Course Offerings, Textbooks and Instructional Materials

School-Wide		
Subject	**Course**	**Curriculum**
English	*English 5*	*Reading Wonders*
	English 6-11	*Springboard (College Board)*
	AP English Language	*Thank You For Arguing (Penguin Random House)*
	English 12	*Expository Reading & Writing Course (CSU Expository Reading)*
Math	*Grade 5 Math*	*Math Expressions*
	Math 1 (6th grade) Math 2 (7th grade) Math 3 (8th grade)	*Open Up Curriculum (Consumable)*
	Algebra I Algebra II Geometry Pre-Calculus	*Springboard (College Board)*
	AP Statistics	*AP Statistics & Data Analysis (NGL/Cengage)*
	AP Calculus	*Calculus: Graphical, Numerical, Algebraic (Pearson)*
History	*Grade 5 History*	*Social Studies Alive!*
	Grade 6 History	*History Alive! The Ancient World*
	Grade 7 History	*History Alive! The Medieval World*
	Grade 8 History	*History Alive! US Through Industrial*
	AP Government	*The American Democracy (McGraw-Hill)*
	Government and	*Econ Alive! (TCi)*
	US History	*American History (Houghton Mifflin Harcourt)*
	AP US History	*The American Pageant (Cengage)*
	World History	*Modern World History (Houghton Mifflin Harcourt)*
	AP Psychology	*Myers' AP Psychology (BFW Publishers)*
Science	*Grade 5 Science*	*CA Science (Pearson Curriculum)*
	Grade 6 Science	*Impact Science Curriculum*
	Grade 7 Science	
	Grade 8 Science	
	Biology	*Biology (Glencoe Science*
	Modern Physics and Chemistry	*McGraw Hill) Glencoe Physical Science*
	Earth and Space	*Glencoe Earth Science (McGraw-Hill)*
	Introduction to Health Sciences	*DHO Health Science (NGL/Cengage)*
	Medical Terminology	*Medical Terminology for Health Professions (NGL/Cengage)*
	Anatomy & Physiology	*Body Structures and Functions*
	Advanced Patient	*DHO Health Science*

H&W	*Health and Wellness 5-8*	*Life Time Health Study – Classroom Set*
	Health and Wellness 1-2	*Life Skills Health (Pearson)*
Spanish	*Spanish I*	EntreCulturas 1(Wayside Publishing)
	Spanish II	*EntreCulturas 2 (Wayside Publishing)*
	Spanish III	*EntreCulturas 3 (Wayside Publishing)*
	AP Spanish	*Triangulo Aprobado (Wayside Publishing)*
Art/ Encore	*5th Grade Technology*	*N/A*
	6th Grade Art	
	7th Grade Music	
	8th Grade Art	
	Fundamentals of Art	
	Advanced Art	

MAKING WAVES ACADEMY
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Executive Summary

To	Making Waves Academy Curriculum Review Advisory Committee
From	Dr. E. Ward-Jackson, Senior School Director
Date	October 16, 2020
Subject	2020-21 Course Offerings

Summary: In our previous curriculum review meeting (March 2020), MWA leadership shared the course-offering list for the 2020-21 school year. Since the meeting, material decisions were made that impacted the availability of courses.

The following courses **are not** currently offered:

- Ceramics: *Moved Ceramic teacher to higher priority offering*
    - In 2019-20, we offered three sections of Ceramics and one section of Advanced Art, comprising a full assignment to one Full Time Employee (FTE). The increased size of our 9th Grade class, however, caused us to offer five sections of Fundamentals of Art, with four sections taught by one FTE, comprising their full assignment, and the 5th section, plus three sections of Advanced Art, comprising the full assignment of the other Visual Art FTE. This resulted in not have a qualified teacher to teach the one section of Ceramic that we were planning to offer.
- Introduction to Drama: *Moved Drama teacher to higher priority offering*
    - In 2019-20, we offered one section of Introduction to Drama and three sections of Expository Reading and Writing, comprising a full assignment to one FTE. The increased size of our senior class, however, caused us to assign four sections of Expository Reading and Writing to one FTE as their full assignment. Additionally, we prioritized this specific teachers 5th section as Senior Advisory over an elective offering.
- Careers in Education (CTE): *Paused as a result of distance learning*
    - This course requires a practicum in which students complete 90 hours of internship at a local elementary or middle school

Additionally, we have yet to find qualified talent to teach the following courses:

- AP Computer Science Principles (79 interested students)
- Introduction to Computer Science (80 interested students)

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Insight: In an ideal and compliant process, programmatic decisions regarding course availability would be discussed and vetted with our Executive Leadership and the Curriculum Review Advisory Committee. Unfortunately, a breakdown in communication, largely a result of gaps connected to changes in our school leadership structure, resulted in decisions being made by leaders who do not own decision-making authority. During a reflective conversation, our Director of College and Career, Mr. Siapno, who is also the owner of the course offerings document, shared with me the course changes that had moved forward as a result of communications between he and our former Upper School Director of Curriculum and Instruction, Ms. Mendez. Operating from previous understandings of each other's roles and misguided assumptions regarding associated communications and decision-making protocols resulted in the premature implementation of course offering recommendations. Once aware of the issue, I met with Alton, our CEO, immediately to start the discussion and recovery process. Several conversations have occurred with our team, and I am confident the team realizes that by not bringing the course challenges to our Executive Leaders and to the Curriculum Review Advisory Committee, there is a significant loss of opportunity to problem solve, engage multiple perspectives, explore solutions, and ultimately to have the support of our Executive Leaders and Board. As the Senior School Director and member of Executive Leadership, I want our Curriculum Review Advisory Committee to know that I take this happening very seriously, and I have incorporated learnings by prioritizing implementation of the MOCHA and RAPID frameworks to support with change management. Additionally, I will share that our leaders' exhibit high levels of integrity and reflection, our leaders have taken ownership of the situation, and collectively we look forward to engaging any questions and/or feedback from the Curriculum Review Advisory Committee, as well as responding to any future course offering related shifts as recommenders within the approval protocol.

Opportunities for Innovation in Distance Learning

Distance learning has offered opportunities for innovative instructional practice. As part of a larger initiative for innovative and aligned instruction, we are thrilled to see our teachers trying new practices and adapting to the distance learning environment.

Innovation: *a new method, idea or product*

Modeling: An instructional practice that we use consistently is modeling. We model note taking, drawing & painting and science labs. This method is used primarily to show steps, or to guide students through a process. The teacher models and the students either follow along, watch, and ask & answer questions. Our teachers have identified new *methods* for implementing this practice during Distance Learning.

Doc Cam Hack: With the support of our Math/Science DAI, our Art teachers have created a doc cam hack that allows students to see them model various rendering strategies on a piece of paper. They have set up their phones as a camera, which spotlights their own art, as students watch, take notes and question. Humanities teachers repurposed previously stored monitors and older devices to create a broader viewing area when using Zoom. This "hack" allowed teachers to display slides and other supplementary materials while being about to maintain eye contact with a class of over 25 students.

Science Demo Labs: Our science teachers have transformed their kitchens to demo various labs connected to their curriculum. They will either video tape themselves implementing the demo, or they will perform it live for students. This is a method that has been used while in person as well. It was not uncommon to walk into a science teacher's classroom and watch them giving a voice over of their recorded demonstration.

Immersion: Distance Learning has allowed our teachers to take our students to places connected to their content areas that they would not normally experience during in person learning. This is a new *idea* that has surfaced this year.

Art Studios: Mr. Mason brings his students to his own personal art studio. His artwork lines the walls and he has his own personal tools at his fingertips to model and show to his students.

Nature: Our science teachers frequent their back yard or their own person "zoos" during Distance Learning. It is not uncommon to observe a science teacher bringing their students outside in real time to watch the weather, show them a butterfly or even their own personal tarantulas and rats!

DIY Equipment: A new product that has resulted from Distance Learning is tools and equipment. Our Health and Wellness teachers have helped students to think outside of the box to identify and even make their own tools for fitness. Students have made balls out of rubber bands and paper mache, tennis nets out of paper towels and markers and identified household

items for weights. Our teachers have also used tools for engagement such as Tik Tok videos and simulated “Harry Potter” workouts.

We are working on a vision for what we are hoping innovation looks like at MWA, and are excited to see collaborative structures lend itself to thinking outside of the box during Quarter 1.

CARDEA

Training, Organizational Development and Research

Transforming the way sex education is taught

Teaching sex education can feel daunting. It doesn't have to be.

During National Health Education Week, we celebrate the dedicated health educators throughout our country who deserve more support for teaching sex education effectively.

Facilitating effective sex education requires unique skills to create safe and supportive environments and promote student learning. Educators often receive limited training in these core skills.

Together, Cardea and Answer are working to increase teachers' comfort and confidence teaching sex education nationwide. Collectively, our organizations have more than 75 years of experience training tens of thousands of educators to deliver comprehensive, medically accurate, age-appropriate, and culturally competent sex education.

Cardea and Answer have partnered to create a standardized, national model for training teachers to deliver sex education. We work with state and local organizations across the country to make this training accessible and affordable to teachers across the country.

Foundations **is an engaging, one-day training that covers:**

Climate Setting

Values Exploration

Managing Self-Disclosure

Responding to Challenging Questions…and more

We also offer half-day supplemental modules on:

Commonly Used Sex Ed Strategies

Cultural Proficiency in Sex Education

LGBTQ Inclusive Sex Ed

Trauma-Informed Approaches

Starting this school year, Cardea will offer *Foundations* as part of all sex education curriculum trainings to ensure that educators have skills training as part of the professional development they need. For example, all educators who participate in our *Positive Prevention PLUS* trainings will receive both *Foundations* and curriculum training.

Interested in learning more? Contact us or visit FoundationsTraining.org.

Key Shifts in Mathematics

Introduction

The Common Core State Standards for Mathematics build on the best of existing standards and reflect the skills and knowledge students will need to succeed in college, career, and life. Understanding how the standards differ from previous standards—and the necessary shifts they call for—is essential to implementing them.

The following are the key shifts called for by the Common Core:

1. Greater focus on fewer topics

   The Common Core calls for greater focus in mathematics. Rather than racing to cover many topics in a mile-wide, inch-deep curriculum, the standards ask math teachers to significantly narrow and deepen the way time and energy are spent in the classroom. This means focusing deeply on the major work of each grade as follows:

   - In grades K–2: Concepts, skills, and problem solving related to addition and subtraction
   - In grades 3–5: Concepts, skills, and problem solving related to multiplication and division of whole numbers and fractions
   - In grade 6: Ratios and proportional relationships, and early algebraic expressions and equations
   - In grade 7: Ratios and proportional relationships, and arithmetic of rational numbers
   - In grade 8: Linear algebra and linear functions

   This focus will help students gain strong foundations, including a solid understanding of concepts, a high degree of procedural skill and fluency, and the ability to apply the math they know to solve problems inside and outside the classroom.

2. Coherence: Linking topics and thinking across grades

   Mathematics is not a list of disconnected topics, tricks, or mnemonics; it is a coherent body of knowledge made up of interconnected concepts. Therefore, the standards are designed around coherent progressions from grade to grade. Learning is carefully connected across grades so that students can build new understanding onto foundations built in previous years. For example, in 4th grade, students must "apply and extend previous understandings of multiplication to multiply a fraction by a whole number" (Standard 4.NF.4). This extends to 5th grade, when students are expected to build on that skill to "apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction" (Standard 5.NF.4). Each standard is not a new event, but an extension of previous learning.

Coherence is also built into the standards in how they reinforce a major topic in a grade by utilizing supporting, complementary topics. For example, instead of presenting the topic of data displays as an end in itself, the topic is used to support grade-level word problems in which students apply mathematical skills to solve problems.

3. Rigor: Pursue conceptual understanding, procedural skills and fluency, and application with equal intensity

   Rigor refers to deep, authentic command of mathematical concepts, not making math harder or introducing topics at earlier grades. To help students meet the standards, educators will need to pursue, with equal intensity, three aspects of rigor in the major work of each grade: conceptual understanding, procedural skills and fluency, and application.

   Conceptual understanding: The standards call for conceptual understanding of key concepts, such as place value and ratios. Students must be able to access concepts from a number of perspectives in order to see math as more than a set of mnemonics or discrete procedures.

   Procedural skills and fluency: The standards call for speed and accuracy in calculation. Students must practice core functions, such as single-digit multiplication, in order to have access to more complex concepts and procedures. Fluency must be addressed in the classroom or through supporting materials, as some students might require more practice than others.

   Application: The standards call for students to use math in situations that require mathematical knowledge. Correctly applying mathematical knowledge depends on students having a solid conceptual understanding and procedural fluency.

Adapted from: http://www.corestandards.org/other-resources/key-shifts-in-mathematics/

Standards for Mathematical Practice

The Standards for Mathematical Practice describe varieties of expertise that mathematics educators at all levels should seek to develop in their students. These practices rest on important “processes and proficiencies” with longstanding importance in mathematics education. The first of these are the NCTM process standards of problem solving, reasoning and proof, communication, representation, and connections. The second are the strands of mathematical proficiency specified in the National Research Council’s report *Adding It Up*: adaptive reasoning, strategic competence, conceptual understanding (comprehension of mathematical concepts, operations and relations), procedural fluency (skill in carrying out procedures flexibly, accurately, efficiently and appropriately), and productive disposition (habitual inclination to see mathematics as sensible, useful, and worthwhile, coupled with a belief in diligence and one’s own efficacy).

Standards in this domain:

CCSS.MATH.PRACTICE.MP1 Make sense of problems and persevere in solving them.

Mathematically proficient students start by explaining to themselves the meaning of a problem and looking for entry points to its solution. They analyze givens, constraints, relationships, and goals. They make conjectures about the form and meaning of the solution and plan a solution pathway rather than simply jumping into a solution attempt. They consider analogous problems, and try special cases and simpler forms of the original problem in order to gain insight into its solution. They monitor and evaluate their progress and change course if necessary. Older students might, depending on the context of the problem, transform algebraic expressions or change the viewing window on their graphing calculator to get the information they need. Mathematically proficient students can explain correspondences between equations, verbal descriptions, tables, and graphs or draw diagrams of important features and relationships, graph data, and search for regularity or trends. Younger students might rely on using concrete objects or pictures to help conceptualize and solve a problem. Mathematically proficient students check their answers to problems using a different method, and they continually ask themselves, "Does this make sense?" They can understand the approaches of others to solving complex problems and identify correspondences between different approaches.

CCSS.MATH.PRACTICE.MP2 Reason abstractly and quantitatively.

Mathematically proficient students make sense of quantities and their relationships in problem situations. They bring two complementary abilities to bear on problems involving quantitative relationships: the ability to *decontextualize*—to abstract a given situation and represent it symbolically and manipulate the representing symbols as if they have a life of their own, without necessarily attending to their referents—and the ability to *contextualize*, to pause as needed during the manipulation process in order to probe into the referents for the symbols involved. Quantitative reasoning entails habits of creating a coherent representation of the problem at hand; considering the units involved; attending to the meaning of quantities, not just how to compute them; and knowing and flexibly using different properties of operations and objects.

CCSS.MATH.PRACTICE.MP3 Construct viable arguments and critique the reasoning of others.

Mathematically proficient students understand and use stated assumptions, definitions, and previously established results in constructing arguments. They make conjectures and build a logical progression of statements to explore the truth of their conjectures. They are able to analyze situations by breaking them into cases, and can recognize and use counterexamples. They justify their conclusions, communicate them to others, and respond to the arguments of others. They reason inductively about data, making plausible arguments that take into account the context from which the data arose. Mathematically proficient students are also able to compare the effectiveness of two plausible arguments, distinguish correct logic or reasoning from that which is flawed, and—if there is a flaw in an argument—explain what it is. Elementary students can construct arguments using concrete referents such as objects, drawings, diagrams, and actions. Such arguments can make sense and be correct, even though they are not generalized or made formal until later grades. Later, students learn to determine domains to which an argument applies. Students at all grades can listen or read the arguments of others, decide whether they make sense, and ask useful questions to clarify or improve the arguments.

CCSS.MATH.PRACTICE.MP4 Model with mathematics.

Mathematically proficient students can apply the mathematics they know to solve problems arising in everyday life, society, and the workplace. In early grades, this might be as simple as writing an addition equation to describe a situation. In middle grades, a student might apply proportional reasoning to plan a school event or analyze a problem in the community. By high school, a student might use geometry to solve a design problem or use a function to describe how one quantity of interest depends on another. Mathematically proficient students who can apply what they know are comfortable making assumptions and approximations to simplify a complicated situation, realizing that these may need revision later. They are able to identify important quantities in a practical situation and map their relationships using such tools as diagrams, two-way tables, graphs, flowcharts and formulas. They can analyze those relationships mathematically to draw conclusions. They routinely interpret their mathematical results in the context of the situation and reflect on whether the results make sense, possibly improving the model if it has not served its purpose.

CCSS.MATH.PRACTICE.MP5 Use appropriate tools strategically.

Mathematically proficient students consider the available tools when solving a mathematical problem. These tools might include pencil and paper, concrete models, a ruler, a protractor, a calculator, a spreadsheet, a computer algebra system, a statistical package, or dynamic geometry software. Proficient students are sufficiently familiar with tools appropriate for their grade or course to make sound decisions about when each of these tools might be helpful, recognizing both the insight to be gained and their limitations. For example, mathematically proficient high school students analyze graphs of functions and solutions generated using a graphing calculator. They detect possible errors by strategically using estimation and other mathematical knowledge. When making mathematical models, they know that technology can enable them to visualize the results of varying assumptions, explore consequences, and compare predictions with data. Mathematically proficient students at various grade levels are able to identify relevant external mathematical resources, such as digital content located on a website, and use them to pose or solve problems. They are able to use technological tools to explore and deepen their understanding of concepts.

CCSS.MATH.PRACTICE.MP6 Attend to precision.

Mathematically proficient students try to communicate precisely to others. They try to use clear definitions in discussion with others and in their own reasoning. They state the meaning of the symbols they choose, including using the equal sign consistently and appropriately. They are careful about specifying units of measure, and labeling axes to clarify the correspondence with quantities in a problem. They calculate accurately and efficiently, express numerical answers with a degree of precision appropriate for the problem context. In the elementary grades, students give carefully formulated explanations to each other. By the time they reach high school they have learned to examine claims and make explicit use of definitions.

CCSS.MATH.PRACTICE.MP7 Look for and make use of structure.

Mathematically proficient students look closely to discern a pattern or structure. Young students, for example, might notice that three and seven more is the same amount as seven and three more, or they may sort a collection of shapes according to how many sides the shapes have. Later, students will see 7×8 equals the well remembered $7 \times 5 + 7 \times 3$, in preparation for learning about the distributive property. In the expression $x^2 + 9x + 14$, older students can see the 14 as 2×7 and the 9 as $2 + 7$. They recognize the significance of an existing line in a geometric figure and can use the strategy of drawing an auxiliary line for solving problems. They also can step back for an overview and shift perspective. They can see complicated things, such as some algebraic expressions, as single objects or as being composed of several objects. For example, they can see $5 - 3(x - y)^2$ as 5 minus a positive number times a square and use that to realize that its value cannot be more than 5 for any real numbers x and y.

CCSS.MATH.PRACTICE.MP8 Look for and express regularity in repeated reasoning.

Mathematically proficient students notice if calculations are repeated, and look both for general methods and for shortcuts. Upper elementary students might notice when dividing 25 by 11 that they are repeating the same calculations over and over again, and conclude they have a repeating decimal. By paying attention to the calculation of slope as they repeatedly check whether points are on the line through (1, 2) with slope 3, middle school students might abstract the equation $(y - 2)/(x - 1) = 3$. Noticing the regularity in the way terms cancel when expanding $(x - 1)(x + 1)$, $(x - 1)(x^2 + x + 1)$, and $(x - 1)(x^3 + x2 + x + 1)$ might lead them to the general formula for the sum of a geometric series. As they work to solve a problem, mathematically proficient students maintain oversight of the process, while attending to the details. They continually evaluate the reasonableness of their intermediate results.

Connecting the Standards for Mathematical Practice to the Standards for Mathematical Content

The Standards for Mathematical Practice describe ways in which developing student practitioners of the discipline of mathematics increasingly ought to engage with the subject matter as they grow in mathematical maturity and expertise throughout the elementary, middle and high school years. Designers of curricula, assessments, and professional development should all attend to the need to connect the mathematical practices to mathematical content in mathematics instruction.

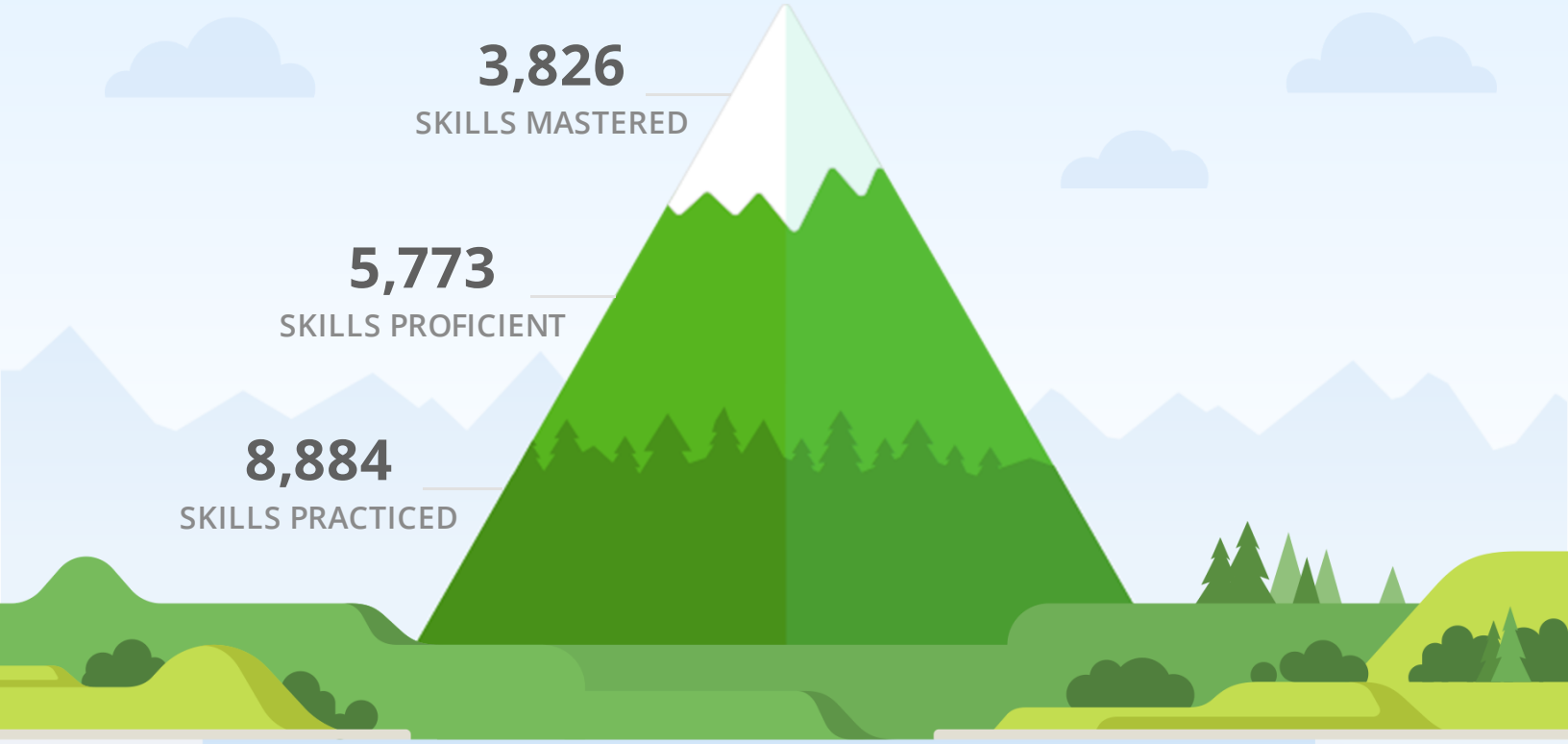
The Standards for Mathematical Content are a balanced combination of procedure and understanding. Expectations that begin with the word "understand" are often especially good opportunities to connect the practices to the content. Students who lack understanding of a topic may rely on procedures too heavily. Without a flexible base from which to work, they may be less likely to consider analogous problems, represent problems coherently, justify conclusions, apply the mathematics to practical situations, use technology mindfully to work with the mathematics, explain the mathematics accurately to other students, step back for an overview, or deviate from a known procedure to find a shortcut. In short, a lack of understanding effectively prevents a student from engaging in the mathematical practices.

