# Meet Navvy

## July 31 & August 13, 2024





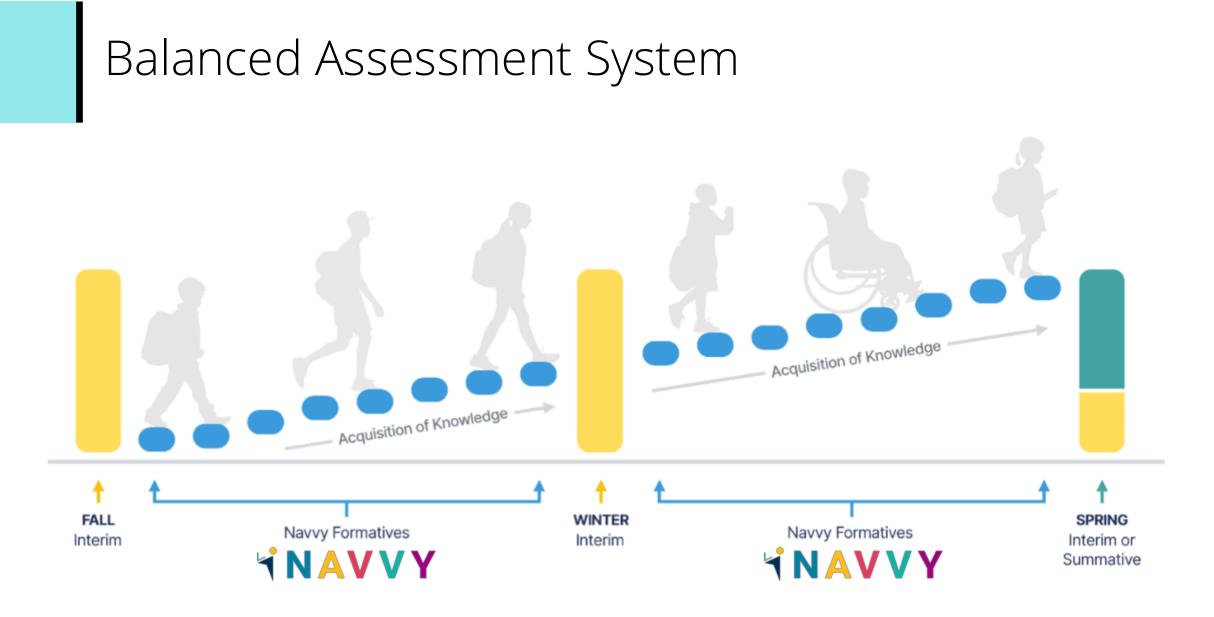


## How would you rate your familiarity with Navvy on a scale from 0-5? 0=This is the first I'm hearing about it 5=I'm a Navvy power user

## Your Team

## Alisha Natvig, Pearson, Sr. Product Manager, Navvy Matt Brunscheen, Pearson, Program Manager

# What is a Balanced Assessment System?



## Unique Purpose & Design

	Navvy	Interim	Summative	
Purpose	Provide teachers with timely data they can trust at a grain size they can use to inform instruction and support student learning	Provide a snapshot of student progress toward year-end expectations; predict summative performance	Measure course-level student proficiency; provide large- scale comparison	
Frequency	Teacher-driven; near instruction	2-3x / year	1x / year	
Data Reported	<ul> <li>Standard-level competency</li> <li>Standard sub-part performance</li> </ul>	<ul><li>Overall subject score</li><li>Domain-level reporting categories</li></ul>	<ul> <li>Overall course score</li> <li>Domain-level reporting categories</li> </ul>	
Sample Report		Indexing Assessment Sample Student	Summative Assessment       Sample Student         NUMAR       POP ODMARK MARK MARK MARK MARK MARK MARK MARK	

## Formative Assessment

"Formative assessment is a planned, **ongoing process** used by all students and teachers **during learning and teaching** to elicit and use **evidence** of student learning to **improve student understanding** of intended disciplinary learning outcomes and support students to become **self-directed learners**."

