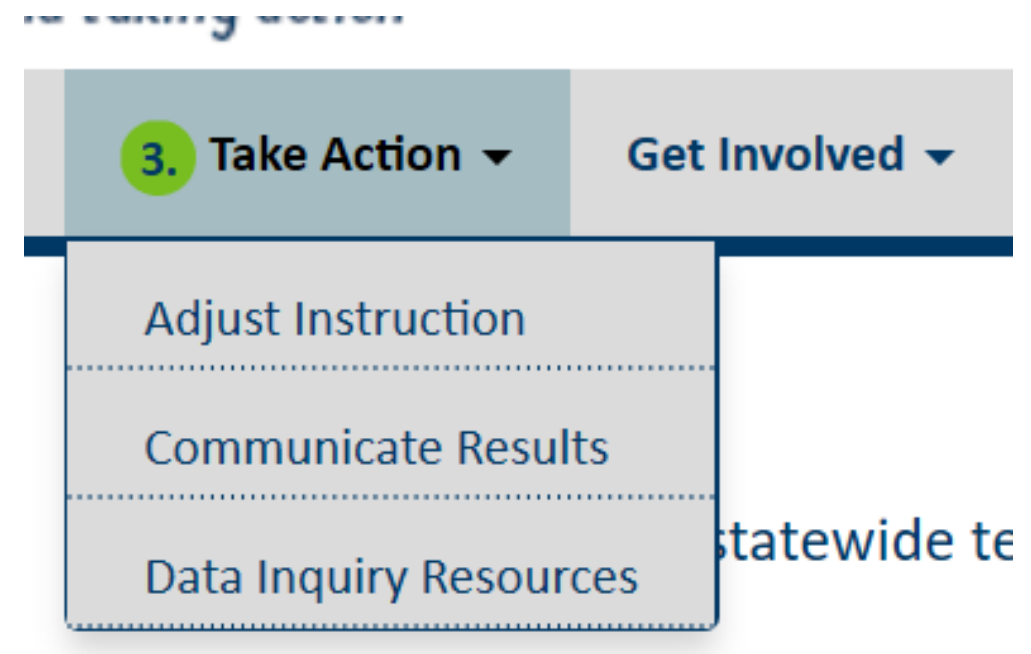
MDE Data  
Center

<https://testing123.education.mn.gov/test/analyze/data/>

# Educator Involvement with State Testing

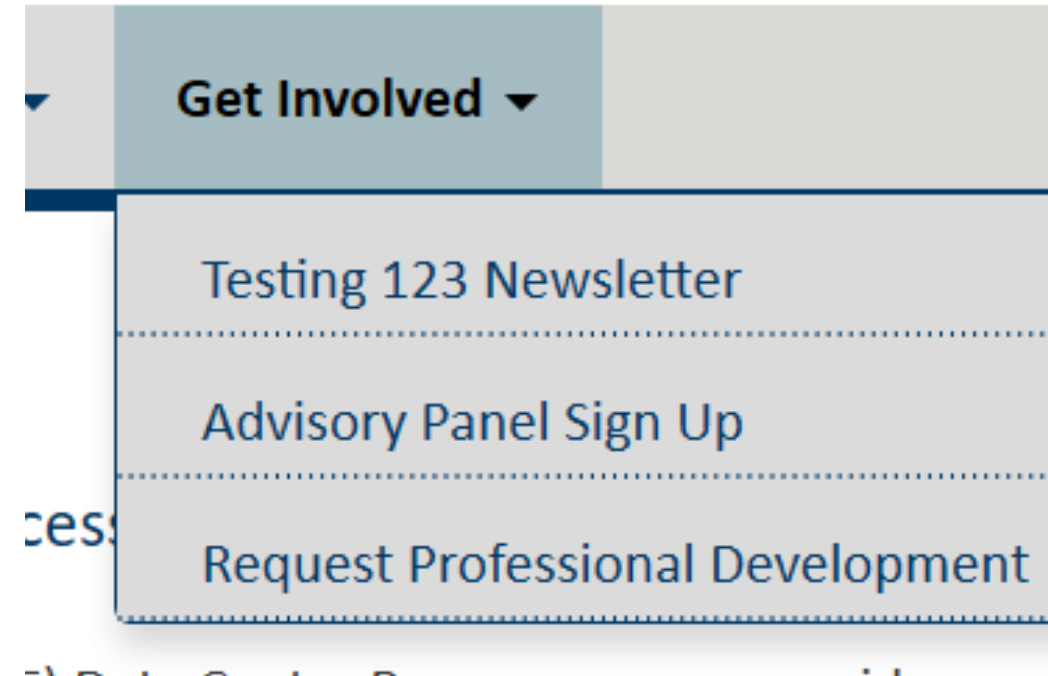
# 3. Take Action Resources

- These pages are under construction, but will feature:
  - Educator resources for reflection on instruction and adjusting next steps
  - Resources for communicating with parents and with other staff about test results
  - Protocols and handouts to use when discussing specific data reports like Benchmark Reports with groups of educators



# Get Involved Resources

- Resources for educators to know about upcoming opportunities or help review and edit MCA Test Questions:
  - Sign up for the Testing 1, 2, 3 Newsletter
  - Sign up for Educator MCA Review Committees
  - Request Professional Development
  - Access resources from past PD's and training



- If you would like to receive updates about information relevant to educators, please use the following QR code to enter your information.
- You can also send an email request to [kendra.olsen@state.mn.us](mailto:kendra.olsen@state.mn.us) or sign up on the [Testing 1, 2, 3 site](#)



# Want to help write questions for the MCA?

We need educators to review and approve new items for the MCA at all grades.

## Benefits:

1. You will see questions that will appear on upcoming MCAs.
2. You will be paid (if non-teaching day).
3. Opportunity to improve test for students
4. Meals and travel accommodations provided



<http://www.education.state.mn.us/MDE/EdExc/Testing/RegAdvPanel/index.html> (or scan the QR code)

Visit the link above to submit your email to the Educator MCA Review database

# Questions and feedback

Please take the remaining time to explore the website, and ask any questions.

[Testing123.education.mn.gov](https://Testing123.education.mn.gov)

# Thank you!

Kendra Olsen

*Kendra.Olsen@state.mn.us*

651-582-8542