In this respect, those content standards which set an expectation of understanding are potential "points of intersection" between the Standards for Mathematical Content and the Standards for Mathematical Practice. These points of intersection are intended to be weighted toward central and generative concepts in the school mathematics curriculum that most merit the time, resources, innovative energies, and focus necessary to qualitatively improve the curriculum, instruction, assessment, professional development, and student achievement in mathematics.

Adapted from: http://www.corestandards.org/Math/Practice/

Making Waves Academy

District Achievement Summary | August 18, 2020 - October 15, 2020



2,058
TOTAL HOURS

1,491
HOURS AT SCHOOL

567
HOURS AT HOME

293,816
QUESTIONS ANSWERED

Making Waves Academy

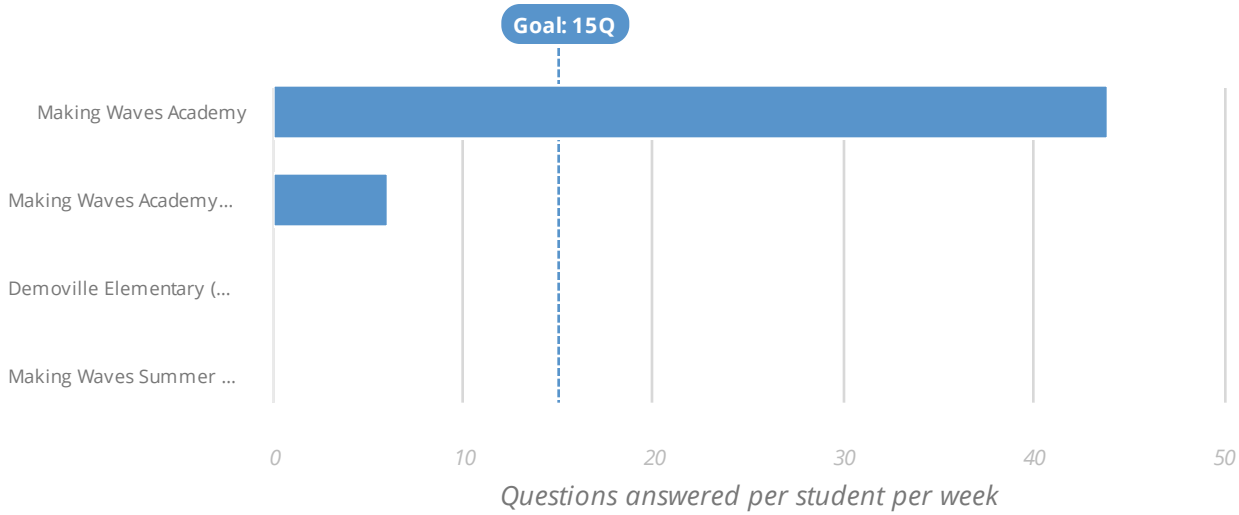
District Achievement Summary | August 18, 2020 - October 15, 2020

THE IXL EFFECT

Schools across the United States are experiencing the IXL Effect, and you can, too. Research shows that answering at least 15 questions per week has a measurable impact on student outcomes.

Already meeting that goal? Aiming for 30 or 65 questions per week has been shown to have an even bigger impact on student success.

Learn more **about the IXL Effect.**



Want to increase your school's IXL usage? Try some of these strategies:

- **Work with your teachers to develop usage goals.** By setting goals tied to our proven best practices, you can help your teachers to be more intentional and effective with their IXL implementation.
- **Get students excited about the IXL app.** With IXL's mobile apps for phone and tablet, students will have even more opportunities to learn and grow.
- **Build IXL into your school's routines.** Help your teachers identify opportunities to blend IXL into their daily instruction. For ideas and support, visit www.ixl.com/inspiration, or contact our Professional Learning team at pd@ixl.com.

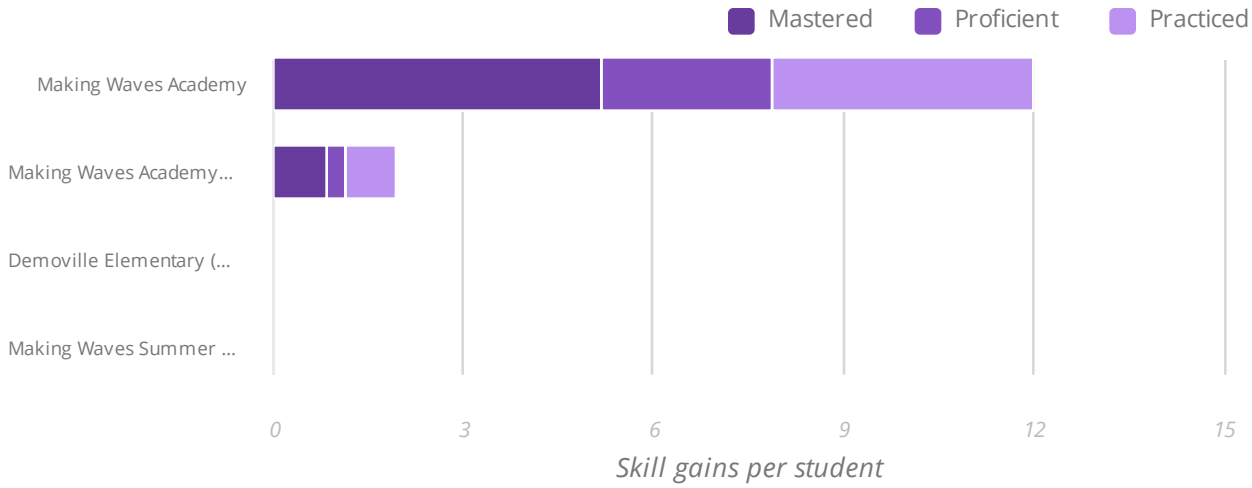
Making Waves Academy

District Achievement Summary | August 18, 2020 - October 15, 2020

BUILDING MASTERY

IXL's SmartScore is based on a proprietary algorithm that combines accuracy, consistency, and question difficulty to authentically gauge student mastery of a topic.

Research shows that striving toward mastery (a SmartScore of 100) is the most effective way to drive student growth on state assessments. Mastery isn't the only goal that impacts learning, however. Achieving proficiency (a SmartScore of 80+) has also been proven to lead to improved student outcomes.



Take IXL to the next level

Striving for proficiency (a SmartScore of 80+) and mastery (a SmartScore of 100) leads to a deeper understanding of concepts and accelerated growth on assessments. Looking for tips on encouraging purposeful practice?

- Set a SmartScore goal of 80 and encourage students to work toward mastery for extra credit
- Set dynamic goals that increase as the lesson or unit progresses
- Use IXL Analytics to ensure students are reaching proficiency

Help students to be successful with SmartScore using the tips and tricks in our SmartScore Guide.

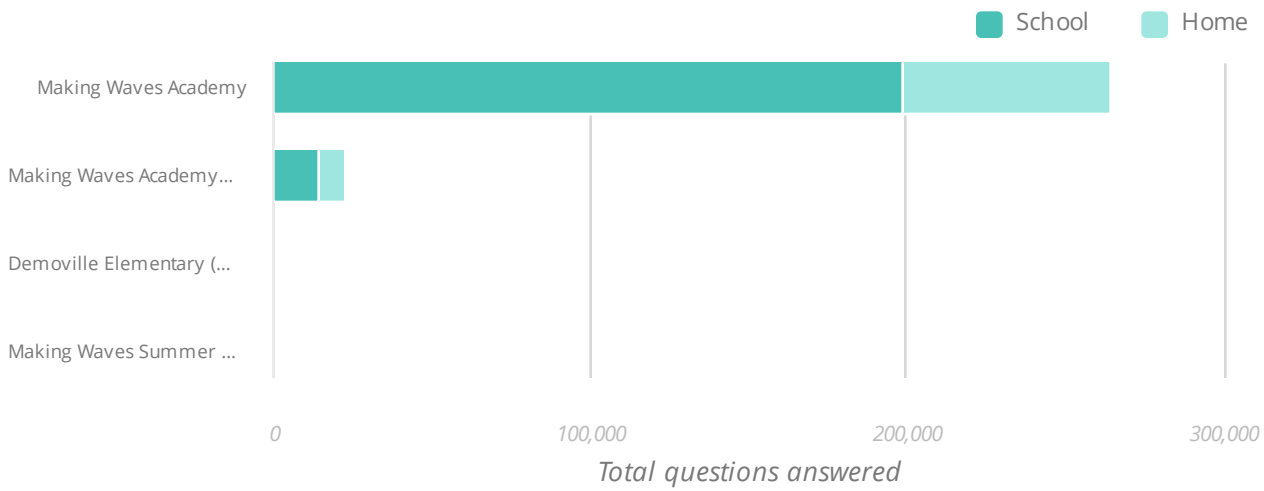
Making Waves Academy

District Achievement Summary | August 18, 2020 - October 15, 2020

EXTEND STUDENT LEARNING

IXL is built for anywhere, anytime learning. We recommend using IXL from both school and home to ensure your students get the most out of their IXL experience.

Collectively this school year, your students have extended their learning time by answering over 287,029 questions from home.



IXL at school

Your students and teachers are enhancing learning with IXL during their school days. Keep it up, or take your implementation to the next level with something special, like:

- Hosting usage contests that celebrate classroom usage milestones
- Setting weekly school-wide question goals
- Celebrating IXL Rockstar classrooms or individuals

IXL at home

At-home usage amplifies the IXL Effect for students and ensures parents are empowered to support the learning process. Boost at-home IXL exploration by:

- Sending a letter home to parents
- Implementing IXL in after school programs
- Encouraging student learning on IXL's phone and tablet apps

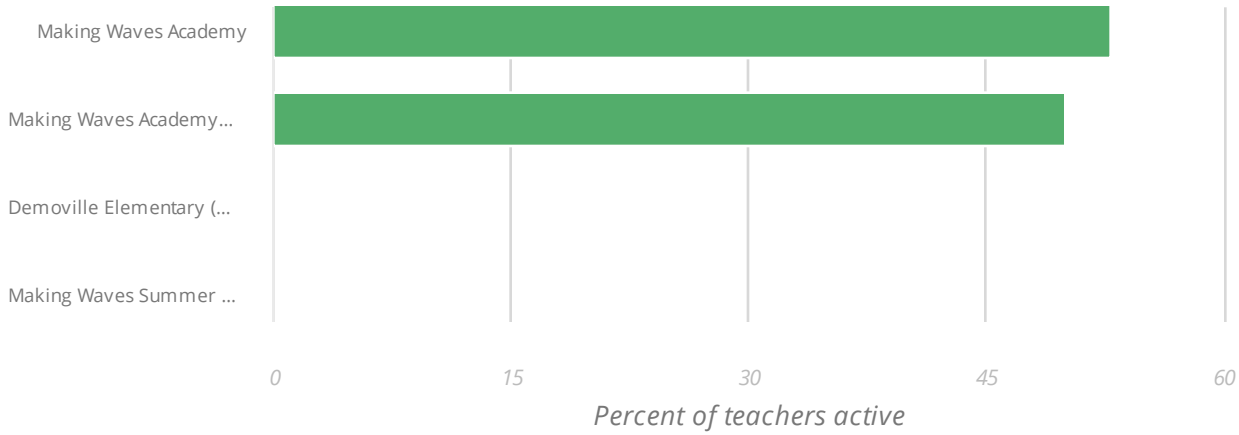
Making Waves Academy

District Achievement Summary | August 18, 2020 - October 15, 2020

TEACHER ENGAGEMENT

IXL is not just for students; it's a powerful tool that can make your teachers more efficient and effective. Monitoring teacher engagement helps you see which teachers are maximizing the benefits of IXL in their classrooms.

If teachers are using IXL regularly, you can feel confident that student learning outcomes will grow and accelerate throughout the school year.



Help your teachers make timely, data-driven decisions with IXL Analytics

One of IXL's most powerful tools for teachers is IXL Analytics, which makes data-driven instruction simple. Did you know that with IXL Analytics your teachers can:

- Take a live look at student progress using the Live Classroom?
- Access individualized action plans, complete with skill recommendations tailored to each student's needs?
- Monitor readiness for state assessments with standards-aligned reports?

To help more teachers get all that they can out of IXL, our professional learning sessions are full of actionable strategies that blend seamlessly into any instructional model.

IMPLEMENTATION GUIDE

IXL for Daily Instruction

STEPS TO SUCCESSFUL IMPLEMENTATION

IXL is designed to be used daily to reinforce your lessons and help students retain the instruction. Getting started is easy:

1

Plan your lesson

Find an IXL skill to support your objective

2

Deliver your lesson

Cement understanding by having students practice the skill to a SmartScore of 80

3

Check for understanding

Get instant ideas for next steps with IXL Analytics

LET'S TAKE A CLOSER LOOK AT HOW IXL SUPPORTS YOUR DAILY INSTRUCTION

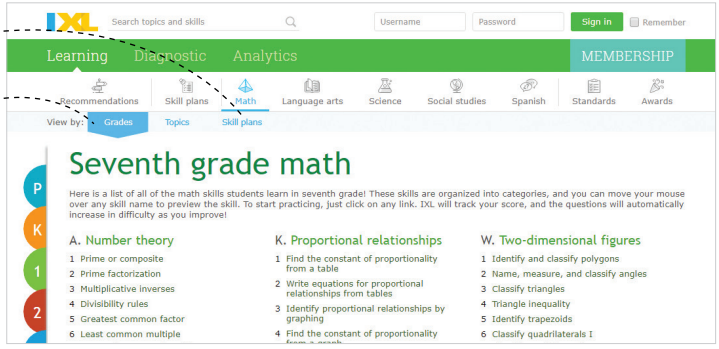
1. Plan your lesson

Find the IXL skill that matches your objective

Review your lesson plan and search for 1-2 IXL skills that support your instruction for the day. You can find these skills by scanning the Grades pages, or by using your IXL skill plan.

Skill plans: *Check out ready-made IXL skill plans for skills that perfectly match your textbook or standard.*

Grades view: *Get easy access to all skills for your grade level.*



2. Deliver your lesson

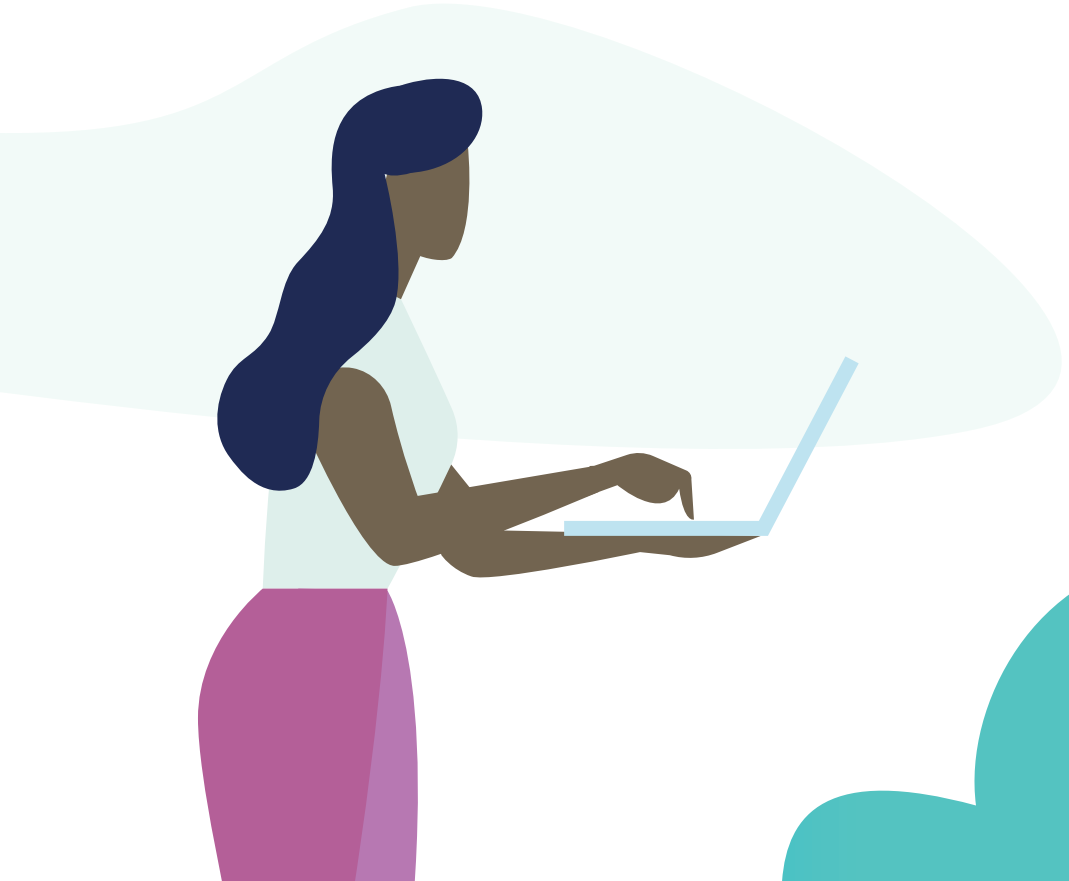
Introduce your lesson to the whole class, then release students to work on your selected IXL skills. You can also have students work on these skills for homework, or as one part of a station rotation in class.

Build student confidence

As students work on their assigned IXL skill, they will be building an in-depth understanding of the concept you introduced in your lesson. Questions adapt automatically to each student so that they can develop skill confidence at their own pace.

Set SmartScore goals

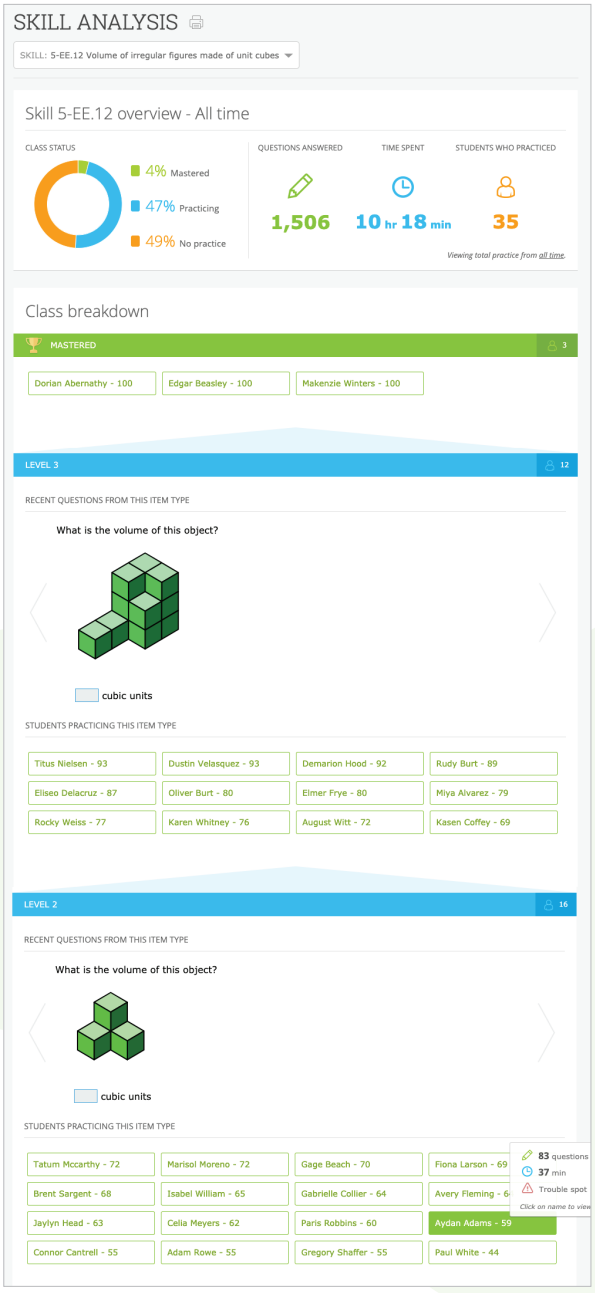
For each IXL skill, encourage students to reach a SmartScore of 80 (proficiency). If students achieve proficiency and are ready for a challenge, have them strive for mastery (SmartScore of 100) for extra credit.



3. Check for understanding

Visit the Skill Analysis report to check for assignment completion and to gain insight on your students' understanding of the lesson. This report gives you overall stats on your class performance and even groups your students by the level of difficulty they are working at within the skill.

Mouse over each student's name for deeper analysis of their progress. Keep an eye out for students who have a trouble spot and may need additional support or practice with foundational skills.



For more ideas on how to use IXL in your classroom, visit **www.ixl.com/resources**

IMPLEMENTATION GUIDE

IXL for Live Assessment

STEPS TO SUCCESSFUL IMPLEMENTATION

IXL can help you assess students in the moment and tailor your instruction to meet their needs.