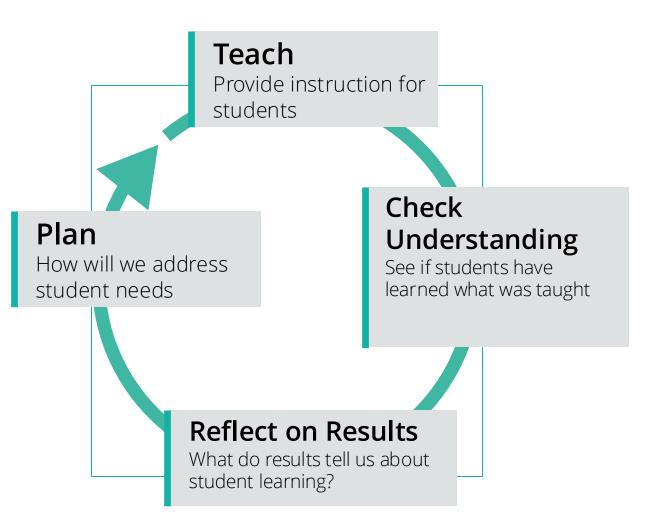
- CCSSO FAST SCASS, 2018

# Navvy Theory of Action

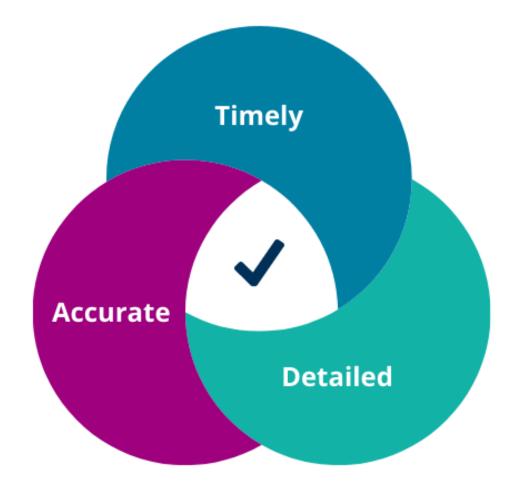
## Theory of Action

- Personalized learning is a powerful tool for successful learning
- Assessment drives personalized learning
- Checking Understanding Phase
  - If it isn't **accurate** information, it could misguide our next steps
  - If it isn't timely, we can't use it
  - If it isn't **specific**, we can't act on it

*High-quality, reliable assessment drives successful and equitable personalized learning.* 

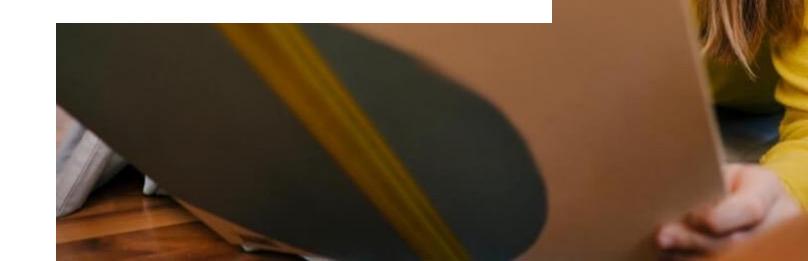


Navvy provides teachers with timely data they can trust at a grain size they can use.





# Introducing Navvy



## Key Characteristics of Navvy Formatives



## Navvy Checks

### **Competency Checks**

- Diagnose standard competency at the moment of need
- Multiple opportunities to show competency
- Valid & reliable assessment design
- Grades 3–8 and high school

### **Practice Checks**

- Build your own Checks with flexible pools of practice questions targeting each standard
- Pre-built questions for practice, review, and class activities
- Grades 3–8 and high school





# Teacher Dashboard

Student 🗘	Current Progress $\bigcirc$ 6.EE.1 $\bigcirc$	6.EE.2 🔆	6.EE.8 🖒	6.G.4 众	6.NS.1 🔿	Course Progress
Koby Knight	60% (3/5)	×	<b>v</b>	×	<b>v</b>	10% (3/29)
Lornezo Laughton	80% (4/5)		<b>I</b>		<b>v</b>	14% (4/29)
larco Mandez	100% (5/5)		<b>I</b>		<b>v</b>	17% (5/29)
leev Ninger	60% (3/5) ×		×		<b>I</b>	10% (3/29)
Dlivia O'Neill	80% (4/5)	0	<b>I</b>		×	14% (4/29)
per Pringle	60% (3/5)	<b>I</b>	×			10% (3/29)
inton Quinn	100% (4/4)		<b>I</b>		4	NAVV
ebecca Raven	80% (4/5)				•	tandard
ebastian Sevan	100% (5/5)		<b>I</b>	sta	andard in r	
evor Timmons	60% (3/5)	<b>v</b>	×	sh	ow learnin	ssessment c g mpt; <u> -</u> 2r

Student 🗘	Current Progress	6.EE.1 🔆	6.EE.2 🔅	6.EE.8 👙	6.G.4 众	6.NS.1 🔆	Course Progress				
Koby Knight	60% (3/5)	<b>I</b>	×		×	0	10% (3/29)				
Lornezo Laughton	80% (4/5)	8	<b>v</b>			<b>v</b>	14% (4/29)				
Marco Mandez	100% (5/5)		<b>v</b>			<b>v</b>	17% (5/29)				
Neev Ninger	60% (3/5)	⊗	<b>Ø</b>	×	Ø	Ø	10% (3/29)				
Olivia O'Neill	80% (4/5)	<b>I</b>	<b>v</b>	<b></b>		×	14% (4/29)				
Piper Pringle	60% (3/5)		<b>I</b>	×		×	10% (3/29)				
Quinton Quinn	100% (4/4)		0			<b>NAVVY</b>					
Rebecca Raven	80% (4/5)		0								
Sebastian Sevan	100% (5/5)		0		learr	ning prof	: has an indiv ile to inform				
Trevor Timmons	60% (3/5)	<b>I</b>		×	pers	onalized	learning				

Student 🗘	Current Progress 0.EE.1 🗘	6.EE.2 🔶 6.	EE.8 6.G	.4 🔶 6.NS.1 🖒	Course Progress
Neev Ninger	60% (3/5)	<b>I</b>	8	9	10% (3/29)
Piper Pringle	60% (3/5)	<b>Ø</b>	8	<b>&gt; ×</b>	10% (3/29)
Trevor Timmons	60% (3/5)	0	8	<b>&gt; ×</b>	10% (3/29)
Lornezo Laughton	80% (4/5)	<b>Ø</b>	<b>I</b>	9 0	14% (4/29)
Sebastian Sevan	100% (5/5)	<b>Ø</b>	<b>I</b>	9 0	17% (5/29)
Rebecca Raven	80% (4/5)	<b>Ø</b>	Ø   (		14% (4/29)
Olivia O'Neill	80% (4/5)	<b>Ø</b>	⊘		<b>Í NAVVY</b>
Marco Mandez	100% (5/5)		$\mathbf{v}$		structional Group
Quinton Quinn	100% (4/4)			groups for a	differentiated instruct
Koby Knight	60% (3/5)	×			

# The right grain size to inform next steps

#### 6.EE.8

Write an inequality of the form x > c or x < c to represent a constraint or condition in a real-world or mathematical problem. Recognize that inequalities of the form x > c or x < c have infinitely many solutions; represent solutions of such inequalities on number line diagrams.