1

Plan your lesson

Choose an IXL skill that supports your lesson

2

Deliver your lesson

Introduce the concept and use IXL to assess students

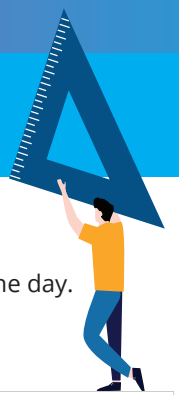
3

Dig into data

Tap into IXL Analytics for in-depth insights on student understanding

LET'S TAKE A CLOSER LOOK AT HOW IXL HELPS YOU ASSESS STUDENTS IN REAL TIME

1. Plan your lesson

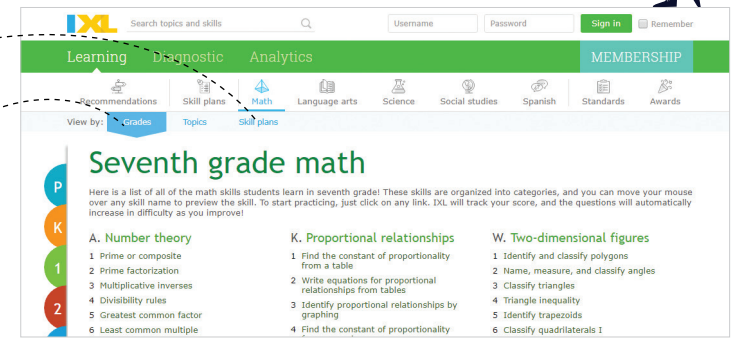


Find the IXL skill that matches your objective

Review your lesson plan and search for 1-2 IXL skills that support your instruction for the day. You can find these skills by using your IXL skill plan, or by scanning the Grades pages.

Skill plans: *Check out ready-made IXL skill plans for skills that perfectly match your textbook or standard.*

Grades view: *Get easy access to all skills for your grade level.*



2. Deliver your lesson

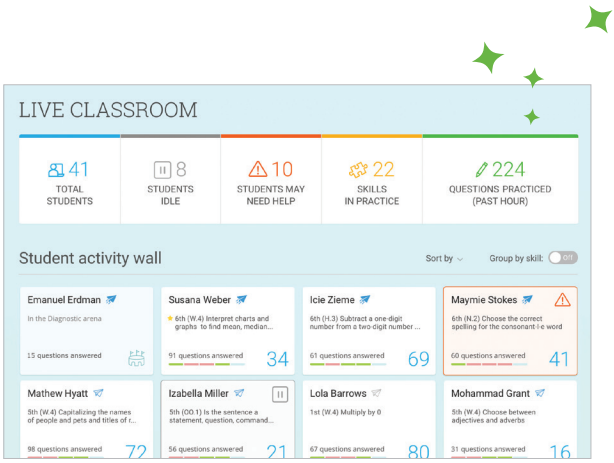
Introduce your lesson to the whole class, then release students to work on your selected IXL skills. For each IXL skill, encourage students to reach a SmartScore of 80 (proficiency).

Assess students in real time

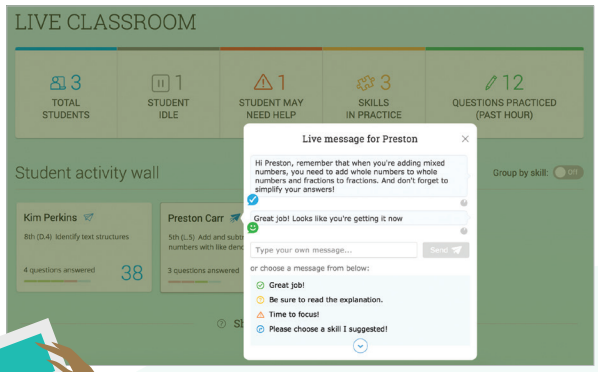
Pull up Live Classroom for live updates on student progress.

- **Red tile:** ***Student is struggling***
  Provide help in the moment
- **Grey tile:** ***Student is idle***
  Check in to see if they need help or are off task
- **Other tiles:** ***Encourage students who reach 80 to push toward mastery***

If a number of students go red, pull them into a small group for remediation.



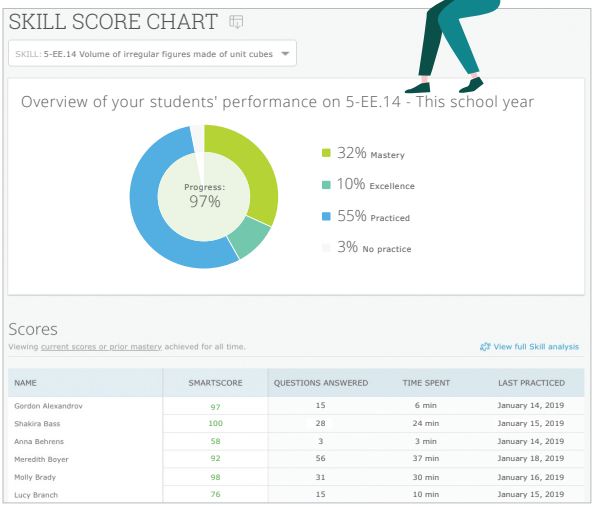
Use Live Message to communicate with students while they're working in IXL. If you notice a student has hit a trouble spot or is off task, click on the airplane icon to reach out and offer guidance.



3. Dig into data

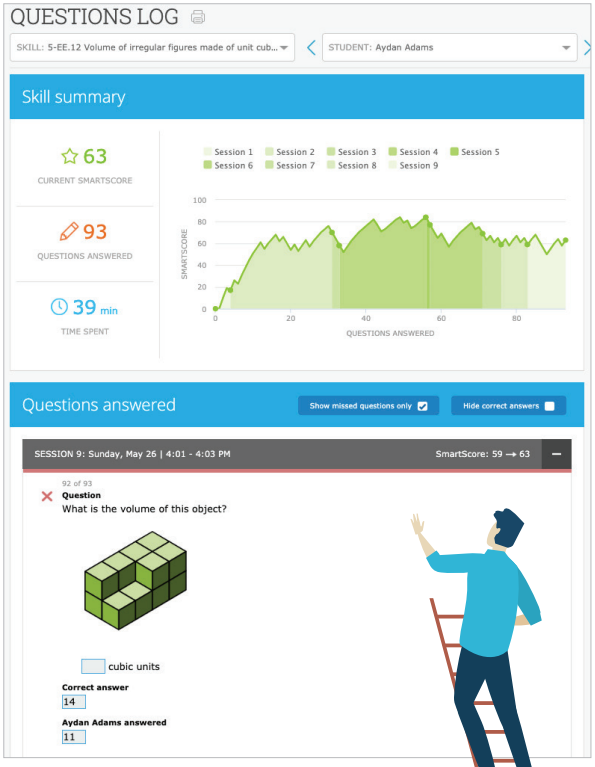
Skill Score Chart

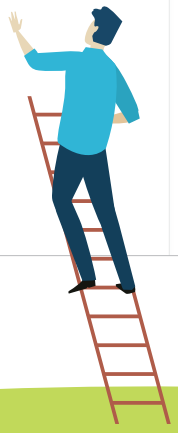
Use the Skill Score Chart to check for assignment completion. Students who have reached at least a SmartScore of 80 are proficient in the skill, while students below an 80 may need a little additional assistance.



Questions Log

If there are any students whose progress you are wondering about, dig a little deeper by clicking their SmartScore in the Skill Score Chart. With IXL's Questions Log, you can view the exact questions any student missed and even look for patterns that might explain why they are struggling.





IMPLEMENTATION GUIDE

IXL for Personalized Practice

STEPS TO SUCCESSFUL IMPLEMENTATION

IXL's personalized guidance ensures your students are working on the best possible skills to help them grow.

1

Empower student choice

Have students select from the personalized skills on their Recommendations wall

2

Set practice goals

Encourage each learner to reach proficiency (SmartScore of 80)

3

Check for understanding

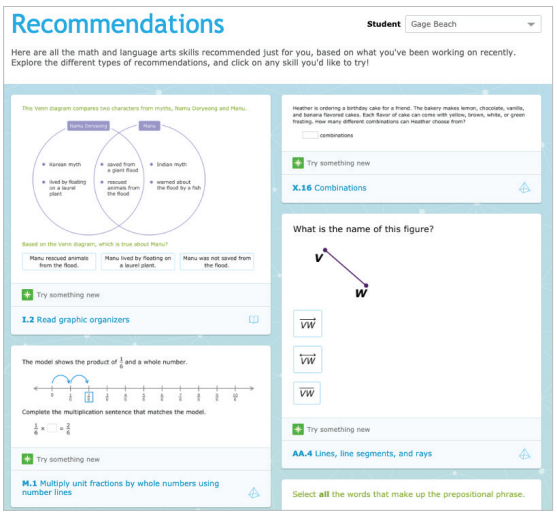
Dig into IXL Analytics to get insight into progress

LET'S TAKE A CLOSER LOOK AT HOW IXL HELPS YOU DELIVER PERSONALIZED LEARNING TO EVERY STUDENT

1. Empower student choice

Have students visit the Recommendations wall

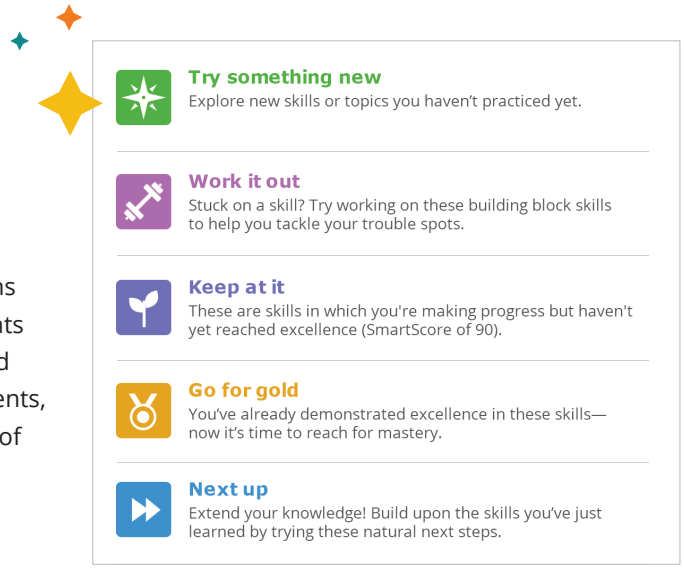
Every student on IXL has a Recommendations wall full of skills that have been hand-picked to help them grow. Encourage students to own their learning by choosing any skill that appeals to them. You can rest assured that each skill is at the right level and will help your students on their learning journey.



2. Set practice goals

Help every student reach their personal potential

There are 5 types of skill recommendations on IXL, and each one will help your students grow in a different way. For recommended skills that are new concepts for your students, encourage them to work to a SmartScore of 80 (proficiency).

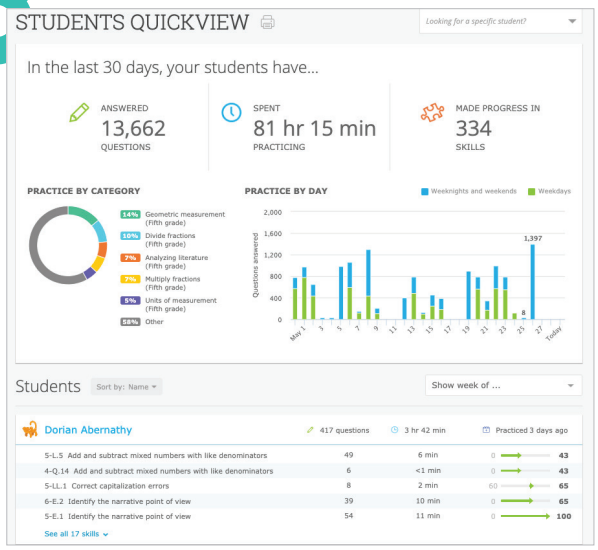


For a fun twist, create a theme for your class's personalized practice. Declare a Work it Out Wednesday or a Try Something New Tuesday!

3. Check for understanding

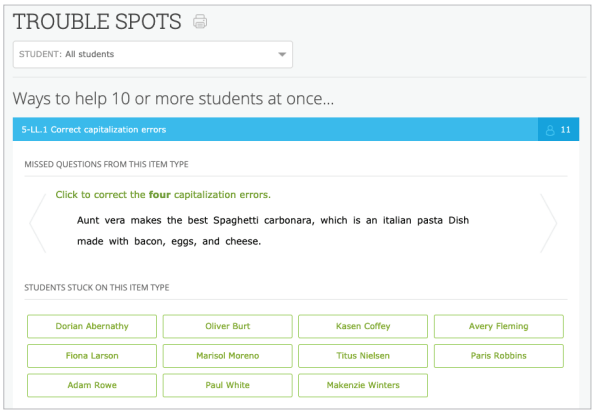
Students Quickview

Scan your Students Quickview to get an idea of which skills your students worked on and how much progress they made on each one.



Trouble Spots

Check your Trouble Spots report to see if any students are struggling with particular skills. Plan for an individual or small group reteach for any problem areas you uncover.



IMPLEMENTATION INSPIRATION

The IXL Recommendations wall can help you support students even when you can't be right by their side. Use the wall:

- As an option for early finishers
- When you're working with a small group
- For bell work
- When you have a substitute

IMPLEMENTATION GUIDE

IXL for Diagnostic Assessment

STEPS TO SUCCESSFUL IMPLEMENTATION

The IXL Real-Time Diagnostic helps you assess your students' grade-level proficiency in both math and English language arts. Getting started is simple!

1

Pinpoint diagnostic levels

Have students visit the Diagnostic Arena

2

Personalize your instruction

Use IXL action plans to guide learning for each student

3

Keep levels up to date

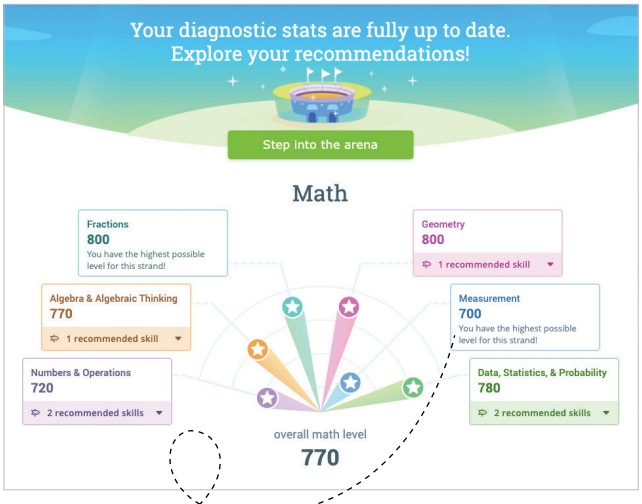
Answer questions weekly to get updated diagnostic insights

LET'S TAKE A CLOSER LOOK AT HOW YOU CAN GET STARTED WITH THE IXL REAL-TIME DIAGNOSTIC

1. Pinpoint diagnostic levels

Visit the Diagnostic Arena

Have students answer diagnostic questions until all of their levels have been pinpointed. It only takes students about 45 minutes to get full diagnostic stats in one subject

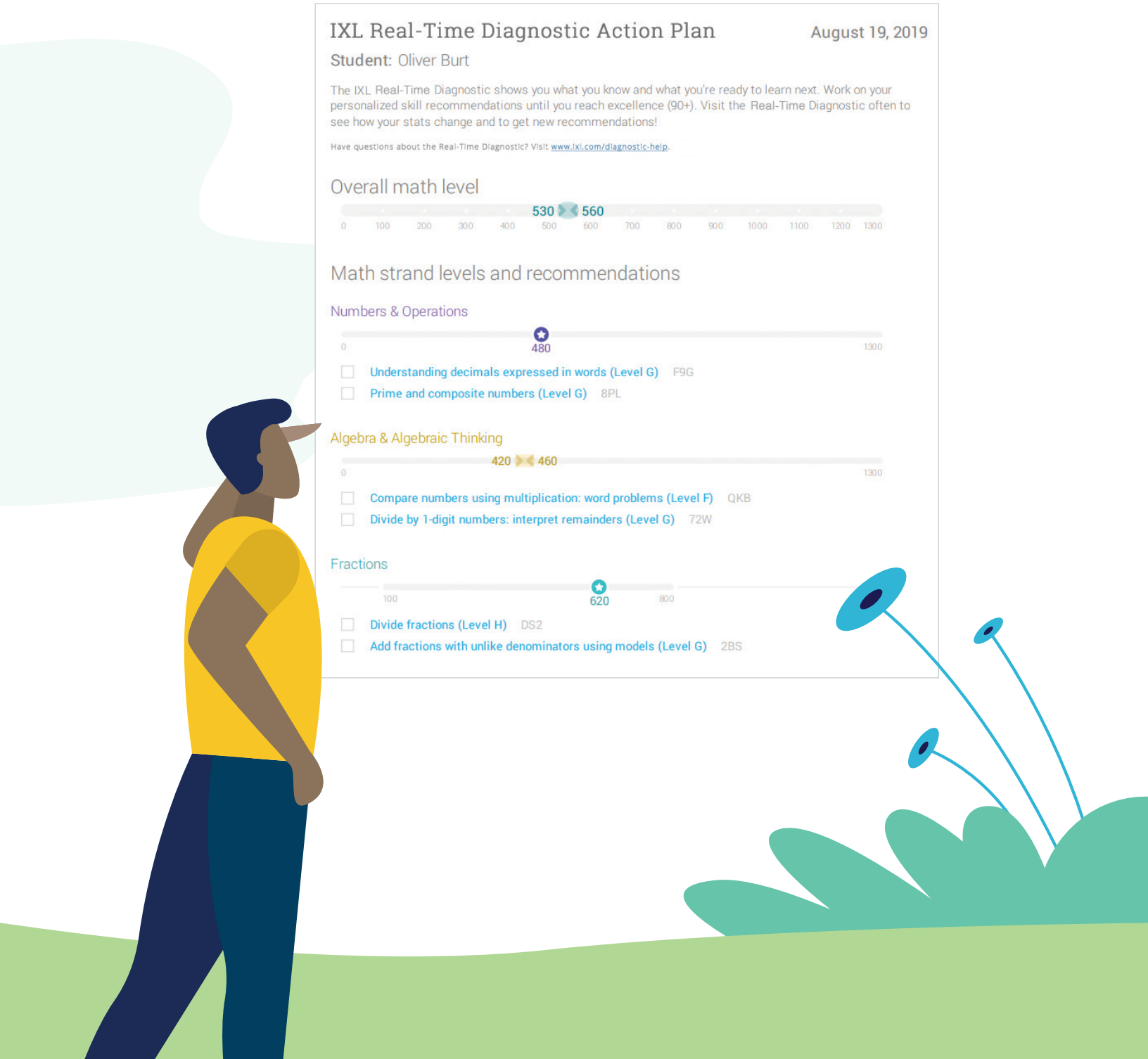


Tip: *Diagnostic levels correspond to grade levels. For example, a score of 700 indicates readiness to begin working on 7th grade skills*

2. Personalize your instruction

Encourage students to follow their action plan from IXL

Using insights from the diagnostic, IXL creates a personalized action plan for each student. Have your students click directly on their recommended IXL skills to start closing gaps and making progress right away.



3. Keep levels up to date

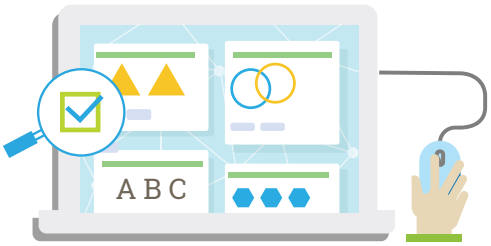
The IXL Real-Time Diagnostic can give you up-to-the-minute information on your students' knowledge every day with these two simple steps:

Answer 10-15 diagnostic questions per week

With just a handful of diagnostic questions each week, your students' levels will stay up to date and ensure you always have timely insights on how to support them.

Work on IXL skills regularly

When students work in IXL skills, their progress is automatically incorporated into their diagnostic levels so that you have a full, meaningful portrait of your students' knowledge.



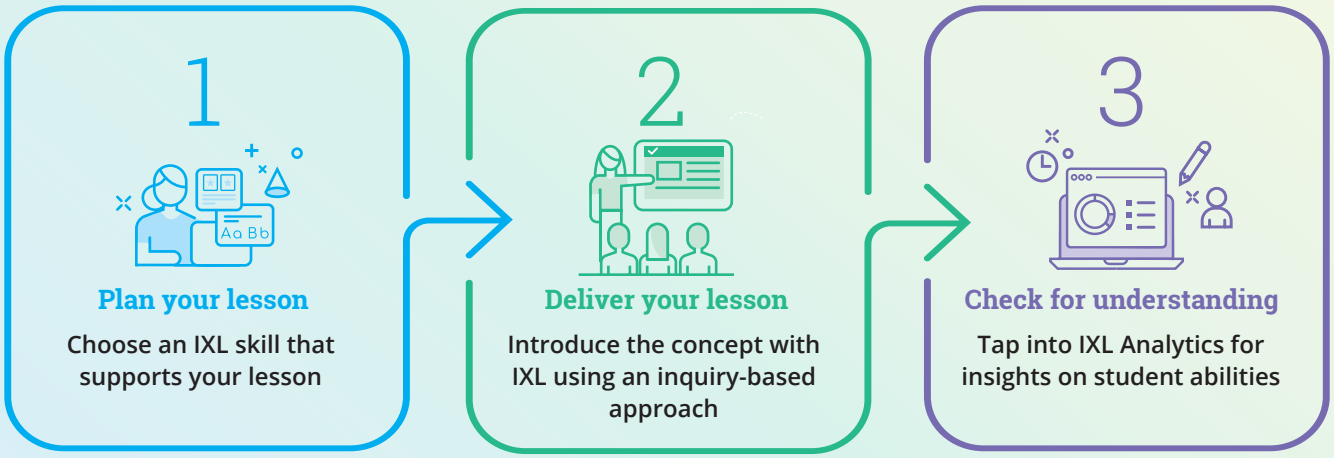
To learn more about the IXL Real-Time Diagnostic, visit **www.ixl.com/diagnostic**

IMPLEMENTATION GUIDE

IXL for Whole Class Instruction

STEPS TO SUCCESSFUL IMPLEMENTATION

IXL is the perfect resource for modeling new concepts during whole class instruction.



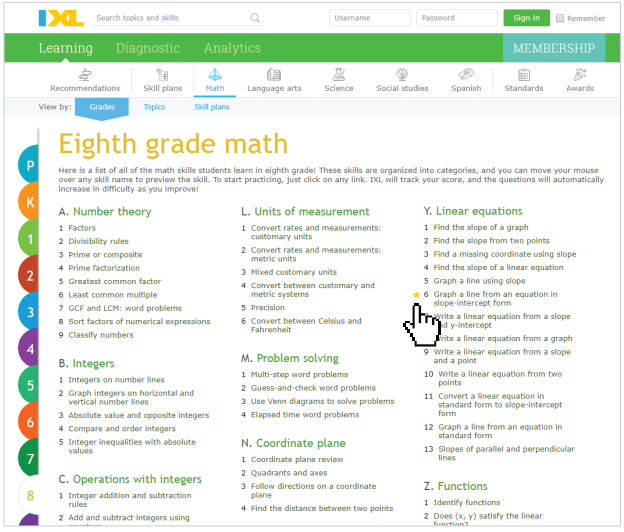
LET'S LOOK AT AN EXAMPLE LESSON TOGETHER

Imagine: You are working with your class on graphing a line from an equation and will be using IXL to kick off the lesson.