Compe	etency Checks			1 of 3	attempts taken
Attempt	Submitted	Time Spent	Items Correct	Diagnosis	
∼ Att	empt 1 May 22, 2023 12:25 PM	11 min	3/7	🗙 Non-Con	npetency
Com	ponent	DOK 1	DOK 2	DOK 3	Total
1	Write an inequality of the form x>c or x <c a="" condition="" constraint="" in="" mathematical="" or="" problem.<="" real-world="" represent="" td="" to=""><td>00</td><td>0</td><td></td><td>3/3 (100%)</td></c>	00	0		3/3 (100%)
2	Recognize that inequalities of the form x>c or x <c have="" infinitely="" many="" solutions.<="" td=""><td></td><td>•</td><td>•</td><td>0/2 (0%)</td></c>		•	•	0/2 (0%)
3	Represent solutions of inequalities of the form x>c or x <c diagrams.<="" line="" number="" on="" td=""><td></td><td>•</td><td>•</td><td>0/2 (0%)</td></c>		•	•	0/2 (0%)
		2/2 (100%)	1/3 (33%)	0/2 (0%)	

## **NAVVY**

## A Standard-level View of Student Understanding

Identify which subparts of a standard to target student supports.

Standard-level reporting is broken down by Components and Depth of Knowledge (DOK).

Course			Class			Competency Che	tck			
Grade 6	Math [Mathematics]	~	Grade 6	Math - A [Mat	Q 6.EE.8 - Co	ompetency Check 🔍				
Write a form x		x > c or $x < c$ to ely many solutio			ion in a real-world or mathen equalities on number line dia		prize that i	nequa	ities of	f the
ttempt				Diagnosis			Accur	acy Pe	rforma	ince Band
Most Re	Attempt 1	Attempt 2	Attempt 3	AB	~	Below 40%	40%	- 65%	-	Above 651
	mponent Summa	iry					Hide C	lass B	reakdo	wn
Comp	ponent			Avg Score	Performance Distribution				4	
C1	Write an inequality of constraint or condition problem.			67%				6	0	14
	Grade 6 Math - 8 [Math 10 students	nematics]		73%	2	0	8	-		
	Grade 6 Math - A [Math 10 studients	hematics)		60%	4	0	6			
C2	Recognize that inequalities of the form x>c or x <c have<br="">infinitely many solutions.</c>			55%				4	10	6
	Grade 6 Math - 8 DMatt 10 students	Grade 6 Math - 8 [Mathematics] 10 students Grade 6 Math - A [Mathematics] 10 students			3	6	3			
					2	4	2			
<b>C</b> 3	Represent solutions of inequalities of the form x>c or x <c diagrams.<="" line="" number="" on="" td=""><td>58%</td><td></td><td></td><td></td><td>4</td><td>2</td><td><u>6</u></td></c>			58%				4	2	<u>6</u>
	Grade 6 Math - 8 (Mat) 10 studients	hematics]		65%	a 🔤	1	9			
	Grade 6 Math - A [Mati	hematics)		25%	1	1	0			

#### Roster By Component Most Recent Attempt Show: Score Student Total C1 Attempt Date Diagnosis C2 C3 Oct 25 Competency 5/7 3/3 1/2 1/2 Koby Knight 7/7 Lorenzo Laughton Oct 26 Competency 3/3 2/2 2/2 Marco Mandez Competency 7/7 3/3 2/2 2/2 1 Oct 26 Non-Competency 1/7 0/3 1/2 0/2 Neev Ninger Oct 25 Olivia O'Neill Oct 26 Competency 5/7 2/3 1/2 2/2 Non-Competency 1/7 0/3 1/2 0/2 Piper Pringle Oct 26 6/7 Quinton Quinn Oct 26 Competency 2/3 2/2 2/2 Competency 6/7 3/3 1/2 2/2 Rebecca Raven Oct 26 3/3 Sebastian Sevan Oct 26 Competency 6/7 1/2 2/2

## **NAVVY**

## Reporting at the Grain Size to Act

Component-level insight of student learning surfaces next steps for small groups and individual learners.

# Standard-bystandard Practice

6.EE.8 Practice	Practice Questions				Questions Selected	Add selected questions	Cancel
Component Componen Componen Componen	it 2 🕐	6.EE.8 Practice	C3 DO		tion set for an inequality is shown on the line.	•	
DOK				<b>∢</b> 25 Which si	50 75 100 125		
DOK 3				A	Jefe spends less than \$115 per week on gas.		
				в	The number of pieces in the puzzle is greater than 115.		
		6.EE.8 Practice	C1 D0	At a loca Alex bou money fi Which in	al coffee shop, a cup of coffee costs \$2.10. aght a cup of coffee and left additional or a tip. sequality represents the total amount of c, that Alex spent at the coffee shop? c <\$2.10		
				в	$c \ge 2.10$		
				С	c > \$2.10		
		6.EE.8 Practice	C1 DC	Rico hiki feet abo halfway out of da Which in	es up a mountain that has a summit of 9,512 ve sea level. He turns around less than to the top because he is worried he will run nylight. nequality best represents Rico's elevation in after he turns around?		
				А	x < 9,512		
				В	x > 4.756		

## **NAVVY**

## Build-Your-Own Practice Checks

Handpick questions from a flexible pool to target specific parts of a standard and Depth of Knowledge (DOK) levels.

#### **Practice Response Frequency**

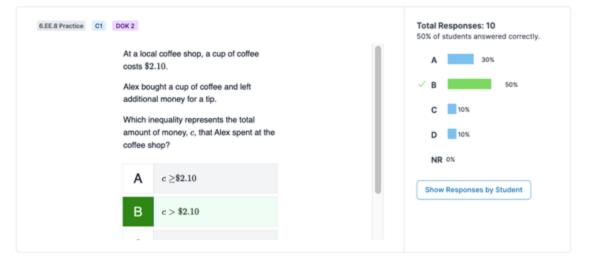
#### 6.EE.8 - Practice Check

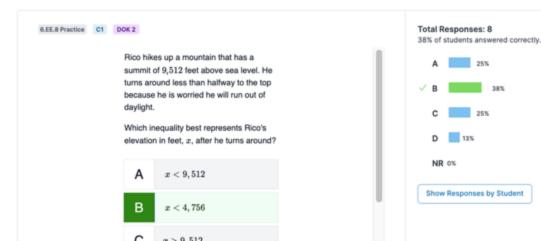
Write an inequality of the form x > c or x < c to represent a constraint or condition in a real-world or mathematical problem. Recognize that inequalities of the form x > c or x < c have infinitely many solutions; represent solutions of such inequalities on number line diagrams.

#### > Component & DOK Blueprint

First Attempt V All V Academic Year V Hide Item Filter	Attempt		Student Diagnosis		1	Time Period		
	First Attempt	~	All	~		Academic Year	~	Hide Item Filter

#### Showing 6 of 6 Items





## **NAVVY**

## Item-by-Item Student Response Frequency for Practice

Analyze the distribution of student responses for each question.

A high frequency of incorrect alternatives may indicate common misconceptions among learners.

Type Ø Practice Check	Standard 6.EE.8	Attempt 1	Submitted Nov 3, 2023 7:32 AM	Time Spe 6 min	int,
Correct		Needs Rev	iew	Result	
3		2		60%	
erformance by item			20	Key: O Correct	C Needs Review
Item 1 GEE & Practice Ct	DOK 2				Correcti
	tip.	ap or ouries and ren i	and an		
		y represents the total at the coffee shop?	amount of money, c,		1
	A c <8	\$2.10			
	<b>B</b> c =	\$2.10			
	C c>	\$2.10			
	D c ≥\$	\$2.10			1
Item 2 KEE&Practice C3	DOK1			<b>O</b> N	eds Review
	Which inequality number line?	y represents the solut	tions graphed on the		1
	• + + + + + + + + + + + + + + + + + + +		••••		
	A y≥	2			
	В y>				

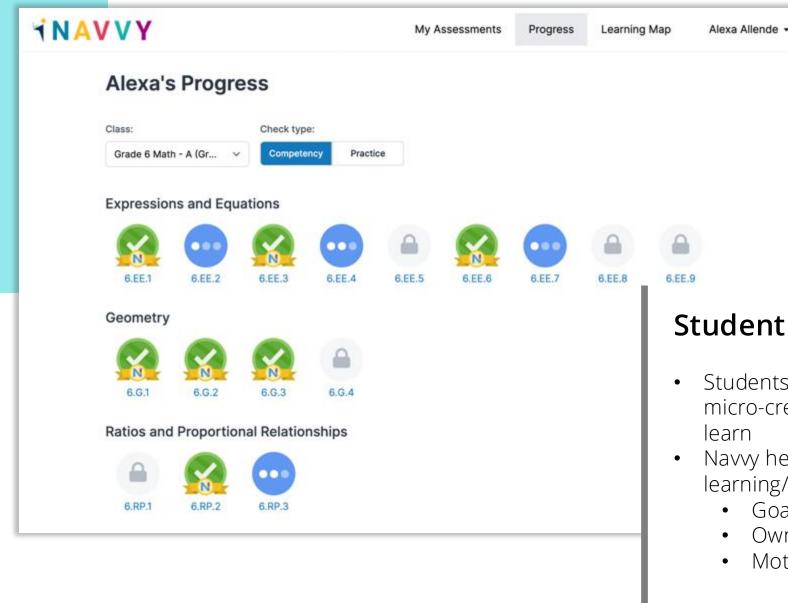
## **NAVVY**

## Instant Feedback to Promote Student Growth

Students receive immediate feedback on their practice session so they can pinpoint misconceptions and review areas for growth.