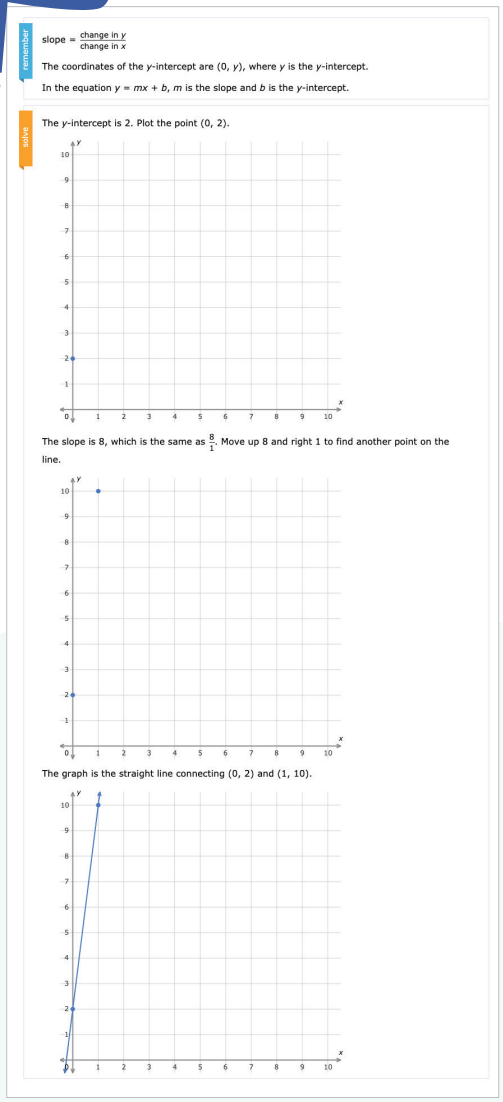
1. Plan your lesson

Choose an IXL skill that matches your objective

You can find skills by scanning the Grades page or by using your IXL skill plan. For this lesson, you might look at the category **Linear equations** and choose the 8th skill, **Graph a line from an equation in slope-intercept form**. Highlight your choice for your students by clicking on the star to the left of the skill name.



2. Deliver your lesson



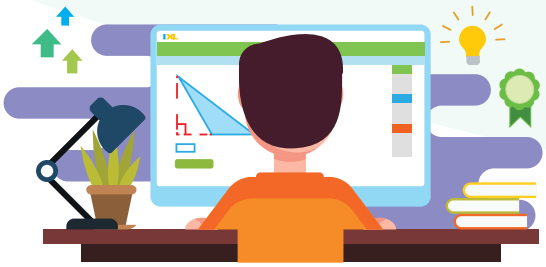
Employ an inquiry-based approach

Project your chosen IXL skill in your classroom and have students work together to answer the first question. Then, walk through the explanation as a class.

Note the key concepts in the Remember box, and talk through each step to solve the problem. Answer a few more questions as a class or in small groups.

Cement learning with individual practice

Have students work on your selected IXL skill individually, either in class or for homework. Set a SmartScore goal of 80 (proficiency), but encourage students to strive for 100 if they feel ready.

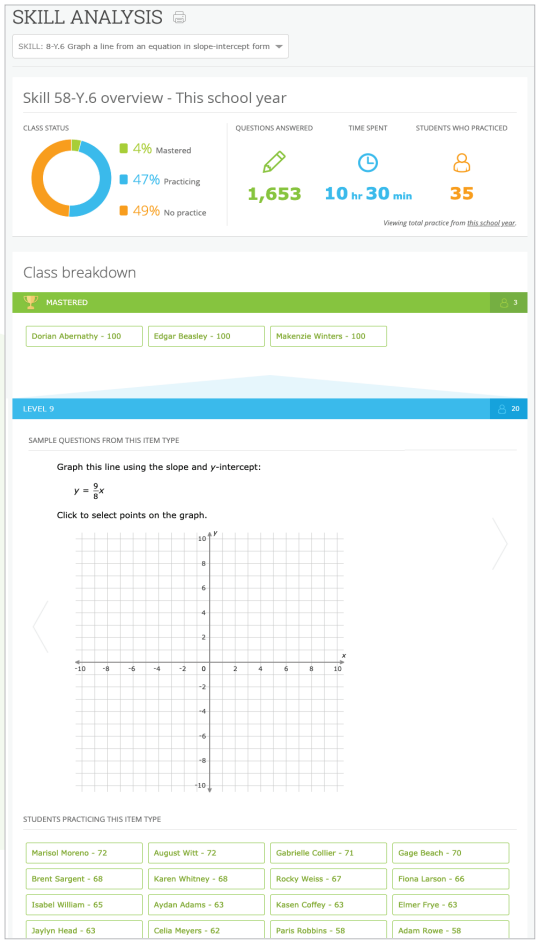


3. Check for understanding

Skill Analysis

Visit the Skill Analysis report to check for assignment completion and to gain insight on your students' understanding of the lesson. This report gives you overall stats on class performance and even groups your students by the level of difficulty they are working at within the skill.

Mouse over each student's name for deeper analysis of student progress. Keep an eye out for students who have a trouble spot and may need additional support or practice with foundational skills.



IMPLEMENTATION GUIDE

IXL for Supporting Core Curriculum

STEPS TO SUCCESSFUL IMPLEMENTATION

IXL skill plans take the guesswork out of lesson planning by providing the exact IXL skills that perfectly match your textbooks.

1

Plan your lesson

Choose a supporting IXL skill in your skill plan

2

Deliver your lesson

Use your aligned IXL skill as classwork or homework

3

Check for understanding

Dive in to IXL Analytics for instant insights

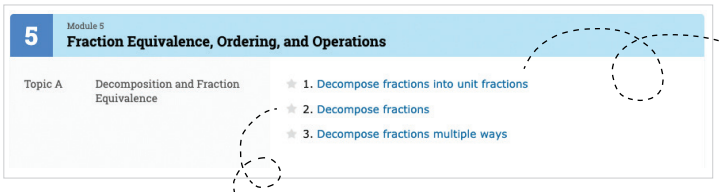
LET'S LOOK AT AN EXAMPLE LESSON TOGETHER

Imagine: You are introducing your class to decomposing fractions and will be using IXL to support the day's lesson.

1. Plan your lesson

Find the right IXL skills

Review your lesson plan and the supporting skills in your IXL skill plan.



Classwork skill

The first skill in this section introduces students to the concept by having them decompose fractions as unit fractions. This would be a great classwork skill for kicking off your lesson.

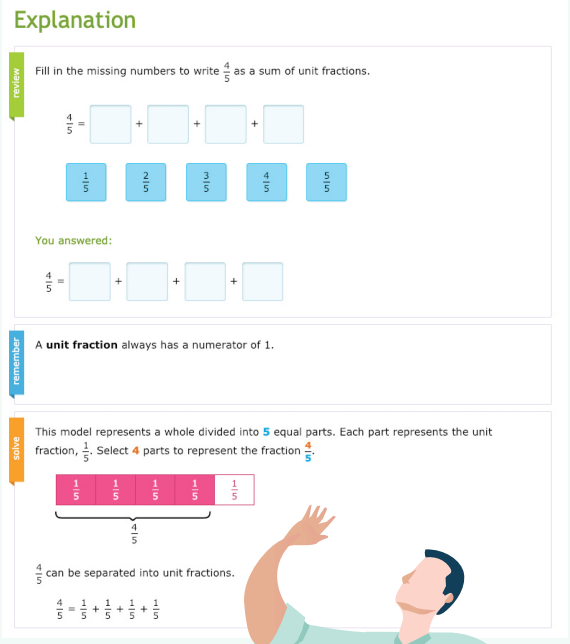
Homework skill

The second skill in this section builds on the first by having students decompose fractions with different numerators. This skill would be a good choice to assign for homework or as an enrichment activity.

2. Deliver your lesson

Whole class instruction

Introduce the concept by working through questions from your classwork skill, as a group. Use IXL's explanations to model each step of the process for your students.

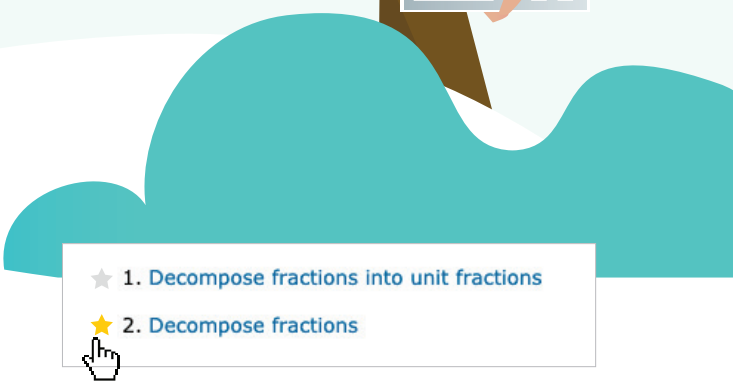


Individual or small-group work

Release students to keep working on your selected skill to deepen their understanding of the concept. Remember that every IXL skill is adaptive, and will guide students from simpler tasks to more complex problems.

Assign homework

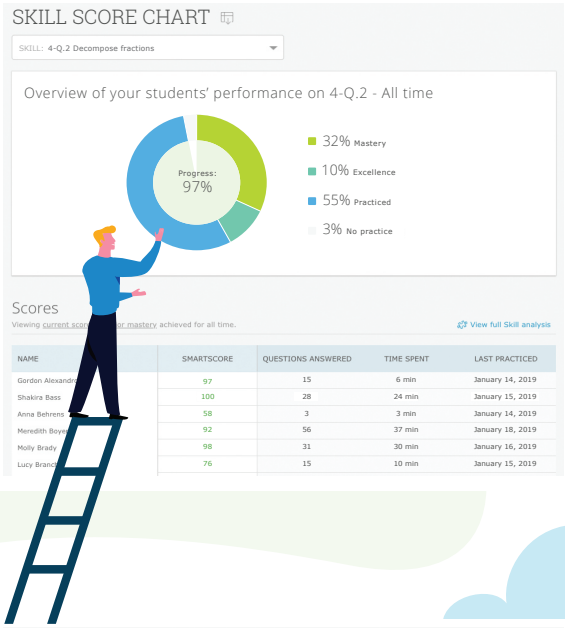
Assign your homework skill through your learning management system or by clicking the star next to the skill. Students should work on this skill to a SmartScore of 80 (proficiency).



3. Check for understanding

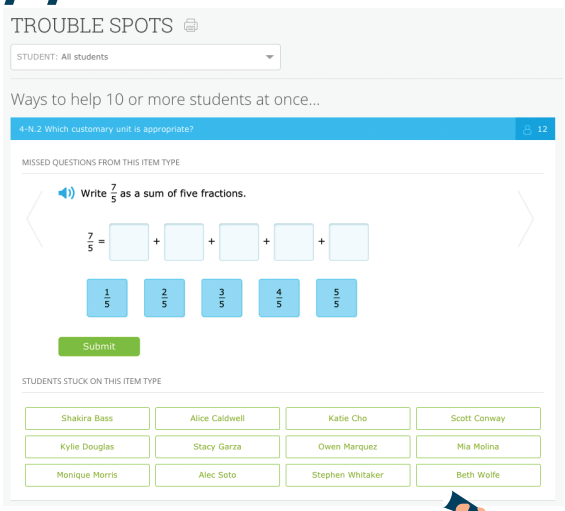
Skill Score Chart

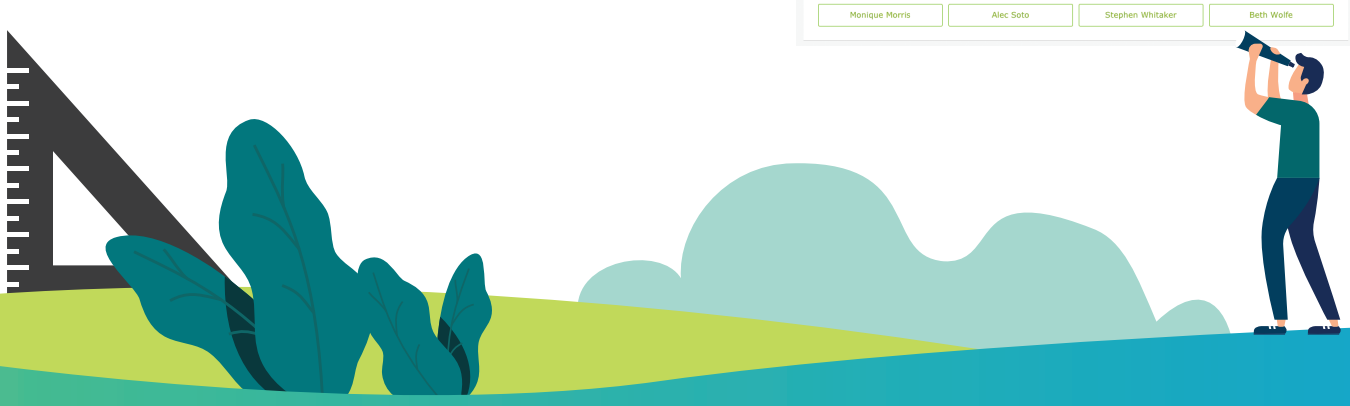
Use the Skill Score Chart to check for assignment completion. Students who have reached at least a SmartScore of 80 are proficient in the skill, while students below an 80 may need a little additional assistance.



Trouble Spots

Check out your Trouble Spots report for instant insights on students who might be struggling with the lesson. Use the groupings provided to form small groups for reteaching the next day in class.





Explore IXL's collection of skill plans at **ixl.com/skill-plans**

IMPLEMENTATION GUIDE

IXL for Standards Prep

STEPS TO SUCCESSFUL IMPLEMENTATION

IXL is fully aligned to your standards so you can ensure your students are ready when it's state assessment time.

1

Plan your lesson

Find the IXL skills that support your target standard

2

Deliver your lesson

Have students work on IXL to reinforce your instruction

3

Check for understanding

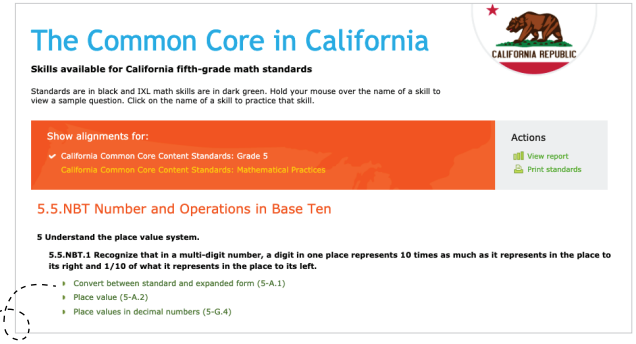
Use insights from IXL Analytics to plan next steps

LET'S TAKE A CLOSER LOOK AT HOW IXL SUPPORTS STANDARDS PREP

Imagine: You are working with your class on the 5th grade Common Core math standards around understanding place value.

1. Plan your lesson

IXL unpacks every standard into targeted skills that help build student understanding and confidence. Find your target standard in IXL's Common Core alignment to view skills that will support your instruction.



These three skills will help your students develop proficiency on your target standard, 5.5.NBT.1.

2. Deliver your lesson

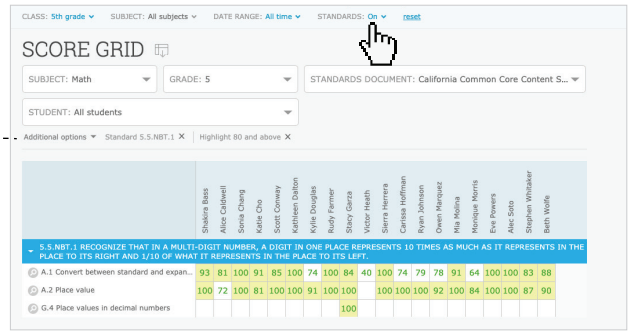
To deepen understanding of your lessons on place value, have students tackle the three supporting IXL skills during class or as homework.

Encourage your students to strive for a SmartScore of 80 (proficiency) on each skill. Remember that every IXL skill is adaptive, and will guide students from simpler tasks to more complex problems.

3. Check for understanding

Standards Score Grid

Visit the Score Grid report and turn Standards “On” to see which students completed their assignments.

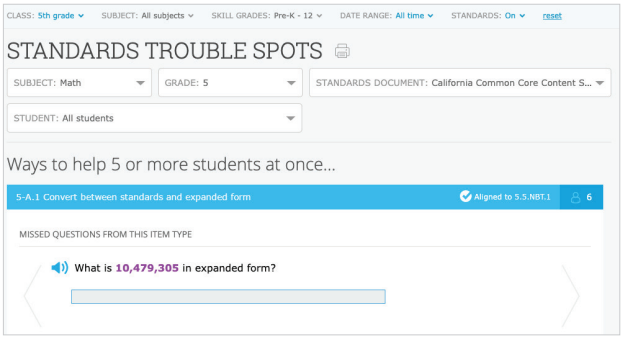


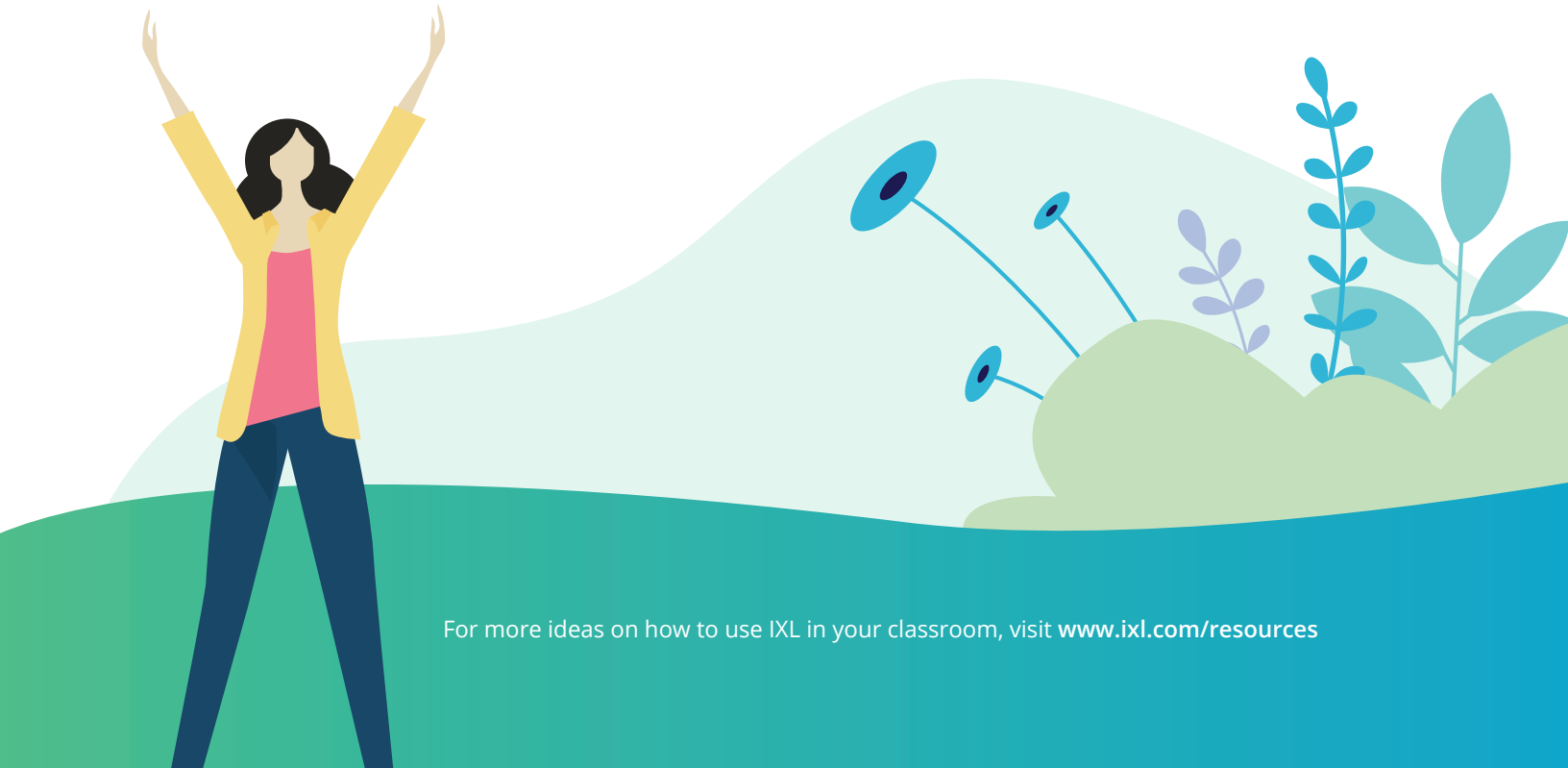
Pro Tip:

The Additional Options menu can make it even easier for you to check for assignment completion. Use the tools in this menu to view only the skills for your target standard, as well as to highlight scores above 80.

Standards Trouble Spots

Check out your Trouble Spots report and turn Standards “On” for instant insights on students who might be struggling with your target standard. Use the groupings provided to form small groups for reteaching.





For more ideas on how to use IXL in your classroom, visit **www.ixl.com/resources**

edreports.org

RUBRIC

EdReports.org Quality Instructional Materials Tool:

High School Mathematics

Table of Contents

Introduction

The Common Core State Standards (CCSS), informed by three decades of knowledge around learning, created an unprecedented opportunity to improve student achievement nationwide. However, simply adopting the CCSS and working with teachers on the instructional shifts does not directly translate into student success. Evidence indicates that instructional materials have a significant effect on student outcomes.[1] And as Harvard's Richard Elmore argues, to get inside the instructional core and improve learning at scale, it is essential to get quality content into the hands of teachers and students.[2]

If quality instructional materials (e.g., textbooks, curriculum, digital resources and other instructional content) are as critical as the research suggests, local decisions about what CCSS materials to adopt or purchase are now more significant than ever. Publishers are updating their materials, independent curriculum providers are launching and teachers nationwide are generously publishing their own materials for the benefit of others. States, districts and organizations also have been developing and disseminating Common Core-aligned lessons. With so many new and repackaged instructional products being introduced into a quickly changing marketplace, state and district leaders and educators need independent information about instructional materials in order to make informed purchasing decisions and, over time, to move the needle on student performance.

About EdReports.org

Our Vision: All students and teachers in the United States will have access to the highest-quality instructional materials that will help improve student learning outcomes.

Our Mission: EdReports.org will increase the capacity of teachers, administrators and leaders to seek, identify and demand the highest-quality instructional materials. Drawing upon expert educators, EdReports.org's evidence-based reviews of instructional materials and support of smart adoption processes will equip teachers with excellent materials nationwide.

Our Theory of Action: Credible information against quality criteria in a quickly changing marketplace helps educators make better purchasing decisions and improve student performance. Identifying excellence and improving demand for credible information will improve the supply of quality materials over time, leading to better student achievement outcomes.

About This Tool

EdReports.org convened educators to develop this tool to provide educators, stakeholders, and leaders with independent and useful information about the quality of core English language arts instructional materials (whether digital, traditional textbook, or blended). Expert educators will use the tool to evaluate full sets of instructional materials in English language arts against non-negotiable criteria (see Figure 1). This tool builds on the experience of educators, curriculum experts, state processes, and leading rubric developers and organizations – such as Achieve, Inc., the Council of Great City Schools, and Student Achievement Partners, among others – that have conducted reviews of instructional materials, lessons, and tasks.

To create the evaluation tool, EdReports.org conducted research into the use of commonly-used rubrics, gathered input from educators and English language arts experts during a nationwide listening tour, interviewed professors of English language arts, developers and publishers of materials, and convened an Anchor Educator Working Group (AEWG). The tool may be refined by the AEWG after the first set of reviews is complete.

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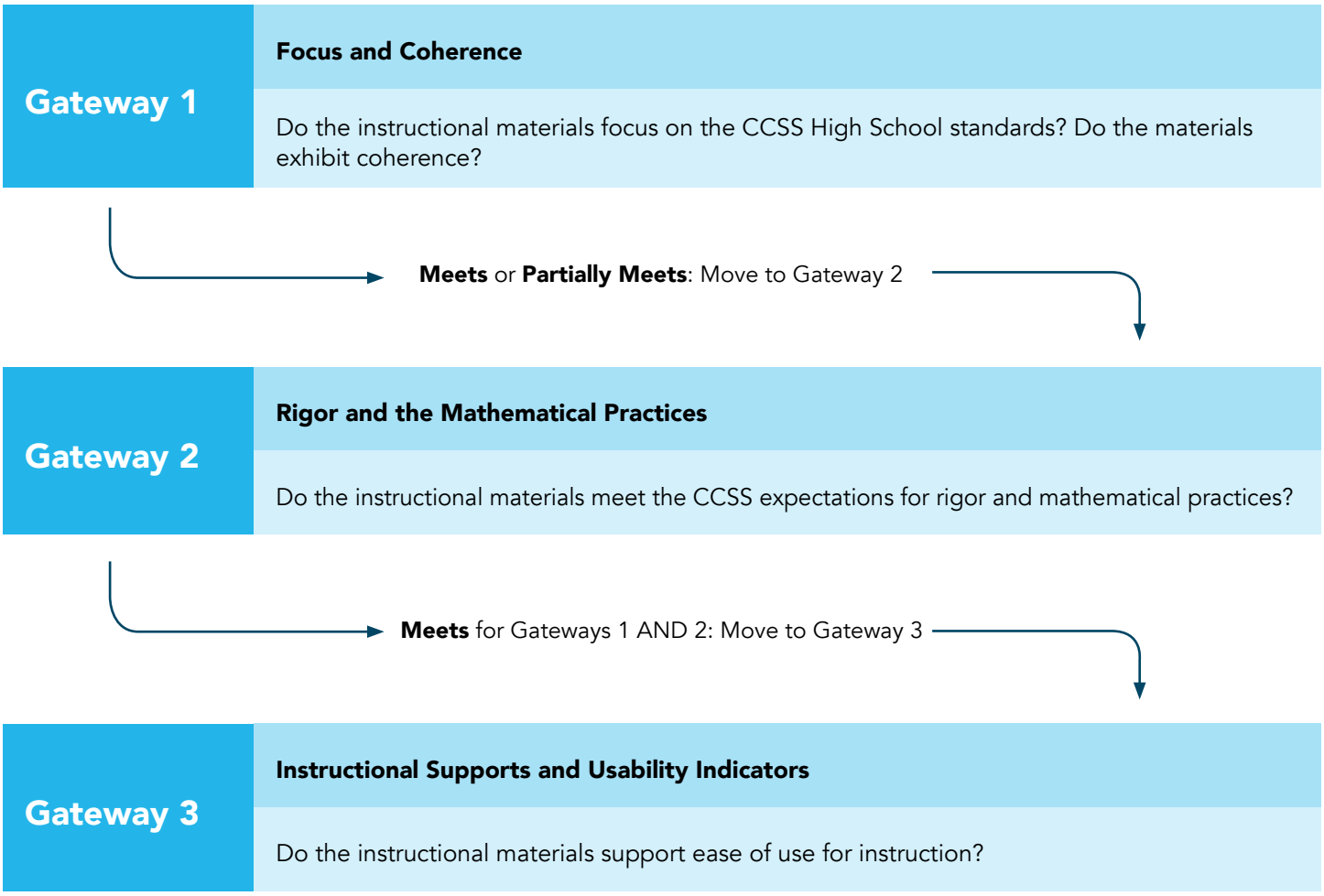
1 G. Whitehurst. "Don't Forget Curriculum." *Brown Center Letters on Education*. (Washington, DC: Brookings Institute, 2009); M. Chingos and G. Whitehurst. *Choosing Blindly: Instructional Materials, Teacher Effectiveness and the Common Core*. (Washington, DC: Brown Center on Education Policy at Brookings, April 2012).

2 Richard Elmore, in his work on the instructional core, asserts that there are three ways to improve student learning at scale: (1) raise the level of content that students are taught; (2) increase the skill and knowledge that teachers bring to the teaching of that content; and (3) increase the level of students' active learning of that content. R. Elmore. *Improving the Instructional Core* (Cambridge, MA: Harvard Graduate School of Education, 2008).

Figure 1: Gateway Evaluation Process for Review of Mathematics Materials



Gateway 1

Focus and Coherence

In this gateway, reviewers consider how well the materials are coherent and consistent with the high school standards that specify the mathematics which all students should study in order to be college and career ready, including the modeling standards that appear throughout the high school Common Core standards, as indicated by a star (*). We use the specific definition of modeling that appears in the standards to inform our evidence collection and scoring.

GUIDING REVIEW QUESTIONS:

- Do the instructional materials focus on "the high school standards that specify the mathematics which all students should study in order to be college and career ready" (p. 57 of CCSSM)?
- Do the instructional materials exhibit coherence within and across courses/grade levels that is consistent with a logical structure of mathematics?

Rating Sheet 1: Focus and Coherence

For 'Focus and Coherence' to attain a score of 'Meets Expectations,' material must earn at least 14 points.

Criterion	**The instructional materials are coherent and consistent with "the high school standards that specify the mathematics which all students should study in order to be college and career ready".** Maximum Points: 18

Indicators	Points	Evidence
1a. The materials focus on the high school standards.[3]		
1ai. The materials attend to the full intent of the mathematical content in the high school standards for all students.[4]	**0 2 4**	
1aii. The materials attend to the full intent of the modeling process when applied to the modeling standards.[5]	**0 1 2**	
1b. The materials provide students with opportunities to work with all high school standards and do not distract students with prerequisite or additional topics.		

(Continues on next page)

3 In this tool, the phrase "high school standards" refers to the standards that "specify the mathematics that all students should study in order to be college and career ready" (p. 57). These standards do not have a plus (+) symbol. Those standards that encompass additional mathematics for advanced courses and are indicated by a (+) symbol in the CCSS are considered in indicator 1g.

4 For those standards indicated as modeling standards, this indicator will not examine how the modeling process is used with them. The examination of the modeling process with specific modeling standards will occur in indicator 1aii.

5 In the CCSSM, "specific modeling standards appear throughout the high school standards indicated by a star symbol" (p. 57), and the modeling process includes 6 steps and is defined to be a "process of choosing and using appropriate mathematics and statistics to analyze empirical situations, to understand them better, and to improve decisions" (p. 72).

(Continued from previous page)

1bi. The materials, when used as designed, allow students to spend the majority of their time on the content from CCSSM widely applicable as prerequisites for a range of college majors, postsecondary programs, and careers.	**0 1 2**	
1bii. The materials when used as designed allow students to fully learn each standard.	**0 2 4**	
1c. The materials require students to engage in mathematics at a level of sophistication appropriate to high school.	**0 1 2**	
1d. The materials are mathematically coherent and make meaningful connections in a single course and throughout the series, where appropriate and where required by the Standards.	**0 1 2**	
1e. The materials explicitly identify and build on knowledge from Grades 6-8 to the High School Standards.	**0 1 2**	
1f. The plus (+) standards, when included, are explicitly identified and coherently support the mathematics which all students should study in order to be college and career ready.	**Not Scored**	

Gateway 1 Overall Rating:

Focus and Coherence

Reviewers use data recorded in Rating Sheet 1 to determine the Gateway 1 final rating.

Gateway 1	Focus and Coherence

Indicators	Rating Score	Evidence
1a-1e: The instructional materials are coherent and consistent with "the high school standards that specfiy the mathematics which all students should study in order to be college and career ready" (p. 57 of CCSM).	**Point Total from Rating Sheet (s):**	

GATEWAY 1 FINAL SCORE

Earned: _____ of 18 points

- ☐ Meets expectations (14-18 points)
- ☐ Partially meets expectations (10-13 points)
- ☐ Does not meet expectations (<10 points)

REMINDER:

- Does not meet = does not continue to Gateway 2
- Materials must "Meet Expectations" or "Partially Meet Expectations" in Gateway 1 to be reviewed in Gateway 2.
- Materials must "Meet Expectations" in BOTH Gateway 1 and Gateway 2 to be reviewed in Gateway 3.

Gateway 2

Rigor and the Mathematical Practices

Rigor determines if a series instructional materials reflect the balances in the standards by helping students develop conceptual understanding, procedural skill and fluency, and application. Mathematical Practices determine how well materials meaningfully connect the Mathematical Content Standards and the Mathematical Practice Standards.

GUIDING REVIEW QUESTIONS:

- Do the instructional materials engage students with all aspects of rigor: conceptual understanding, procedural skill and fluency, and application in a balanced way?
- Do the Mathematical Practices connect to the Mathematical Content Standards in meaningful and deliberate ways?

Rating Sheet 2.1: Rigor and Balance

For "Rigor and Balance" to attain a score of 'Meets Expectations,' materials must earn at least 7 points

Criterion	**The instructional materials reflect the balances in the Standards and help students meet the Standards' rigorous expectations, by giving appropriate attention to: developing students' conceptual understanding; procedural skill and fluency; and engaging applications.**[6] Maximum Points: 8

Indicators	Points	Evidence
2a. Attention to Conceptual Understanding: The materials support the intentional development of students' conceptual understanding of key mathematical concepts, especially where called for in specific content standards or clusters.	**0 1 2**	
2b. Attention to Procedural Skill and Fluency: The materials provide intentional opportunities for students to develop procedural skills and fluencies, especially where called for in specific content standards or clusters.	**0 1 2**	
2c. Attention to Applications: The materials support the intentional development of students' ability to utilize mathematical concepts and skills in engaging applications, especially where called for in specific content standards or clusters.	**0 1 2**	
2d. Balance: The three aspects of rigor are not always treated together and are not always treated separately. The three aspects are balanced with respect to the standards being addressed.	**0 1 2**	

6 Refer also to Criterion #2 (pages 9-10) in the HS Mathematics Publisher's Criteria.

RATING SHEET 2.1 TALLY

Earned: _____ of 8 points	☐ Meets expectations (7-8 points) ☐ Partially meets expectations (5-6 points) ☐ Does not meet expectations (<5 points)

Rating Sheet 2.2: Practice-Content Connection

For "Practice-Content Connection" to attain a score of 'Meets Expectations,' materials must earn at least 7 points

Criterion	**Materials meaningfully connect the Standards for Mathematical Content and the Standards for Mathematical Practice.**[7] Maximum Points: 8

Indicators	Points
2e. The materials support the intentional development of overarching, mathematical practices (MPs 1 and 6), in connection to the high school content standards, as required by the mathematical practice standards.	**0 1 2**
2f. The materials support the intentional development of reasoning and explaining (MPs 2 and 3), in connection to the high school content standards, as required by the mathematical practice standards.	**0 1 2**
2g. The materials support the intentional development of modeling and using tools (MPs 4 and 5), in connection to the high school content standards, as required by the mathematical practice standards.	**0 1 2**
2h. The materials support the intentional development of seeing structure and generalizing (MPs 7 and 8), in connection to the high school content standards, as required by the mathematical practice standards.	**0 1 2**

RATING SHEET 2.2 TALLY

Earned: _____ of 8 points	☐ Meets expectations (7-8 points) ☐ Partially meets expectations (4-6 points) ☐ Does not meet expectations (<4 points)

7 Refer also to Criterion #5 (pages 12-13) in the HS Mathematics Publisher's Criteria. Not all items need to align to a Mathematical Practice. In addition, there is no requirement to have an equal balance among the Mathematical Practices in any set of materials or grade.

Gateway 2 Overall Rating:

Rigor and Mathematical Practices

Reviewers use data recorded in Rating Sheets 2.1 and 2.2 to determine the Gateway 2 overall rating.

Gateway 2	**The materials align with CCSS expectations for rigor and mathematical practices.** Maximum Points: 16

Indicators	Rating Score	Evidence
2a-2d: The instructional materials reflect the balances in the Standards and help students meet the Standards' rigorous expectations, by helping students develop conceptual understanding, procedural skills and fluency, and application.	**Point Total from Rating Sheet(s):**	
2e-2h: Materials meaningfully connect the Standards for Mathematical Content and the Standards for Mathematical Practice.	**Point Total from Rating Sheet(s):**	

GATEWAY 2 FINAL SCORE

Earned: _____ of 16 points

- ☐ Meets expectations (14-16 points)
- ☐ Partially meets expectations (10-13 points)
- ☐ Does not meet expectations (<10 points)

REMINDER:

- Materials must "Meet Expectations" in BOTH Gateway 1 and Gateway 2 to be reviewed in Gateway 3.

Gateway 3

Instructional Supports and Usability Indicators

Gateway 3 Rating Sheets include some Indicators that are rated and some that are not rated. In cases where Indicators are not rated, the evidence collected provides valuable information about instructional materials, although the indicator is not scored and does not affect the rating for the Criterion or Gateway.[8]

Rating Sheet 3.1: Use and Design to Facilitate Student Learning

For "Use and design facilitate student learning" to attain a score of "Meets Expectations," material must earn at least 7 points.

Criterion	**Materials are well designed and take into account effective lesson structure and pacing.** Maximum Points: 8

Indicators	Points	Evidence
3a. The underlying design of the materials distinguishes between problems and exercises. In essence, the difference is that in solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery. Each problem or exercise has a purpose.	**0 1 2**	
3b. Design of assignments is not haphazard: tasks are given in intentional sequences.	**0 1 2**	
3c. There is variety in how students are asked to present the mathematics.	**0 1 2**	
3d. Manipulatives, both virtual and physical, are faithful representations of the mathematical objects they represent and when appropriate are connected to written methods.	**0 1 2**	
3e. The visual design (whether in print or digital) is not distracting or chaotic, but supports students in engaging thoughtfully with the subject.	**Not Scored**	

RATING SHEET 3.1 TALLY

Earned: _____ of 8 points

- ☐ Meets expectations (7-8 points)
- ☐ Partially meets expectations (5-6 points)
- ☐ Does not meet expectations (<5 points)

8 Gateway 3 Rating Sheets include some Indicators that are rated and some that are not rated. In cases where Indicators are not rated, the evidence collected provides valuable information about instructional materials, although the indicator is not scored and does not affect the rating for the Criterion or Gateway.

Rating Sheet 3.2: Teacher Planning and Learning for Success with CCSS

For "Teacher Planning and Learning for Success with CCSS" to attain a score of "Meets Expectations," materials must earn at least 7 points.

Criterion	**Materials support teacher learning and understanding of the Standards.** Maximum Points: 8

Indicators	Points	Evidence
3f. Materials support teachers in planning and providing effective learning experiences by providing quality questions to help guide students' mathematical development.	**0 1 2**	
3g. Materials contain a teacher's edition with ample and useful annotations and suggestions on how to present the content in the student edition and in the ancillary materials. Where applicable, materials include teacher guidance for the use of embedded technology to support and enhance student learning.	**0 1 2**	
3h. Materials contain a teacher's edition that contains full, adult-level explanations and examples of the more advanced mathematics concepts and the mathematical practices so that teachers can improve their own knowledge of the subject, as necessary.	**0 1 2**	
3i. Materials contain a teacher's edition that explains the role of the specific mathematics standards in the context of the overall series.	**0 1 2**	
3j. Materials provide a list of lessons in the teacher's edition, cross-referencing the standards addressed and providing an estimated instructional time for each lesson, chapter and unit (i.e., pacing guide).	**Not Scored**	
3k. Materials contain strategies for informing students, parents, or caregivers about the mathematics program and suggestions for how they can help support student progress and achievement.	**Not Scored**	
3l. Materials contain explanations of the instructional approaches of the program and identification of the research-based strategies.	**Not Scored**	

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RATING SHEET 3.2 TALLY

Earned: _____ of 8 points	☐ Meets expectations (7-8 points) ☐ Partially meets expectations (5-6 points) ☐ Does not meet expectations (<5 points)

Rating Sheet 3.3: Assessment

For "Assessment" to attain a score of "Meets Expectations," materials must earn at least 9 points.

Criterion	**Materials offer teachers resources and tools to collect ongoing data about student progress on the Standards.** Maximum Points: 10

Indicators	Points	Evidence
3m. Materials provide strategies for gathering information about students' prior knowledge within and across grade levels/ courses.	**0 1 2**	
3n. Materials provide support for teachers to identify and address common student errors and misconceptions.	**0 1 2**	
3o. Materials provide support for ongoing review and practice, with feedback, for students in learning both concepts and skills.	**0 1 2**	
3p. Materials offer ongoing assessments:		
3pi. Assessments clearly denote which standards are being emphasized.	**0 1 2**	
3pii. Assessments provide sufficient guidance to teachers for interpreting student performance and suggestions for follow-up.	**0 1 2**	
3q. Materials encourage students to monitor their own progress.	**Not Scored**	

RATING SHEET 3.3 TALLY

Earned: _____ of 10 points	☐ Meets expectations (9-10 points) ☐ Partially meets expectations (6-8 points) ☐ Does not meet expectations (<6 points)

Rating Sheet 3.4: Differentiated Instruction

For "Differentiated Instruction" to attain a score of "Meets Expectations," materials must earn at least 9 points.

Criterion	**Materials support teachers in differentiating instruction for diverse learners within and across courses.** Maximum Points: 10

Indicators	Points	Evidence
3r. Materials provide teachers with strategies to help sequence or scaffold lessons so that the content is accessible to all learners.	**0 1 2**	
3s. Materials provide teachers with strategies for meeting the needs of a range of learners.	**0 1 2**	
3t. Materials embed tasks with multiple entry-points that can be solved using a variety of solution strategies or representations.	**0 1 2**	
3u. Materials provide support, accommodations, and modifications for English Language Learners and other special populations that will support their regular and active participation in learning mathematics (e.g., modifying vocabulary words within word problems).	**0 1 2**	
3v. Materials provide support for advanced students to investigate mathematics content at greater depth.	**0 1 2**	
3w. Materials provide a balanced portrayal of various demographic and personal characteristics.	**Not Scored**	
3x. Materials provide opportunities for teachers to use a variety of grouping strategies.	**Not Scored**	
3y. Materials encourage teachers to draw upon home language and culture to facilitate learning.	**Not Scored**	

RATING SHEET 3.4 TALLY

Earned: _____ of 10 points

- ☐ Meets expectations (9-10 points)
- ☐ Partially meets expectations (6-8 points)
- ☐ Does not meet expectations (<6 points)

Rating Sheet 3.5: Effective Technology Use

This section is not scored.

Criterion	**Materials support effective use of technology to enhance student learning. Digital materials are accessible and available in multiple platforms.** Not Scored

Indicators	Points	Evidence
3z. Materials integrate technology such as interactive tools, virtual manipulatives/objects, and/or dynamic mathematics software in ways that engage students in the Mathematical Practices.	**Not Scored**	
3aa. Digital materials (either included as supplementary to a textbook or as part of a digital curriculum) are web- based and compatible with multiple internet browsers (e.g., Internet Explorer, Firefox, Google Chrome, etc.). In addition, materials are "platform neutral" (i.e., are compatible with multiple operating systems such as Windows and Apple and are not proprietary to any single platform) and allow the use of tablets and mobile devices.	**Not Scored**	
3ab. Materials include opportunities to assess student mathematical understandings and knowledge of procedural skills using technology.	**Not Scored**	
3ac. Materials can be easily customized for individual learners.		
3aci. Digital materials include opportunities for teachers to personalize learning for all students, using adaptive or other technological innovations.	**Not Scored**	
3acii. Materials can be easily customized for local use. For example, materials may provide a range of lessons to draw from on a topic.	**Not Scored**	
3ad. Materials include or reference technology that provides opportunities for teachers and/or students to collaborate with each other (e.g. websites, discussion groups, webinars, etc.).	**Not Scored**	

Gateway 3 Overall Rating:

Instructional Supports and Usability Indicators

Reviewers use data recorded in Rating Sheets 3.1-3.4 to determine the Gateway 3 overall rating.

Gateway 3	**Materials support student learning and engagement and support teacher learning and understanding of the Standards. Materials also offer supports to differentiate instruction for diverse learners and enrich instruction through technology.** Maximum Points: 36

Indicators	Rating Score	Evidence
3a-3e: Materials are well designed and take into account effective lesson structure and pacing to facilitate student learning.	**Point Total from Rating Sheet(s):**	
3f-3l: Materials support teacher learning and understanding of the Standards.	**Point Total from Rating Sheet(s):**	
3m-3q: Materials offer teachers resources and tools to collect ongoing data about student progress on the Standards.	**Point Total from Rating Sheet(s):**	
3r-3y: Materials support teachers in differentiating instruction for diverse learners within and across grades.	**Point Total from Rating Sheet(s):**	
3z-3ad: Materials support effective use of technology to enhance student learning.	**Not Scored**	

GATEWAY 3 FINAL SCORE

Earned: _____ of 36 points

- ☐ Meets expectations (30-36 points)
- ☐ Partially meets expectations (22-29 points)
- ☐ Does not meet expectations (<22 points)

Conducting High Quality Instructional Materials Reviews

Using the Tool and Toolkit:

Reference Materials to Support Quality Reviews

In addition to the EdReports.org Quality Instructional Materials Review Tool: High School Mathematics, reviewers have a toolkit with the following materials as references for reviews:

- CCSS for Mathematics (High School standards begin on page 57)
- High School Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013)
- High School Progression Documents
- Standards for Mathematical Practices: Commentary and Illustrations for High School

Using the Tool and Evidence Guides

The Quality Instructional Materials Review Tool and the High School Evidence Guides work in tandem to provide educator reviewers with the criterion, indicators, and guidance to identify, collect, calibrate, and report on instructional material alignment to the standards for mathematical content, the standards for mathematical practice, and the usability of the instructional materials.