# Student Progress



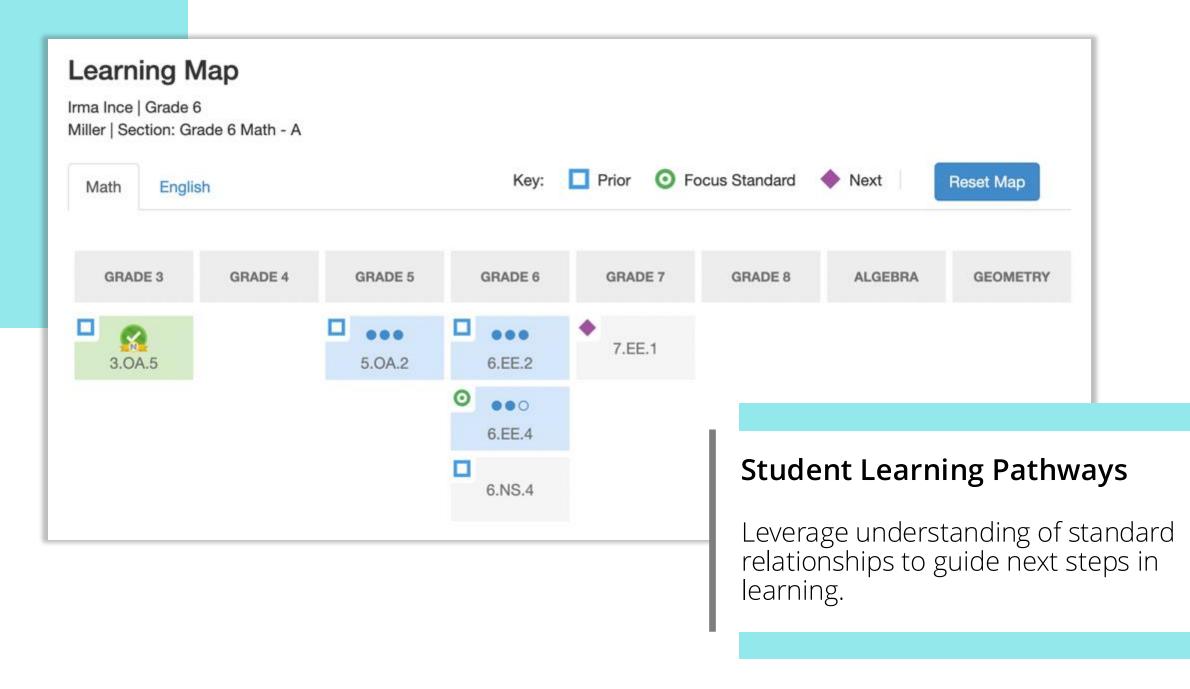
## **Student Dashboard**

- Students are on a mission to earn a micro-credential for each standard they learn
- Navvy helps students have a healthy learning/growth mindset by improving:
  - Goal-setting and goal-reaching
  - Ownership and agency of learning
  - Motivation for learning

						-	
Alexa Al	lende's	earning	Man				
Subject:		Louining	map				
Math ~							
GRADE 3	GRADE 4	GRADE 5	GRADE 6	GRADE 7	GRADE 8	ALGEBRA	GEOMETRY
3.0.1	4.G.1	5.6.1	6.EE.1	7.EE.1	8.EE.1	HSA-APR.1	HSG-C.2
•00 3.G.2	4.G.2	000 5.G.2	000 6.EE.2	7.EE.2	8.EE.2	HSA-CED.1-E	HSG-C.5
3.MD.1	•00 4.G.3	•00 5.G.3	6.EE.3	7.EE.3	8.EE.3	HSA-CED.1-L	HSG-CO.10
• O O 3.MD.2	4.MD.1	5.G.4	000 6.EE.4	7.EE.4	8.EE.4	HSA-CED.1-Q	HSG-CF
3.MD.3	000 4.MD.2	5.MD.1	6.EE.5	7.G.1	8.EE.5	HSA-CED.2-E	HSG-C
3.MD.4	4.MD.3	000 5.MD.2	6.EE.6	7.G.2	8.EE.6	HSA-CED.2-L	HSG-C
CO. LAILOV-4			6.EE.7	7.6.3	8.EE.7	HSA-CED.2-Q	HSG-C

## Navvy Learning Map

Identify granular learning over time. Unfinished learning, or learning gaps, are pinpointed as a part of classroom assessment with Navvy.