The Evidence Guides are organized by ***Indicator*** and identify:

- ***The Guiding Question(s)*** that frames evidence collection.
- The ***Purpose of the Indicator*** to contextualize the indicator within the criterion as well as how indicators work together to build a complete picture for the criterion.
- ***Evidence Collection*** to help reviewers find evidence, and when appropriate, provides examples and counterexamples of evidence for an indicator.
- ***Questions to Guide Discussion/Discussion Prompts*** to help reviewers prepare for their weekly meeting where they present their rationale and evidence for a given indicator.
- ***The Scoring Criteria*** that defines what must be present in the rationale and evidence to support each level of score for a given indicator.

Appendix A

Content from CCSSM Widely Applicable as Prerequesites for a Range of College Majors, Postsecondary Programs, and Careeers[9]

Number and Quantity	Alegebra	Functions	Geometry	Statistics and Probability	Applying Key Takeaways from Grades 6-8
N-RN, Real Numbers: Both clusters in this domain contain widely applicaable prerequisites. **N-Q, Quantities*:** Every standard in this domain is a widely applicable prerequisite. Note, this domain is especially important in the high school content standards overall as a widely applicable prerequisites.	**Every domain in this category** contains widely applicable prerequisites. Note, the **A-SSE** domain is especially important in the high school content standards overall as a widely applicable prerequisites.	**F-IF, Interpreting Functions:** Every cluster in this domain contains widely applicable prerequisites. Additionally, standards **F-BF.1** and **F-LE.1** are relatively important within this category as widely applicable prerequisites.	**The following standards and clusters** are relatively important within this category as widely applicable prerequisites: **G-CO.1** **G-CO.9** **G-CO.10** **G-SRT.B** **G-SRT.C** Note, this above standards in turn have learning prerequisites within the Geometry category, including: G-CO.A G-CO.B G-SRT.A	**The following standards** are relatively important within this category as widely applicable prerequisites: S-ID.2 S-ID.7 S-IC.1 Note, the above standards in turn have learning prerequisites within 6-8.SP.	**Solving problems at a level of sophistication appropriate to high school by:** • Applying ratios and proportional relationships. • Applying percentages and unit conversions, e.g., in the context of complicated measurement problems involving quantities with derived or compound units (such as mg/ml, kg/m^3, acre-feet, etc. • Applying basic function concepts, e.g., by interpreting the features of a graph in the context of an applied problem • Applying concepts and skills of basic statistics and probability (see 6-8.SP. • Performing rational number arithmetic fluently.

9 Refer also to Table 1 (page 8) in the HS Mathematics Publisher's Criteria.

edreports.org

WHY MATERIALS MATTER

Through our work we know that

INSTRUCTIONAL MATERIALS MAKE A DIFFERENCE FOR KIDS. WHAT IS CHOSEN MATTERS.

Research shows that students learn primarily through their interactions with teachers and content.

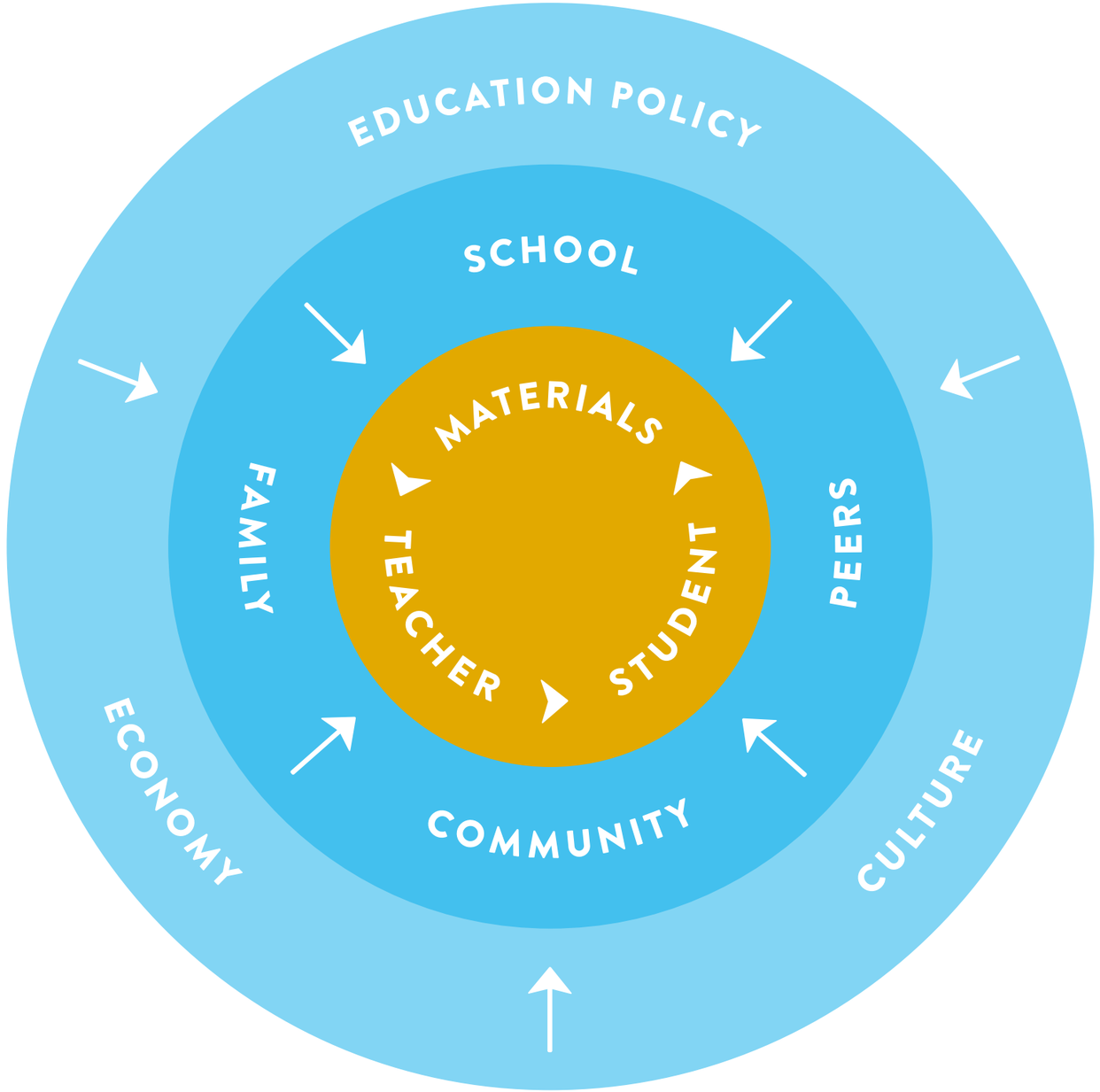
THIS INSTRUCTIONAL CORE IS THE FOUNDATION

for ensuring all kids are college and career-ready and have the skills and knowledge they need to thrive in school and beyond.

“THAT INSTRUCTIONAL MATERIALS EXERCISE THEIR INFLUENCE ON LEARNING DIRECTLY AS WELL AS BY INFLUENCING TEACHERS’ INSTRUCTIONAL CHOICES AND BEHAVIOR, MAKES INSTRUCTIONAL MATERIALS ALL THE MORE IMPORTANT.”

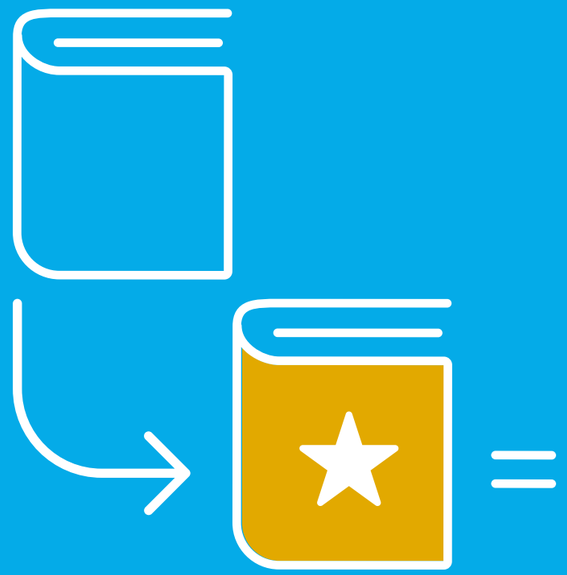
- Chingos and Whitehurst, 2012[1]

[1]Chingos, M., Whitehurst, G. (2012). Choosing Blindly: Instructional Materials, Teacher Effectiveness, and the Common Core. Retrieved from Brown Center on Education Policy at Brookings: https://www.brookings.edu/wp-content/uploads/2016/ 06/0410_curriculum_chingos_whitehurst.pdf



INSTRUCTIONAL MATERIALS HAVE A DIRECT IMPACT ON STUDENT LEARNING OUTCOMES.

ONE STUDY SHOWED USING A TOP RANKED PROGRAM IN 4TH OR 5TH GRADE MATH CAN LEAD TO



STUDENT ACHIEVEMENT GAINS OF 3.6 PERCENTILE POINTS

larger than the improvement of a typical teacher's effectiveness in their first three years on the job when they are learning to teach.[2]

[2]Kane, T., Owens, A., Marinell, W. Thal, D., Staiger, D. (2016). Teaching Higher: Educators' Perspectives on Common Core Implementation. Boston, MA: Harvard University Center for Education Policy Research. Retrieved from: https://cepr.harvard.edu/files/cepr/files/teaching-higher-report.pdf

INSTRUCTIONAL MATERIALS HAVE A DIRECT IMPACT ON STUDENT LEARNING OUTCOMES.

WHEN MIDDLE SCHOOL TEACHERS USE HIGH-QUALITY INSTRUCTIONAL MATERIALS

IT CAN SIGNIFICANTLY IMPROVES STUDENT LEARNING OUTCOMES.

A 2017 study shows that the effect on learning is the same as moving an average performing teacher to one at the 80th percentile.[3]

[3]Jackson, K., Makarin, A. (2016-2017). Can Online Off-the-Shelf Lessons Improve Student Outcomes? Evidence from a Field Experiment. American Economic Journal: Economic Policy, Vol 10 (3), pages 226-254. Retrieved from: https://www.nber.org/papers/w22398

HIGH-QUALITY MATERIALS DON'T NECESSARILY COST MORE, BUT OFTEN HAVE BIGGER PAY OFFS.

"TEXTBOOKS ARE RELATIVELY INEXPENSIVE AND TEND TO BE SIMILARLY PRICED.

The implication is that the marginal cost of choosing a more effective textbook over a less effective alternative is essentially zero."[4] (Polikoff and Koedel, 2017)

[4]Koedel, C., Polikoff, M. (2017). Big Bang for Just a Few Bucks: the Impact of Math Textbooks in California. Economic Studies at Brookings, Evidence Speaks Reports, Vol 2 (5). Retrieved from: https://www.brookings.edu/wp-content/uploads/2017/01/es_20170105_polikoff_evidence_speaks.pdf

IMPROVING THE QUALITY OF CURRICULUM IS

40X MORE COST-EFFECTIVE

THAN CLASS-SIZE REDUCTION.[5]

[5]Boser, U., Chingos, M., Straus, C. (2015). The Hidden Value of Curriculum Reform: Do States and Districts Receive the Most Bang for Their Curriculum Buck? Washington, DC: Center for American Progress. Retrieved from: https://cdn.americanprogress.org/wp-content/uploads/2015/10/06111518/CurriculumMatters-report.pdf

TEACHERS KNOW THAT MATERIALS MATTER, BUT DON'T ALWAYS HAVE ACCESS TO THE QUALITY CONTENT THAT THEIR STUDENTS DESERVE.

HIGH-QUALITY INSTRUCTIONAL MATERIALS

are cited as a top funding priority for teachers.

Top Five Funding Priorities Identified by Teachers

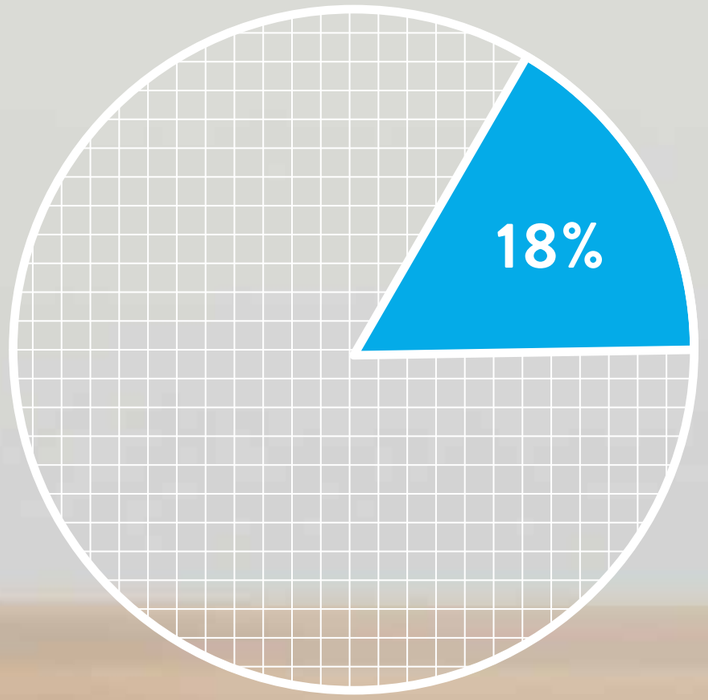
- **55% High-quality instructional materials and textbooks**
- **55%** Additional staff
- **47%** Digital resources
- **47%** Higher salaries
- **46%** Intervention programs

[6]Scholastic.Teacher and Principal School Report: Equity in Education. (2016). Retrieved from: http://www.scholastic.com/teacherprincipalreport/Scholastic-Teacher-and-Principal-School-Report.pdf

TEACHERS KNOW THAT MATERIALS MATTER, BUT DON'T ALWAYS HAVE ACCESS TO THE QUALITY CONTENT THAT THEIR STUDENTS DESERVE.

AND YET...
ONLY 18% OF TEACHERS

believe that their district or school's instructional materials are aligned with the Common Core State Standards.



[7]Zubrzycki, J. "Teachers Say They Know More About the Common Core, But Challenges Linger" EdWeek (2016).

WHEN TEACHERS DON'T HAVE ACCESS TO GREAT MATERIALS THEY HUNT FOR THEM ONLINE— OFTEN LEADING TO INCONSISTENT QUALITY THAT IMPACTS LOW-INCOME STUDENTS OF COLOR THE MOST.

TEACHERS SPEND 7-12 HOURS PER WEEK

searching for and creating instructional resources (free and paid),[8] drawing from a variety of sources, many of them unvetted.

[8]Goldberg, M. (2016). Classroom Trends: Teachers as Buyers of Instructional Materials and Users of Technology. K-12 Market Advisors. Retrieved from: https://mdreducation.com/reports/classroom-trends-teachers-buyers-instructional-materials-users-technology/

WHEN TEACHERS DON'T HAVE ACCESS TO GREAT MATERIALS THEY HUNT FOR THEM ONLINE— OFTEN LEADING TO INCONSISTENT QUALITY THAT IMPACTS LOW-INCOME STUDENTS OF COLOR THE MOST.

A 2017 RAND analysis found that

96%
OF TEACHERS
use Google to find lessons and materials.

Nearly **75%**
OF TEACHERS
use Pinterest to find lessons and materials.[9]

[9]Opfer, V., Kaufman, J., Thompson, L. (2016). Implementation of K-12 State Standards for Mathematics and English Language Arts and Literacy. Santa Monica, CA: RAND Corporation. Retrieved from: https://www.rand.org/pubs/research_reports/RR1529-1.html

WHEN TEACHERS DON'T HAVE ACCESS TO GREAT MATERIALS THEY HUNT FOR THEM ONLINE— OFTEN LEADING TO INCONSISTENT QUALITY THAT IMPACTS LOW-INCOME, STUDENTS OF COLOR THE MOST.

Teachers working in schools that have a high proportion of students who receive free and reduced lunch are searching for materials online at higher rates.[10]

The assignments teachers select or create tend to be lower quality than what the district or state provided.[11]

Percentage of assignments on grade-level:

34% ASSIGNMENTS PROVIDED BY DISTRICT OR STATE

20% TEACHER CREATED/SELECTED ASSIGNMENTS

[10]Opfer, V., Kaufman, J., Thompson, L. (2016). Implementation of K-12 State Standards for Mathematics and English Language Arts and Literacy. Santa Monica, CA: RAND Corporation. Retrieved from: https://www.rand.org/pubs/research_reports/RR1529-1.html

[11]TNTP. (2018). The Opportunity Myth. Retrieved from: https://opportunitymyth.tntp.org/

INCONSISTENT ACCESS TO HIGH-QUALITY CONTENT IMPACTS STUDENT LEARNING IN SCHOOLS ACROSS THE COUNTRY.

IN A SINGLE SCHOOL YEAR, THE AVERAGE STUDENT SPENDS **581** OF **720** AVAILABLE HOURS ON ASSIGNMENTS THAT ARE NOT HIGH-QUALITY.[12]

[12]TNTP. (2018). The Opportunity Myth. Retrieved from: https://opportunitymyth.tntp.org/

THIS IS PARTICULARLY SIGNIFICANT FOR STUDENTS OF COLOR AND STUDENTS LIVING IN POVERTY WHO HAVE LESS ACCESS TO HIGH-QUALITY STANDARDS-ALIGNED MATERIALS THAN THEIR PEERS.

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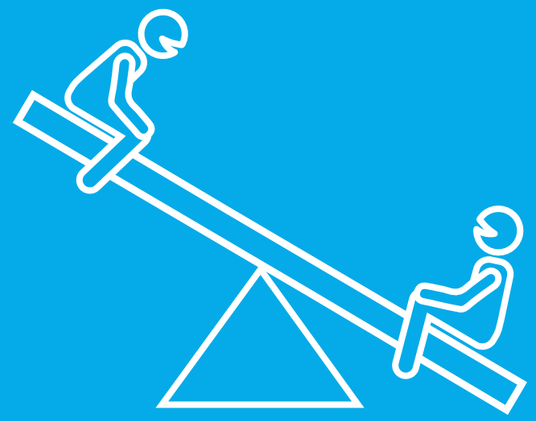

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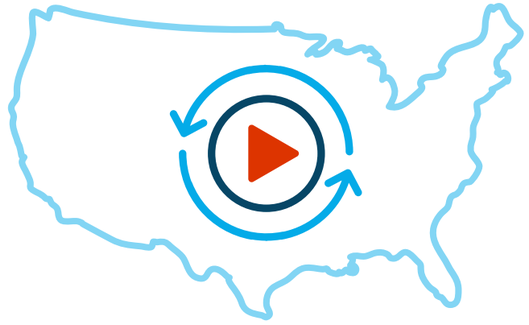
[13]Schmidt, W., Burroughs, N., Zoido, P., Houang, R. (2015). The Role of Schooling in Perpetuating Educational Inequality: An International Perspective. Educational Researcher, Vol 44 (7), page 371-386. Retrieved from: https://journals.sagepub.com/doi/pdf/10.3102/0013189X15603982

AND STUDENTS OF COLOR AND THOSE FROM LOW-INCOME BACKGROUNDS WERE LESS LIKELY THAN WHITE AND HIGHER-INCOME STUDENTS TO BE IN CLASSROOMS WITH GRADE-APPROPRIATE ASSIGNMENTS.[14]

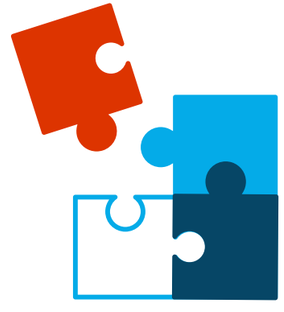
[14]TNTP. (2018). The Opportunity Myth. Retrieved from: https://opportunitymyth.tntp.org/

AND THE CONSEQUENCES OF NOT HAVING HIGH-QUALITY MATERIALS DOESN'T END AT HIGH SCHOOL GRADUATION.



Nationwide, **40%** of
COLLEGE STUDENTS
(including 66 percent of Black college students and 53 percent of Latinx[15] college students) take at least one remedial course[16] learning skills they were told they'd already mastered in high school.

A recent study found that college remediation costs students and their families
$1.5 BILLION ANNUALLY.[17]



Graduates who opt for a career straight out of high school aren't faring much better, with many employers reporting high school graduates are
MISSING SKILLS
needed to do their jobs well.[18]

[15]TNTP. (2018). The Opportunity Myth. Retrieved from: https://opportunitymyth.tntp.org/endnotes#3 [16]TNTP. (2018). The Opportunity Myth. Retrieved from: https://opportunitymyth.tntp.org/endnotes#4
[17]TNTP. (2018). The Opportunity Myth. Retrieved from: https://opportunitymyth.tntp.org/endnotes#5 [18]TNTP. (2018). The Opportunity Myth. Retrieved from: https://opportunitymyth.tntp.org/endnotes#3

BUT WHEN TEACHERS HAVE ACCESS TO HIGH-QUALITY, ALIGNED INSTRUCTIONAL MATERIALS, IT MAKES A DIFFERENCE IN THEIR CLASSROOM PRACTICE AND THE INSTRUCTION STUDENTS RECEIVE.