# Rise to the Rigor of the Standards





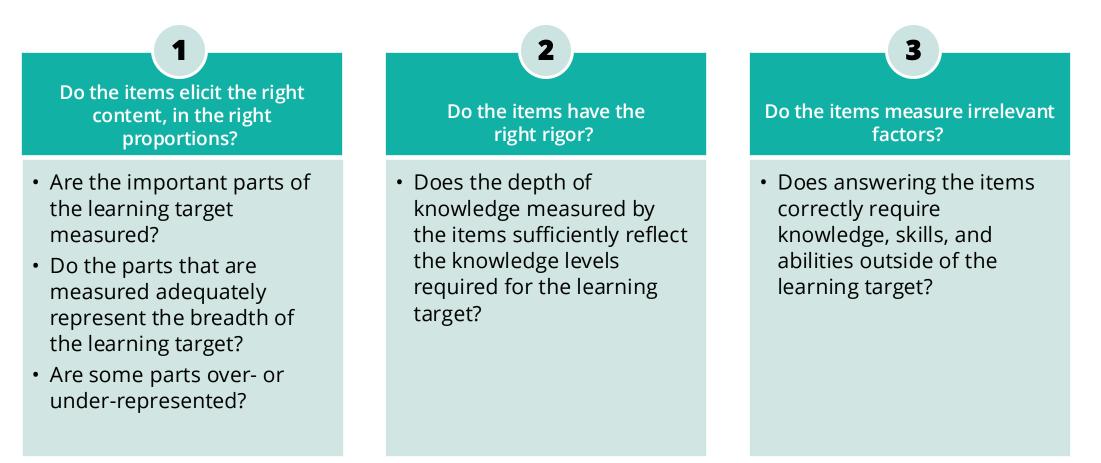
<b>NAVVY</b>	My Checks Progress	Learning Map	Alexa A. +			
My Checks All Subjects Math English Science Social Studies Competency Checks						
MATH - COMPETENCY CHECK Attempt 1 6.EE.3 - Grade 6: Expressions and Equations 3	Available until: Jul 13, 2024 12:24 PM	Take Competency C	heck			
Practice Checks			Grade 6: Geometry 2	Practice / Sec	ction 1	ê
+       -         MATH - PRACTICE CHECK         6.G.2 - Grade 6: Geometry 2 Practice	Available until: Jul 15, 2024 10:25 AM	Take Practice C	Section 1: Item 1 of 3			Next ->
ELA - PRACTICE CHECK RI.6.5 - Grade 6: Informational 5 Practice	Available until: Jul 15, 2024 10:24 AM	Take Practice C	1 🛛 🖬 🗠		odel shown is a rectangular prism. Each cube in the prism has an edge length of $rac{1}{4}$	← ×
New to Navvy? Try out an Orientatio	n Check.					× • 2
				What is	is the volume of the prism?	
				A	$\frac{15}{4}$ cubic inches	
				B	120 cubic inches 30 cubic inches	
				D		



Multiple Choice/Multiple Select	Text Entry	Gap Match	Basic Match	Ordered Lists		
Select a choice.  Choice A  Choice B  Choice C  Choice D	Four score and seven years ago our <b>fore</b> brought forth, upon this continent, a new nation, conceived in, and dedicated to the proposition that all men are created equal .	Now is the winter of our discontent Made glorious by this sun of York; And all the clouds that lour'd upon our house In the deep bosom of the ocean buried. spring summer autumn	Nidden in this list of characters from furneus tholespeare plays are three pairs of finals. Can you match each character to ha adversary?	The following F1 drivers finished on the podium in the first ever Grand Prix of Bahrain. Can you rearrange them into the correct finishing order? Rubers Barrichello Jenson Button Michael Schumacher		
Inline Choice	Hot Spot	Graphic Gap Match	Hot Text	Tabular Match		
Identify the missing word in this famous quote from Shakespeare's Richard III. Now is the winter of our discontent Made glorious summer by this sun of <b>Gloucester</b> • And all the clouds that lour'd upon our house In the deep bosom of the <b>Ocean</b> • buried.		100         100 <td>Select the error in this sentence. Sponsors of the Olympic Games who bought advertising time on United States television includes at least a dozen international firms whose names are familiar to American consumers. No error</td> <td>A Midsummer     Romeo and Juliet     The Tempest       Capulet     O     O       Denetius     O     O       Lysander     O     O       Pospero     O     O</td>	Select the error in this sentence. Sponsors of the Olympic Games who bought advertising time on United States television includes at least a dozen international firms whose names are familiar to American consumers. No error	A Midsummer     Romeo and Juliet     The Tempest       Capulet     O     O       Denetius     O     O       Lysander     O     O       Pospero     O     O		

## 3 Key Content Considerations

A key to validity of fine-grained learning evidence is that the assessment design process happens at that fine-grained level. More detailed learning evidence necessitates a more detailed assessment development process.



Bradshaw, L. (In Press). Empowering personalized learning with a three-tiered approach to learning evidence. *EdWeek*.



### NAVVY MATH

DOK 1





DOK 2





APPLY

DOK 3





## Standard 5.OA.1: Sample Blueprint

### Standard: 5.OA.1

Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.

#### **Component 1**

Solve expressions that include grouping symbols

**Component 2** 

Solve expressions using order of operation

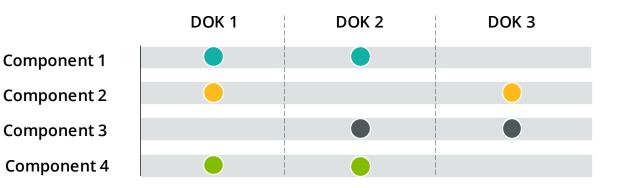
### Component 3

Place grouping symbols in an expression

### **Component 4**

Explain thinking

## Sample Assessment Blueprint





### NAVVY ELA



# 0%

**RECALL | REMEMBER** 



APPLY

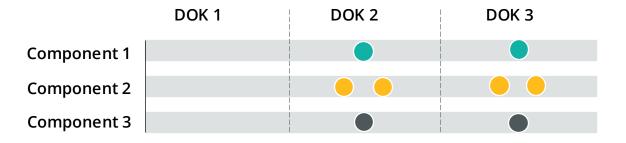
DOK 3



## Standard RI.6.2: Sample Blueprint

### Standard

Determine a central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments.



### **Component 1**

Determine a central idea of a text.

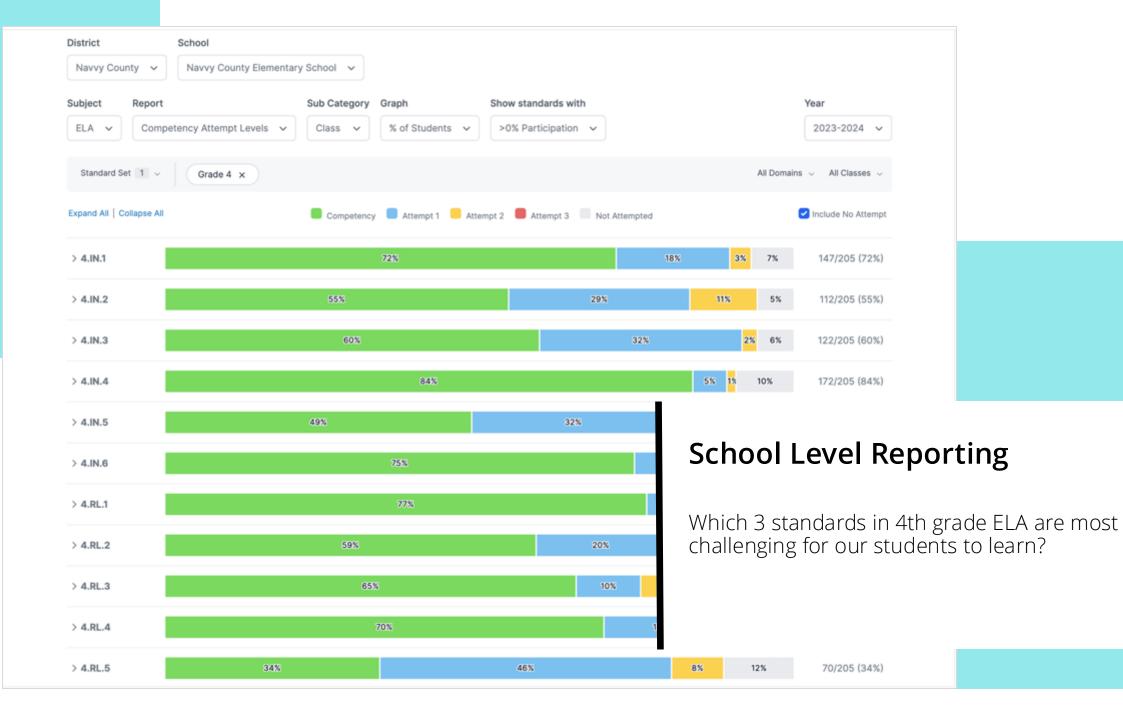
### Component 2

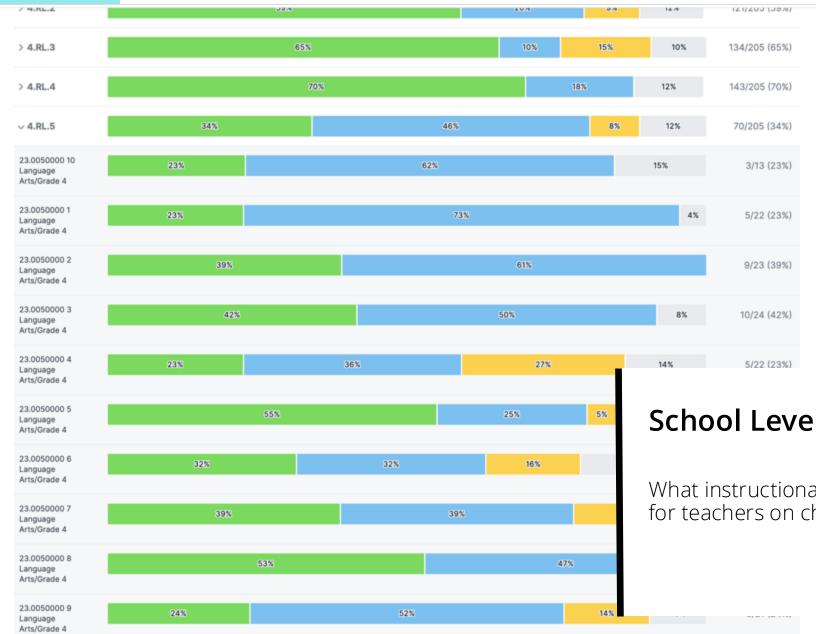
Determine how the idea is conveyed through particular details.

### **Component 3**

Provide a summary without opinion or judgment.

## School Level Reporting





### **School Level Reporting**

What instructional supports or PL can we provide for teachers on challenging standards?