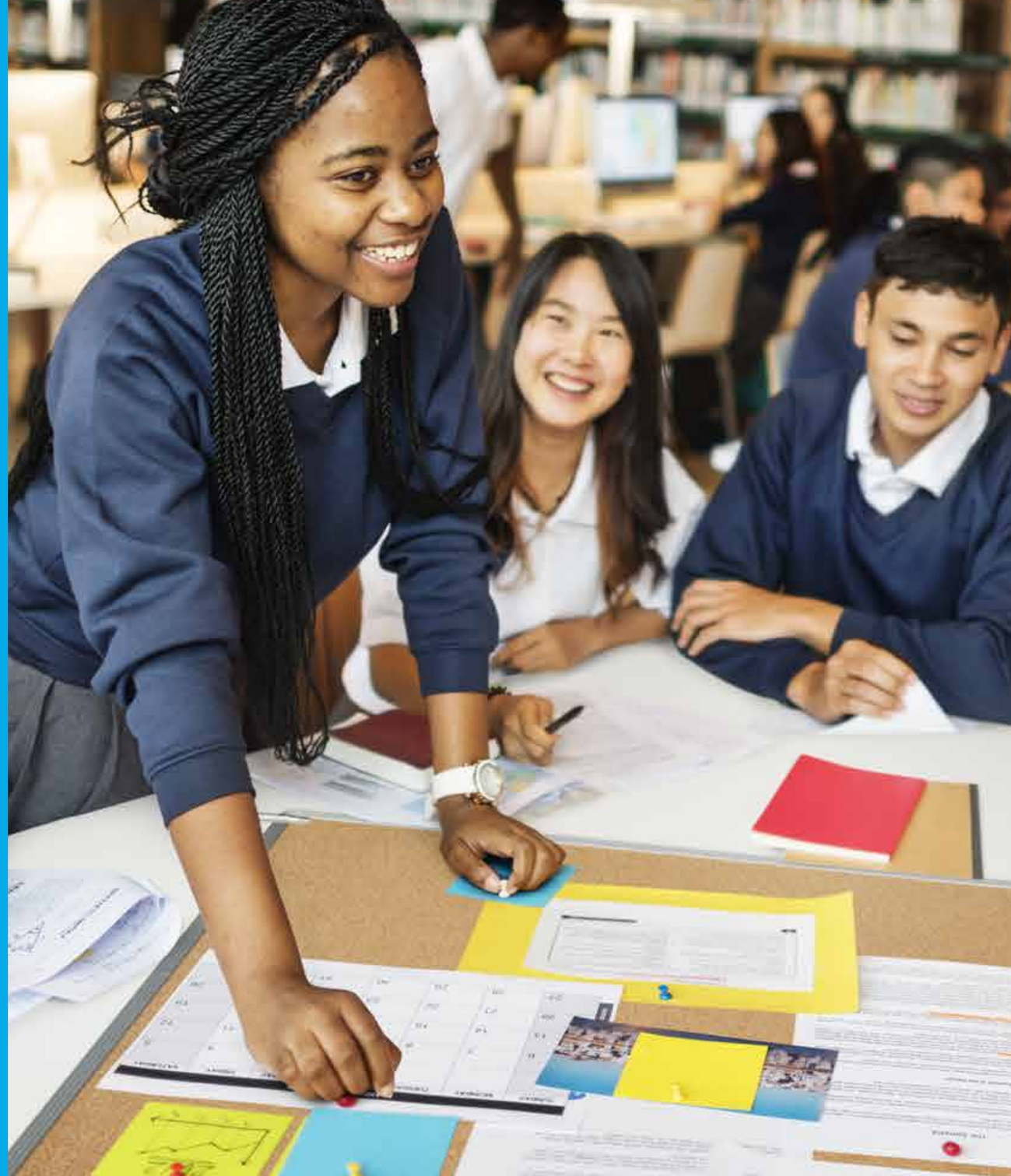
A 2018 study illustrated that teachers using aligned materials engaged students in mathematical practices at a **SIGNIFICANTLY HIGHER RATE** than teachers who did not have access to aligned curriculum.[19]

[19]Opfer, V., Kaufman, J., Bongard, M, Pane, J. (2018). Changes in What Teachers Know and Do in the Common Core Era, American Teacher Panel Findings from 2015 to 2017. Santa Monica, CA: RAND Corporation. Retrieved from: https://www.rand.org/pubs/research_reports/RR2658.html

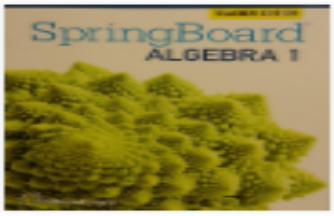
...WHEN TEACHERS HAVE ACCESS TO HIGH-QUALITY, ALIGNED INSTRUCTIONAL MATERIALS, IT MAKES A DIFFERENCE IN THEIR CLASSROOM PRACTICE AND THE INSTRUCTION STUDENTS RECEIVE.

"When students who started the year off behind grade level were given more grade-appropriate assignments, stronger instruction, deeper engagement, and higher expectations, the gap between these students and their higher achieving peers began to narrow substantially."[20]

[20]TNTP. (2018). The Opportunity Myth. Retrieved from: https://opportunitymyth.tntp.org/



EdReports' mission is to increase the capacity of teachers, administrators, and leaders to seek, identify, and demand the highest quality instructional materials. Explore hundreds of free reports and learn more about why materials matter for students and their futures.



Springboard Traditional

College Board | High School

Home / Reports Center / Math / High School / Springboard Traditional

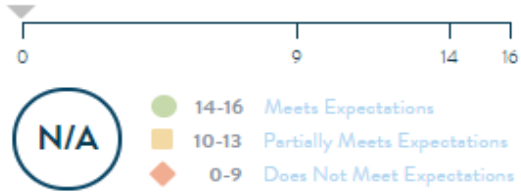
Alignment: Overall Summary

The instructional materials reviewed for the Springboard Traditional series do not meet expectations for alignment to the CCSSM for high school. The materials do not meet the expectations for focus and coherence as they partially meet the expectations in the following areas: attending to the full intent of the mathematical content contained in the high school standards for all students, allowing students to fully learn each standard, requiring students to engage at a level of sophistication appropriate to high school, making meaningful connections in a single course and throughout the series, and identifying and building on knowledge from Grades 6-8 to the High School Standards. Since the materials did not meet the expectations for focus and coherence, evidence for rigor and the mathematical practices in Gateway 2 was not collected.

ALIGNMENT
Does Not Meet Expectations

Gateway 1: **FOCUS & COHERENCE**

Gateway 2:
RIGOR & MATHEMATICAL PRACTICES



USABILITY

NOT RATED

Adapted from: https://www.edreports.org/reports/detail/springboard-traditional-2015-hs

Updates from Math/Science/Visual & Performing Arts Team

Team Commitments

The **US Art Department** is committed to supporting student mastery of Math standards by incorporating geometry skills in Unit 1 instruction.

The **MS Encore Department** is committed to supporting student mastery of Math standards by incorporating any and all math skills taught in their respective grade level skills in Unit 1 instruction.

The **US Science Department** will intentionally incorporate mathematical reasoning and application opportunities, pointing out to students when math skills are being addressed and focusing on measurements and mathematical contexts in science.

The **MS Science Department** is committed to supporting student mastery of Math standards by incorporating problem-based/content application of MEASUREMENT skill/math strand in Unit 1 instruction.

The **US Math Department** is committed to supporting student mastery of Math standards by incorporating Fractions skills in Unit 1 instruction.

The **MS Math Department** is committed to supporting student mastery of Math standards by incorporating prior grade level skills in Unit 1 instruction. Specifically, creating tiered/differentiated assignments on IXL to create some choice for our students. We will look at prior years standards to allow students to access the material from wherever level they currently are at. E.g. 5th splits it into need support, getting it, and ready to rock.

NEXT STEPS

-**Content Team Meetings**: YAAG and Unit Plan review coupled with coherence mapping **targeted* and *just in time* interventions are *intentionally* planned for*

-**Ongoing Data Conversations**: Triangulate class, PowerSchool, IXL, ANet, IAB, and SBAC data

-**IXL**: Support students in maintaining up-to-date diagnostic levels as well as assigning skills that are aligned to current standards

-**Skill Building**: reading, writing, speaking, critical thinking

-**Synchronous Lessons**: focus on high-quality tasks for grade-level mastery

-**Asynchronous Lessons**: focus on interventions and pre-requisite skills that accelerate student learning

After hours of testimony, state board adopts history guidelines

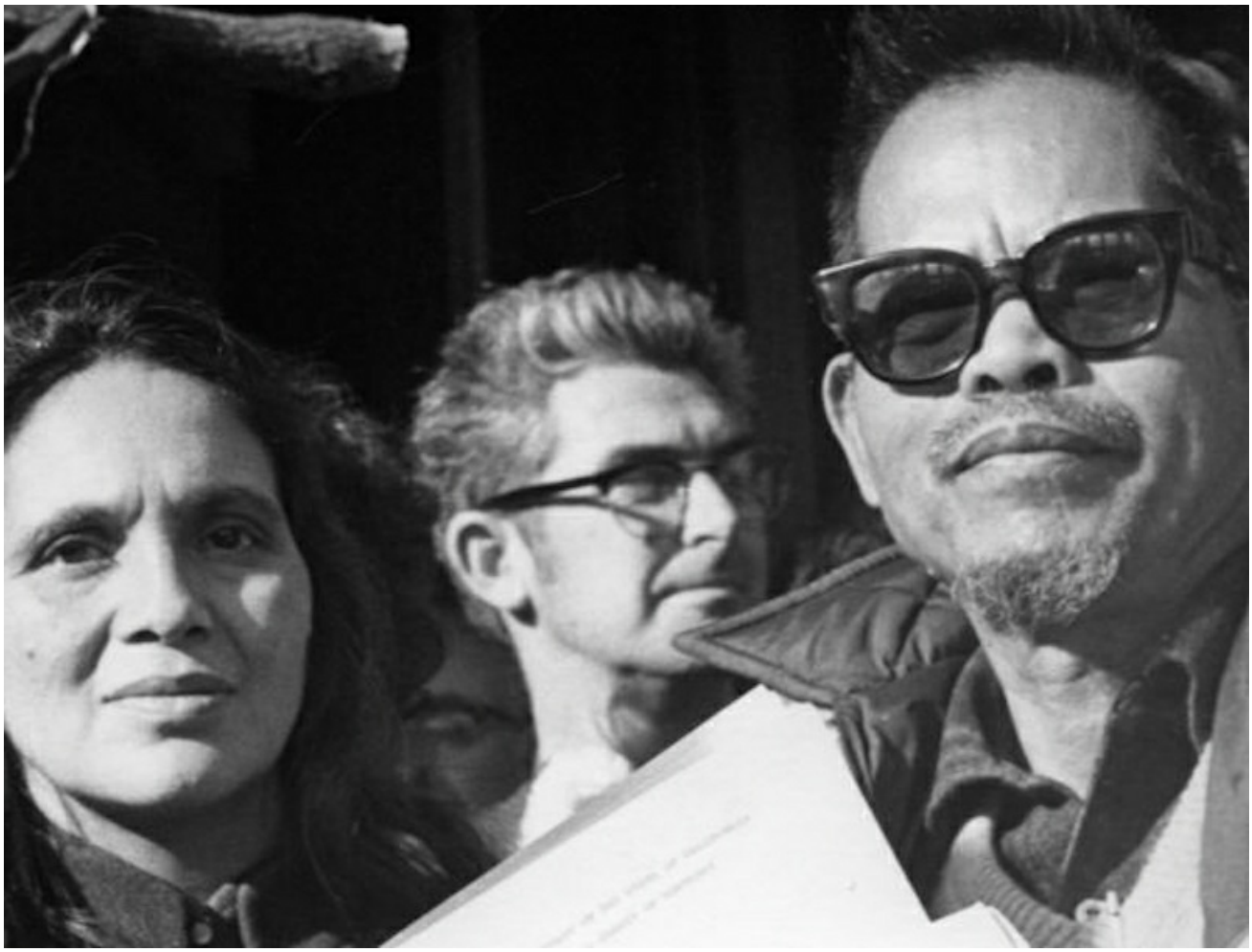
edsource.org/2016/after-hours-of-testimony-state-board-adopts-history-guidelines-history-and-social-studies-framework/567055

State Education Policy

July 14, 2016

John Fensterwald

The new history and social science framework will include a section on Filipino-American labor leaders like Larry Itliong, right, who organized the first farmworkers strike in California, in 1965. He's shown with farmworkers organizer Dolores Huerta in the 1970s.



The new history and social science framework will include a section on Filipino-American labor leaders like Larry Itliong, right, who organized the first farmworkers strike in California, in 1965. He's shown with farmworkers organizer Dolores Huerta in the 1970s.

After listening to five hours of charged disagreements by Hindus, Muslims and others on how their religions and culture should be depicted in California classrooms, the State Board of Education adopted new social science guidelines Thursday that will stress teaching critical thinking and objective inquiry so that students can determine historical truths for themselves.

“We are not the arbiter of historical debate,” State Deputy Superintendent of Public Instruction Tom Adams, who oversaw the process of approving the guidelines, told the state board. “We will turn it over to students to make their own judgment.”

Seven years in the making and hundreds of pages in length, the new History-Social Science Framework was suspended in 2009 during the economic recession and revived two years ago. The framework is not a curriculum or a textbook; it’s an instruction guide for teachers on the state’s K-12 history and social science standards.

The standards haven’t been updated since 1996 but the new framework will serve as a historical update and the basis for publishers to rewrite K-8 textbooks, which they will start submitting for approval next year. High schools choose their own materials.

The standards lay out topics and events that students should learn and when they should learn them, such as California history in grade 4; U.S. history in grades 5, 8 and 11; world history in grades 6, 7 and 10; and civics/democracy in grade 12. The Legislature has weighed in too, mandating in the past several years the instruction of financial literacy, Filipino-American contributions to the labor movement and World War II, the Armenian Genocide, President Barack Obama, and voter education. The FAIR Education Act requires the inclusion of lesbian, gay and transgender history and key figures.

Teachers and historians wrote the framework, incorporating the Legislature’s instructions. The state’s Instructional Quality Commission, led by Chair Lauryn Wild and former state Superintendent Bill Honig, the vice chair, organized the process, reviewed and revised the document and held extensive public hearings.

The framework stresses the importance of incorporating diverse historical perspectives of Hispanics, Native Americans and other ethnic groups. And the work of the commission may not be done. If Assembly Bill 2016, by Assemblyman Luis Alejo, D-Salinas, passes, the commission would be charged with creating a model curriculum for a high school ethnic studies course.

Immigrant groups, particularly from India, have been especially vigilant – and vocal – about references in the framework to their homelands and religions. Some Hindu groups

opposed any reference to the caste system, while other Hindus expressed anger over a lobbying effort to whitewash caste persecution. The frameworks will keep the reference.

Muslims criticized a reference to forced conversion by Islamic rulers on the Indian subcontinent centuries ago. There were a record 10,000 emails, 1,000 suggested revisions and hundreds of speakers on these and other issues at hearings. Adams said that every comment was registered and responded to. Language was massaged and revisions were made, Adams said, to strike the balance of sensitivity and accuracy.

Well-organized Hindu-American groups pressed legislators to support their cause. Lt. Gov. Gavin Newsom, a likely gubernatorial candidate, backed their cause in a letter to the state board. “I strongly encourage you to consider the perspective of young Indian-American and Hindu-American students” and whether the proposed framework accurately portrays their history, he wrote. “If you agree that it does not, I hope you will consider making the appropriate modification.”

A caravan of speakers lobbied one last time in one-minute comments on Thursday. Middle school Hindu students said that false references to their religion would lead to bullying. They said they felt demeaned by a section on Hinduism in a textbook accompanied by a photo of women picking through a mountain of trash.

Speakers carried signs reading, “Stop Islamophobia” and “Stop Hinduphobia.” Elderly Japanese denied that South Korean women were forced to become prostitutes during World War II.

Honig and Adams said the references to Korean comfort women would remain, but they agreed to tweak the language referring to Muslim conversion. The framework includes “positive facts about each religion, but we did not want to neglect negative facts” like the caste system – just as the framework includes sections on slavery in America and serfs in Russia.

State board member Patricia Rucker, the board’s liaison to the Instructional Quality Commission, thanked speakers for expressing their “pain and concerns” and praised Adams and other drafters for taking their views seriously. The new framework is “remarkable and unique” and will lead to a better curriculum and textbooks, she said.

The framework includes an appendix on civic education and service learning that includes examples of projects and activities that will encourage students to become active in community issues and problems. Adams and Honig said this focus represents a far different approach than the rote teaching of democracy that typified many civics classes in the past.

SELECTING INSTRUCTIONAL MATERIALS: BRIEF 2 — SUPPLEMENTATION

Why and How Teachers Choose to Supplement Adopted Materials

by Stacy Marple, Dan Bugler, Min Chen-Gaddini, Elizabeth Burr, and Neal Finkelstein

This brief reports on focus-group participants' comments regarding what drives teachers to supplement their school- or district-adopted instructional materials, where they look to find supplemental materials, and how they choose those materials. (See Appendix 1 for details on the sample and methods of the study that contributed to the findings reported in this brief.)

> *I don't think that there is a magic wand that's going to create one package for all children. You have to be innovative. You've got to be creative . . . and there has to be a lot of things that teachers have to go through and try out [to] see if it works. And you [may] do it the next year and it doesn't work at all.*
>
> — Teacher, New Orleans Area[1]

None of the teachers who participated in the focus groups said that they used their school's adopted materials or curricular program with complete fidelity, even when using materials that they described as being high-quality and standards-aligned. Teachers indicated that they crave materials that better serve the range of students in their classrooms and that enliven learning. Indeed, teachers in more than one of the focus groups described themselves as materials "hunter-gatherers." Yet all participants expressed frustration at the amount of time they spent looking for resources that they need in order to support their students' learning and success on standardized tests. Teachers resisted quantifying precisely how much time they spent searching for resources; typical responses to this question included "too much" and "you don't really want to know." Teachers in the focus groups consistently described the inadequacy of provided texts and

[1] Teachers' statements throughout this brief are not necessarily representative of their school, district, or state.

Background

With funding from the William and Flora Hewlett Foundation, WestEd is studying how teachers make decisions about which instructional materials to use in their classrooms. WestEd's work is designed to support a portfolio of Hewlett-funded grantees working to improve the quality and consistency of instructional materials in classrooms across the United States. In 2016, WestEd researchers conducted focus groups with teachers in six cities to develop a baseline understanding of how they obtain, judge the quality of, and select instructional materials. Specifically, WestEd researchers explored three areas of interest: (1) teachers' judgments of what constitutes quality materials, (2) why and how teachers choose to supplement the adopted materials, and (3) teachers' descriptions of processes for adopting instructional materials in their districts and schools. This brief focuses on the second area of interest: teachers' supplementing school- and district-adopted instructional materials. All three briefs are available online at http://WestEd.org/bookstore.

the need to augment them since recent shifts to new standards.

Supplementation, as described in these focus groups, was prevalent and was not opposed by administrators. Many schools supported teachers' creative use of materials in their classrooms. Even for schools using pacing guides, numerous focus-group teachers described different ways to show an administrator how supplemental materials were both standards-aligned and supportive of classroom needs. In addition, many noted that, as long as their students met the required levels on standardized tests, they had pretty free rein to teach as they saw fit.

The majority of the teachers' comments about supplementation fell into one of two categories: (1) describing the sources that they use to gather supplemental materials, or to get guidance for creating supplemental materials, and (2) explaining their reasons for seeking out materials to supplement the adopted texts.

Sources for Supplementation

The rapid expansion of publishing platforms on the internet has led to an explosion of sources for instructional materials. The range of these sources is enormous, from comprehensive materials developed by education professionals (such as EngageNY), and materials developed by start-up educational companies (such as Khan Academy and Desmos) and blogs, to inventories of teacher-produced materials (such as Teachers Pay Teachers and Pinterest boards).

Focus-group teachers were asked how they located instructional materials, how they decided among sources, and which sources they used most frequently. A list of specific sources that participants cited is provided in Appendix 2. Although this list is extensive, it is not comprehensive; participants were not expected to mention every source that they had used.[2] However, a few sources were mentioned in every focus group. This section describes those sources and how teachers used them.

> *You've got to keep going back and figuring it out to say, "I taught it this way last year. [The students] didn't get it. I taught it this way this year. They still didn't get it." So now you have to come back and say, "Okay, what other resource do I have?" You have to start utilizing your peers. . . . "Hey, what does your school use? What do you do for this?"*
>
> — Teacher, New Orleans Area

With a few exceptions, the majority of teachers said that they worked collaboratively with a peer or with other teachers in a grade band to supplement the adopted texts. These collaborations took many forms, from developing similar lesson plans to sharing accounts for subscription websites and collaborating on Pinterest pages filled with lesson ideas and comments. Teachers in every focus group also mentioned seeking the advice of senior colleagues because those colleagues had accumulated considerably more resources, over the years, than younger teachers had. Some focus-group teachers mentioned utilizing district-developed websites for help in finding supplementary materials.

Google

Most teachers began their hunts for materials with a Google search. What they typed into the search box varied, depending on the particular needs of their students. For example, teachers explained that they might type in a standard, a particular skill, or a theme. One teacher said, "Common Core is amazing because everybody in the country

[2] In the focus groups, teachers were observed taking notes on one another's methods and favorite sites, suggesting that teachers do not pass up opportunities to expand their resources.

is doing the same thing at the same time. And so all these amazing resources are out there." The research team was interested in how teachers choose from among the many search results that they would receive. After topic relevance, their next most important criteria were ease of access, time, and cost. One teacher explained:

> *I just type in "free printable fractions for fifth graders." . . . Of course, they all pop up. Today I went through, and the first one, I had to sign in. I had to get a membership. So the second one . . . it was a lot of just [verbiage] about it. I didn't have time for that. And then the third one . . . was just like fifth grade math: fractions, multiplication, division, word problems . . . and it had the answer key with it, so I could just print off the calculations, answer key, and then they were leveled by difficulty. . . . So for me it's just the simpler, the faster, the easier.*
>
> — Teacher, Raleigh Area

The process that this teacher describes for making selections from search results was echoed throughout the focus groups. This teacher was driven by responsive instruction (her students had shown weakness with fractions on a formative assessment) and was looking for something that would be easy to access (without signing in or reading too much), printable, and differentiated.

More teachers described searching for entire lessons — utilizing well-known educational resources, such as PBS.org, or based around a theme or chapter book — rather than looking just for an extra piece to complement a lesson that they already had a sense of, or to augment students' experience with a concept that the students had already been taught.

With regard to cost of materials, some teachers described having pooled money for a website login to share, or for a resource that appeared to be worthwhile but was expensive.

Pinterest

All of the teachers in the focus groups were familiar with Pinterest, and nearly all (about 95%) said that they use it to organize their online curricular resources or to get ideas. For example, one teacher described her grade-level team sharing a Pinterest page where team members collected different lessons throughout the year and then left comments on implementation for one another. Other teachers talked about "following" colleagues on Pinterest who consistently posted instructional materials that worked in their classrooms, and about eagerly awaiting new "pins." Teachers often reported that Pinterest served as an intermediary between a web search and the publisher of the curricular resource.

Teachers Pay Teachers

All teachers who participated in the focus groups were familiar with the Teachers Pay Teachers website and had accessed some resources from the site. As with Pinterest, teachers reported "following" other teachers on the site who had been successful with lessons in their own classrooms. Teachers indicated that one of the main aspects that makes Teachers Pay Teachers appealing is that its materials are created by teachers. However, this characteristic was not the only incentive for teachers to use the site. As with all of the other web resources cited, teachers asserted that no single criterion guaranteed the website's usefulness for their classrooms. With regard to Teachers Pay Teachers, many focus-group teachers echoed the following description from one teacher:

> *What draws me to [Teachers Pay Teachers] is not only that it's made by teachers, but they give us that evidence and that reflection on when and how they've used it. How it's worked. And then you can see everyone's [comments] who has chosen to partake in it. All their comments. All their adjustments. All their questions. Most of the time you can*

preview the products before you even purchase. And so I like that, because that way you can [make] a better-informed decision.

— Teacher, Raleigh Area

Much of the draw of sites such as Teachers Pay Teachers is the "hive mind" that they cultivate. Teachers in the focus groups reported that reading about successful uses of, and subtle alterations to, materials was beneficial. One teacher described primarily looking for materials that included a video of the lesson, so that she could see the teaching as well as the student responses.