## Navvy Resources



### Instructional Resources

- Help answer the question "Now what?"
- "Standard Starter" teacher guide to help explore the standard and standard components, common misconceptions, and what comes before and after this standard.
- Grab-and-go resources and short, engaging activities for whole class, small group, or individual practice



INAVVY							
Home	≜ Learning Library						
Reports							
Schools	8 Math Figlish						
Learning Library	Grade Level:     Domain:     Standard(s):     Activity Type:						
B Math	All V All V All V						
🙀 English	O Search activities						
L Science	Sedicit activities						
Social Studies	Showing 1 - 50 of 537 activities Expand All Collap						
Support Hub	- 3.MD.5 3.MD.5 Standard Starter Starter Starter Starter 3.MD.5 1 File @ area @ length @ rectangle @ square @ square unit @ unit squares is sai AVE. 3.MD.5 1 File @ area @ length @ rectangle @ square @ square unit @ unit square} Starter @ square unit @ unit square with square with square with @ square unit @ unit square with @ square with @ unit square with						
	Making Shapes with Unit Squares         Students recognize that a square with side length 1 unit has one square unit of area, and can be used to measu area. They recognize that a plane figure which can be covered without gaps or overlaps by n unit squares has a of n square units.       Browse Navvy's Learning Library for top-notch instructional resources that target						
	Measuring Area Using Unit Squares Students recognize that a square with side length 1 unit has one square unit of area, and can be used to measure area. They recognize that a plane figure which can be covered without gaps or overlaps by n unit squares has a of n square units. Measuring Area Using Unit Squares						

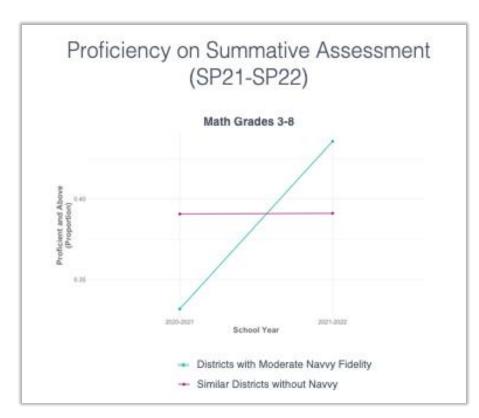
3.MD.5 area rectangle square square unit unit square

# Navvy Implementation

### Navvy Efficacy Study

Key question

In math and ELA, do districts using Navvy with at least moderate fidelity show a greater increase in the rate at which students show proficiency on the end-of-year summative assessment than students in similar districts who are not using Navvy?



# Navvy Pacing Example Grade 4 Math - Full Implementation Model

Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7
Angle Measure and Plane Figures	Place Value, Rounding, and Algorithms for Addition and Subtraction	Multi-Digit Multiplication and Division	Fraction Equivalence, Ordering, and Operations	Decimal Fractions	Unit Conversions and Problem Solving with Metric Measurement	Exploring Measurement with Multiplication
14 lessons	18 lessons	30 lessons	38 lessons	13 lessons	5 lessons	10 lessons
Aug 9-Aug 27	Aug 30-Sep 29	Sept 30-Nov 19	Nov 22-Feb 17	Feb 18-Mar 16	Mar 1-Mar 31	Apr 1-Apr 27
Standards	Standards	Standards	Standards	Standards	Standards	Standards
4. MD.5 4. MD.6 4. MD.7 4. G.1 4. G.2 4. G.3	4.OA.3 4.NBT.1 4.NBT.2 4.NBT.3 4.NBT.4	4.OA.1 4.OA.2 4.OA.3 <b>4.OA.4</b> <b>4.NBT.5</b> <b>4.NBT.6</b> <b>4.MD.3</b> <b>4.MD.8</b>	4.OA.5 4.NF.1 4.NF.2 4.NF.3 4.NF.4 4.MD.4	<b>4.NF.5</b> <b>4.NF.6</b> <b>4.NF.7</b> 4.MD.2	4.MD.1 4.MD.2	4.0A.1 4.0A.2 4.0A.3 4.MD.1 4.MD.2

\*Standards in **BOLD** are the standards required to be assessed using a Navvy Competency Check. Within 2-3 weeks of showing non-competency on a standard, provide remediation for the student on the standard and then provide Navvy Competency Check Attempt #2.



### Navvy for BIE Details

- Content Availability
  - Math: Grades K-8, Algebra 1, Algebra 2, Geometry
  - ELA: Grade K-8, 9-10, 11-12
- Rostering
  - More information to come in August
- Access/Roles in Navvy
  - Student, Teacher, School Admin (can make interventionists admins)

## Implementation Support and Training

- Informational Webinars for BIE Schools

   July 31 (1-2pm MT)
   August 13 (1-2pm MT)
- Implementation Strategy Meetings (1:1 with BIE Schools)
   o Throughout August
- Navvy Educator Onboarding Trainings

   Throughout September
- Weekly office hours beginning in August
- Additional training available as requested

## Navvy Resources

Bureau of Indian Education						
🗰 Home 🖉 Navvy Resources 🖉 Interim Resources 🖉 Summative Resources 🦩 Technology Resources 🕍 Reporting 🏤 Practice Tests 🚓 Student Readiness Tool 🚭 Support						
Avvy Resources						
Navvy Overview						
Meet Navvy »						
Unlocking Student Success: Navigate Confidently with Assessment Excellence with Founder Dr. Laine Bradshaw »						
Navvy Resources						
Educator Resources >						
Navvy User Guide »						
BIE Calendaring the Standards »						
Upcoming Training						
Introduction to Navvy: Provide an introduction to Navvy - choose one; all times 1-2:00 PM MT -						
Navvy Educator Onboarding Trainings: Training for Teachers to use Navvy in their classrooms - choose one; all times 1-2:30 PM MT -						
Developing Data Literacy - choose one; all times 1-2:30 PM MT ▼						

### https://bie.mypearsonsupport.com/navvy

# Questions