And so, when the district decided to get rid of Addison-Wesley, I went around to every teacher and I said, "Don't throw the bag away." Um, that's 20 years ago. I'm still carrying Addison-Wesley counters, protractors, algebra tiles.

— Teacher, New Orleans Area

Although the internet and the advent of the Common Core State Standards (CCSS) have provided teachers with unprecedented access to instructional materials, the tailoring of lessons to classes and students is, as many teachers noted, part of the art of teaching. Veteran teachers talked about having 20 years' worth of curricular materials in their classrooms. In one focus group, teachers showed photos of storage spaces, garages, and closets filled to the brim with instructional materials. One teacher explained that, because she had only taught for five years, she relied heavily on the cabinets of materials from colleagues in her school. Other teachers in the focus groups talked about keeping a few books that were on a discard list. Teachers held on to older, admittedly outdated materials (thus the filled storage spaces and garages) for a variety of reasons. For example, they pointed to the challenge of getting up to speed on a set of new materials — that it could take two to three years for them to really understand how to successfully use a text. Once they understood the strengths of a set of texts, they wanted to be able to draw on those strengths. Oftentimes a feature of a particular textbook would stand out, making the textbook worth keeping, even if teachers found it insufficient for supporting student learning without supplementation.

In discussing the specific sources that they used and how they assessed the quality of those sources (for more information on this topic, see another brief in this series: *How Teachers Judge the Quality of Instructional Materials*), focus-group teachers also explained that supplementation was a highly collaborative activity. These collaborations happened locally, often in classrooms after school, and also online, such as in the comments sections of websites. Interestingly, in spite of how much time and effort teachers evidently put into finding supplementary materials, not a single-focus group participant discussed any professional development oriented toward building their facility in this area or supporting teachers' time to engage in searching for materials.

Reasons for Supplementing

In all of the focus groups, at least one teacher described needing to fill in perceived gaps in school- or district-adopted instructional materials. One teacher described a mathematics text as being so inadequate that "it was almost easier to just start from the ground up." Teachers explained that the adopted materials often either lacked necessary components or assumed knowledge that their students did not have.

This latter problem was made evident by the switch to the CCSS. Teachers explained that, for many classes, the curriculum had changed to align with the CCSS, and it often takes at least two years for students to adjust to a new curriculum. For example, some schools typically introduce

fractions in grade 4, whereas the CCSS assume that students learn fractions in grade 3. This misalignment forced teachers to augment the grade 4 mathematics lessons with grade 3 work in the first year of CCSS implementation. Teachers in one focus group described challenges with a particular curriculum, saying it was not a "transitioning curriculum" because it did not help students adjust to the difference from the ways that mathematics had been taught and sequenced in the standards system prior to the CCSS.

Across all focus groups and in equal proportions, three main issues dominated teachers' discussions about supplementing the adopted materials:

- Students' achievement of the standards and success on assessments was not supported by the adopted materials;
- There was insufficient differentiation in the adopted materials; and/or
- The adopted materials were not engaging for students or teachers.

In addition to these themes, other notable reasons for supplementation included needs for hands-on, manipulative-based lessons; low production quality of the adopted texts; perception that the materials were not easy to use; and needs for texts that were referenced in textbook lessons but that were not supplied by the school or district.

Standards and assessments

Across all focus groups, teachers oriented their teaching, and thus their selection of materials, toward the standards and assessments to which they and their students would be held accountable. They discussed at least some aspects of backward planning, which involves starting with a standards- or assessment-based objective. Teachers spoke about district benchmark or interim tests that were oriented toward a particular skill or standard. In some contexts, teachers had access to sample or prior-year test questions, and they would use those questions to pinpoint where their students needed further instruction. Then they would begin looking for other materials to support student success with that skill or standard.

All of the focus-group teachers said that they considered the shift from prior standards to the CCSS or other new state standards to be a large shift that necessitated reworking lessons and instructional materials. They also expressed frustration with texts that purported to be aligned to the CCSS but, in the teachers' judgments, were not. Lastly, teachers reported that they learn the standards as best they can and construct lessons accordingly. However, veteran teachers said that they are wary of spending too much effort with any one set of standards (or curriculum or text) because, as many expressed, by the time they feel that they understand it, the context or expectations have changed.

Differentiation

Because children do not all gain knowledge in the same ways, and because classrooms contain students with many differing competencies and challenges that impact their relationships with school subjects, most major textbook companies produce their own supplemental and/or complementary materials. Teachers in the focus groups explained that they typically had access to full suites of textbook companies' materials during piloting and adoption processes, and that they based their judgments of the materials on this exposure to the full suite, which included supplemental materials. However, districts rarely purchase these supplemental materials, or only purchase them in the first year of adoption of the textbooks that the materials supplement. As one teacher explained, "It's like they [textbook companies and districts] focus a lot of the planning and stuff, they home in on the [students] that are in the middle . . . and it's up to the teacher to . . . differentiate." The students

"in the middle" — students who are on grade level — make up only a portion of a teacher's classroom. Thus, teachers are left to find their own resources to support differentiated instruction for students who are not "in the middle."

Working to meet the needs of both lower- and higher-achieving students was found to be the primary reason for differentiation. Most of the focus-group discussions about differentiation were oriented toward the needs of below-grade-level students. In districts that had shifted to materials that were CCSS-aligned (or that purported to be CCSS-aligned), the primary issue that teachers identified was students' need for more practice with the subject basics. In mathematics, teachers were creating worksheets for additional practice problems. For English language arts (ELA), they sought to supplement grammar and spelling support and practice for students. Interestingly, although above-grade-level students' needs were frequently mentioned, little detail was offered on what those needs were, though teachers in three focus groups discussed directing students to adaptive online resources where the students could work at any level.

Focus-group teachers also discussed looking for supplemental materials to support students who were receiving special education services, to meet alternative learning styles (e.g., auditory, visual, kinesthetic), as well as to provide materials in other languages. Teachers described using Bing or Google Translate to help English learner students understand mathematics problems. However, these online translators are not always accurate.

Student and teacher engagement

When explaining their opinions of what makes materials high-quality, all focus-group teachers indicated that the materials' ability to engage students was the single most important element of quality. Therefore, it is not surprising that teachers reported that one of the primary reasons that they seek out supplemental materials is to bolster student engagement. One teacher in the Tampa area described backwards planning from the standards and then asking, "Is this something that's going to hook [students] and hold their interest? If it's not, even if it teaches the standards, it's not worth implementing." This perspective is important, given teachers' intentions to find materials that are aligned with assessments and standards. Although every teacher in the focus groups was familiar with and had accessed the EngageNY materials — the most widely accessible, CCSS-aligned, free materials — most teachers in our focus group reported that they did not find the EngageNY materials to be sufficiently engaging for students.

For mathematics, teachers looked for engaging games and manipulatives. Mathematics teachers also complained about word problems that introduced a distracting element, such as a topic with which their students had little or no familiarity (such as snow, for students in Florida) and which, therefore, derailed lessons.

Similarly, ELA teachers looked for tasks, questions, and texts that they considered to be authentic. Many lamented what they perceived as a move away from chapter books, and few utilized the story collections with which they were provided:

> *I find that even with a quality curriculum . . . I have to do a lot of work to bring them into it, and that the materials themselves don't do that. So, in a way, I'm rewriting the curriculum a lot of the times, and especially I teach kids who don't want to do school, and so my kids need a lot of that kind of work done, where I can get them to figure out what is going to be the hook to get them into what we're reading. That's missing in a lot of materials.*
>
> — Teacher, Seattle Area

Teachers in the focus groups asserted that they work hard to find reading materials and ways of engaging with reading to keep their students motivated and interested. One teacher described reworking how students are asked to respond to a text, asking students to write an "analog tweet" in which they write their reflections on the text on small pieces of paper, with a little bird on one corner of the paper, and use hashtags as summaries. Teachers also described eavesdropping on students' conversations for topics that the teachers can connect to the instructional materials at hand, and searching online for games that connect to reading comprehension for the texts that they are given.

Summary

Teachers in these focus groups described the process of supplementing materials as being standards- and assessment-driven and, in particular, as being highly responsive to formative assessment of their students. Furthermore, the process of supplementation that they described is highly collaborative, and this collaboration can be locally organized and/or supported by the internet. Teachers noted the particular challenge that first-year teachers face in this regard, as first-year teachers have not acquired extensive collections of materials, which teachers see as a critical component to creating successful lessons.

> *Really, to be honest, you should be modifying pretty much everything that's put in front of you, because it's not made with your students in mind, with you, the teacher, in mind.*
>
> — Teacher, Seattle Area

Focus-group discussions on supplementation revealed a number of tensions that teachers face as professionals. Teachers may know that they are not experts on curriculum, but they also know that they are experts on their students and on their classrooms' dynamics. They are committed to their students' success, and they understand that that success is primarily measured by standards-based testing. Thus, teachers strike a balance between learning the new standards or materials and using their own and their colleagues' judgment about what else to be doing (so that they don't invest too much time and energy pursuing what might soon change). In addition, the focus-group teachers described engaging in modification of curricular resources as a way of keeping themselves engaged. They frequently discussed the need to be creative in their own evolution as teachers.

> *I like to build, [creating new materials], because that kind of keeps me on my toes too, as far as I want to be having fun and learning along with my kids, like this is something new to me, so we're learning together.*
>
> — Teacher, Raleigh Area

This type of creativity happens during searches for materials that combine high-level, engaging, differentiated, culturally relevant, standards-aligned materials.

Discussion

Districts, schools, and teachers are not organized around a set of norms for selecting supplemental materials. As the focus-group teachers expressed, part of the art of teaching involves assessing students' needs and applying professional judgment, accrued through experience and education, to determine how to deliver the best instruction possible. Teachers conveyed a desire for better materials upon which to base their instruction, and asserted that supplementation and modification of those materials also needs to be supported. The

findings from the focus groups point to a need to support teachers in growing their skills around supplementation, and to provide more structure for selecting materials and more access to high-quality resources. Districts and schools could consider promoting common planning time, and using professional learning communities, to promote communication, to develop and make transparent the criteria used to judge the sources for and quality of supplemental materials, to encourage sharing of resources, and to provide particular support to new teachers in the area of supplementation.

Appendix 1: Sample and Methods

The data for this project were collected through group interviews with teachers in varied metropolitan areas across the country. A total of 14 focus groups were held in six metro locations: Boston, Denver, New Orleans, Raleigh, Seattle, and Tampa. In each of these locations, the project team hired a local firm to recruit participants. In addition, the project team used Craigslist advertisements to recruit teachers for two focus groups, in the Raleigh and Tampa metro areas. Prospective participants were screened using a short survey, to ensure that they were currently credentialed teachers working in public schools and that they had participated in either an English language arts (ELA) or a mathematics materials adoption process within five years of the focus group. The project team also required prospective participants to respond to a short-answer questionnaire regarding quality of materials. This process yielded a total of 65 ELA and/or mathematics teachers, from elementary schools (62%) and middle schools (38%). A total of 31 districts were represented, with an average total enrollment of 85,608 per district, and an average non-White student population of 56 percent across the districts.

About three quarters of participants (48) had been involved in materials adoption activities within the prior two years; the rest of the participants (17) had been involved in adoption activities within five years of the focus groups. In both the Seattle and Denver metro areas, the number of participants who had experience in the adoption of ELA materials was roughly equivalent to the number of participants who had experience in the adoption of mathematics materials. In the other four locations, slightly more participants had experience in the adoption of ELA materials than mathematics materials. In most locations, participants were about as likely to have been involved in both ELA and mathematics materials adoptions as they were

to have participated in the adoption of materials in only one subject. In the Boston area, most participants had been involved in only one subject's adoption process.

The focus-group interviews were intended to collect information about how teachers make judgments about the quality of instructional materials. Another interest of the study was to learn about why and how teachers sought additional instructional materials to supplement those adopted by their schools and districts. And a third interest was to collect information about school and district processes for adopting new instructional materials under the Common Core State Standards or other new standards, as well as information about teachers' roles in those processes.

Focus groups were facilitated by WestEd senior research staff and were limited to a maximum of eight participants per focus group. Questions were open-ended and structured by a protocol. However, the facilitator was also able to follow the participants' interests. Participants were regularly asked to support their statements by describing the materials adoption committees in which they had participated and by describing experiences in their classrooms.

The focus-group responses were transcribed, and the transcripts were coded in a two-part process. First, teacher statements that would inform the three primary interests of the project (materials adoption processes, teachers' judgments about materials quality, and supplementing adopted materials) were identified. Coding was non-exclusive, in that any statement or set of statements by teachers could be coded multiple ways. Codes were applied broadly, including as much information as needed to provide context for each statement. The first round of coding produced collections of quotations from across research sites. These collections were then read closely as a set, in order to develop a more refined and emergent coding scheme for each of the three areas. The collection of quotations was then recoded using these thematic codes.

The exploratory nature of these focus groups, as well as the open-ended protocol, prevents strict quantifying of the findings. However, the themes described in this brief, as well as their subthemes, represent topics that were discussed substantially, often across multiple focus groups and by various groups of teachers. This brief and the other two briefs in this series explain these themes and use quotations as examples of teachers' statements to illustrate the themes.

Nonetheless, the themes that are discussed in these briefs should be interpreted with caution, as these focus groups capture the views of only a small number of teachers, and the statements made by these teachers are not necessarily representative of the teachers' schools, districts, or states. In addition, not every teacher in the focus groups remarked on every discussed topic, so the statements in these briefs should not be interpreted as the consensus of any focus group, except in instances that are explicitly noted as representing views expressed by all teachers.

Appendix 2: Internet Sources Cited by Teachers (Ordered Alphabetically)

Educational organizations

- Achievement Network
- National Geographic Reach for Reading
- ReadWorks.org

Licensed products

- Algebraic Thinking by Khan Academy
- BrainPOP
- DreamBox
- edHelper
- EngageNY
- enVisionMATH
- Eureka Math
- Everyday Mathematics
- Geogebra
- GOMath!
- Journeys
- Khan Academy
- Looney Math Consulting
- Math in Focus / Singapore Math Curriculum
- Mathalicious
- Reading A–Z
- Reading Street Common Core
- Storypath
- Gumbo-limbos

Popular websites

- Google
- Pinterest
- Teachers Pay Teachers
- YouTube

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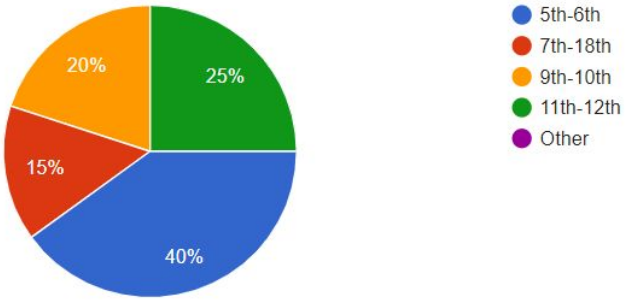
Supplemental Reading for the Humanities

Teachers in the Humanities department, school-wide, were given a short Curriculum Supplementation Survey to ascertain how they used their curriculum and what drove their curricular choices. Below are the results of the survey along with specific titles and resources that teachers have historically or plan to use to supplement the school-approved curriculum.

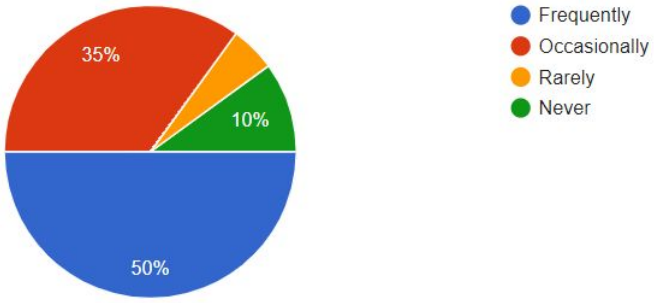
Identify the grade level(s) you teach.

20 responses



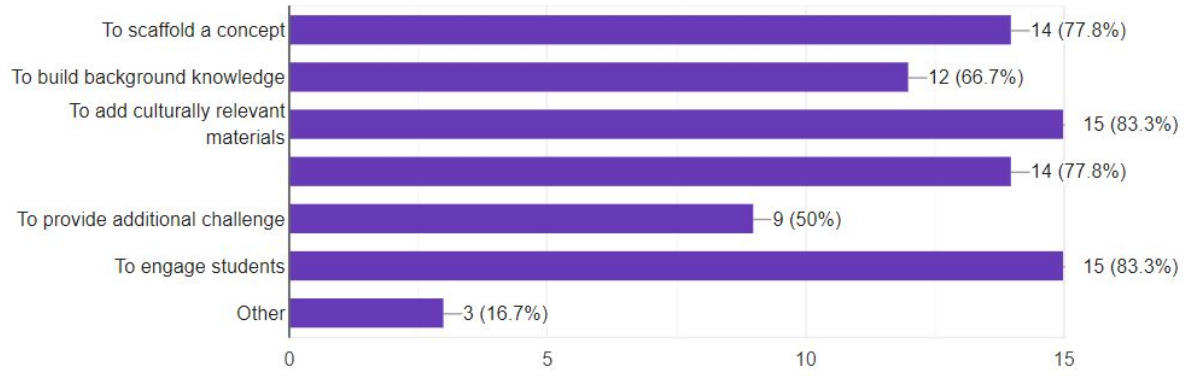
How often do you supplement or modify your current school-approved curriculum?

20 responses



Skip if you answered 'Never' to the previous question. If you supplement or modify the curriculum, what leads you to make changes most of the time? Check all that apply.

18 responses



English Language Arts		
Books/Authors	Articles, Poetry, Short Stories	Online Resources
Langston Hughes Gloria Anzaldua Toni Morrison *Beverley Daniel Tatum's Complexity of Identity* *Bad Indians: A Tribal Memoir* *Octavia Butler's Parable of the Sower* *The House of Mango Street* *Esparanza Rising* *Morning Girl* *Ghost Boys* *Hidden Figures*	Katy Perry's "Fireworks" Kanye West's "Heartless" Rita Dove Lucille Clifton Gwendolyn Brooks Richard Blanco "Who's Irish?" by Gish Gen Brownies by ZZ Packer Ta'Nahesi Coates (Essays)	National Geographic History Channel NewsELA Pixar Shorts CommonLit NAACP Toolkit Brannan Center (research) New York Times Poets.org

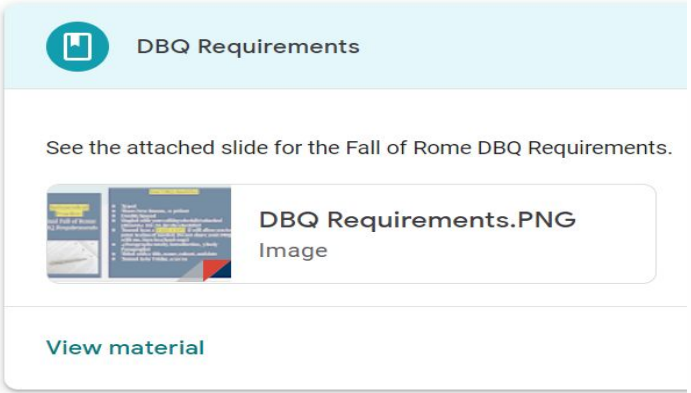
History/Social Students		
Books/Authors	Articles, Poetry	Online Resources
Everything You Need to Know to Ace/World/American History *A Different Mirror for Young People* *A History of Multicultural America* *The Kingfisher Book of the Ancient World* *Lies My Teacher Told Me* *A Young People's HIstory of the United STates* *Out History is the Future* *Stamped* *The NYTs 1619 Project* *Verna Myers* *Chimamanda Ngozi* *Lord of the Flies*		National Geographic History Channel NewsELA Facing History and Ourselves Teaching Tolerance EdPuzzle Brene Brown Podcast HIdden Brain BBC ABC News The Guardian

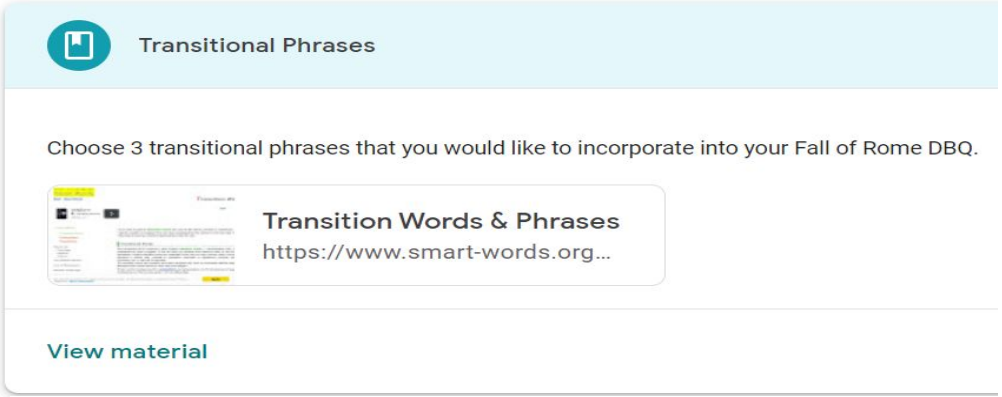
Language		
Books/Authors	Articles, Poetry	Online Resources
Langston Hughes Gloria Anzaldua Toni Morrison Beverley Daniel Tatum's Complexity of Identity		National Geographic History Channel ACFTL Conference Materials

Health and Wellness		
Books/Authors	Articles, Poetry	Online Resources
A Guide for Eating for Sports	Healthkids.net	Overload Specificity Barbend Kidshealth Men's Health Beachbody Game Rules (Workouts) Swordkits Less Mills Nearpod 3D Brain Viewer The Atlantic

Examples of the Supplementation of Document-Based Questions (DBQs) in a Middle School History Class

7th Grade Medieval History (Rodriguez)





DBQs are a multidisciplinary approach to critically engaging in history by examining multiple perspectives, and engaging in oral and written discourse. Documents feature varied arguments and often include first person narratives.

Steps for supplemental planning can include (but is not limited to):

- Gather grade level, relevant, rigorous materials
- Creating a DBQ planning sheet (often aligning with National History Day competition criteria or grade level English Language Arts standards.
  - sentence structure
  - paragraph structure
  - thematic development
- Scaffolding identifying and creating a strong research question
- Incorporating peer revision cycles or Socratic Seminars

TCI Informal Audit

Strengths

+ English to Spanish audio features and worksheet translation
+ CA History standard alignments supports pacing
+ Provides clear scope and sequence for collaborative planning
+ Online platform

Deltas

- Provides limited perspective of history and its impacts on the global majority
  - reported inaccuracies in the representation of Muslim idelogies
- Centering of Christian ideals and ideologies
- Limited first-person narrative offerings
- Curriculum is not build around strong thematic or connecting essential questions
- Requires extensive supplementation
- Does not cover topics and skills presented in the State Board of Education's proposed CAAASP for History-Social Studies, specifically geography and civics.