

Core Curriculum

Translating Research into Practice



The Challenge

Policy reports and research studies suggest that curricula can be a significant lever for student learning:

- A 2012 Brookings Institute report found that “instructional materials can have an impact as large as or larger than the impact of teacher quality on student test scores” (Chingos & Whitehurst, p. 5).
- An experimental study found that the effect of providing middle school students with well-designed math lessons was equivalent to improving the performance of an average teacher to the 80th-percentile level of quality (Jackson & Makarin, 2018).

While there is consensus about the importance of curriculum in student learning, data indicate that teachers lack access to the rigorous curricula needed to transform learning:

- A survey of 5,000 teachers found that 40 percent work without a prescribed curriculum and 92 percent use digital websites such as YouTube, Teachers Pay Teachers, Pinterest, Facebook, Instagram, and Twitter to find lessons (Institute for Arts Integration and STEAM, 2020).
- Many educators report that they lack the data needed to personalize instruction effectively. For example, 67 percent of teachers surveyed for the Bill and Melinda Gates Foundation (2015) report *Teachers Know Best: Making Data Work for Teachers and Students* noted that they are not happy with the quality of data they get from their curricula.

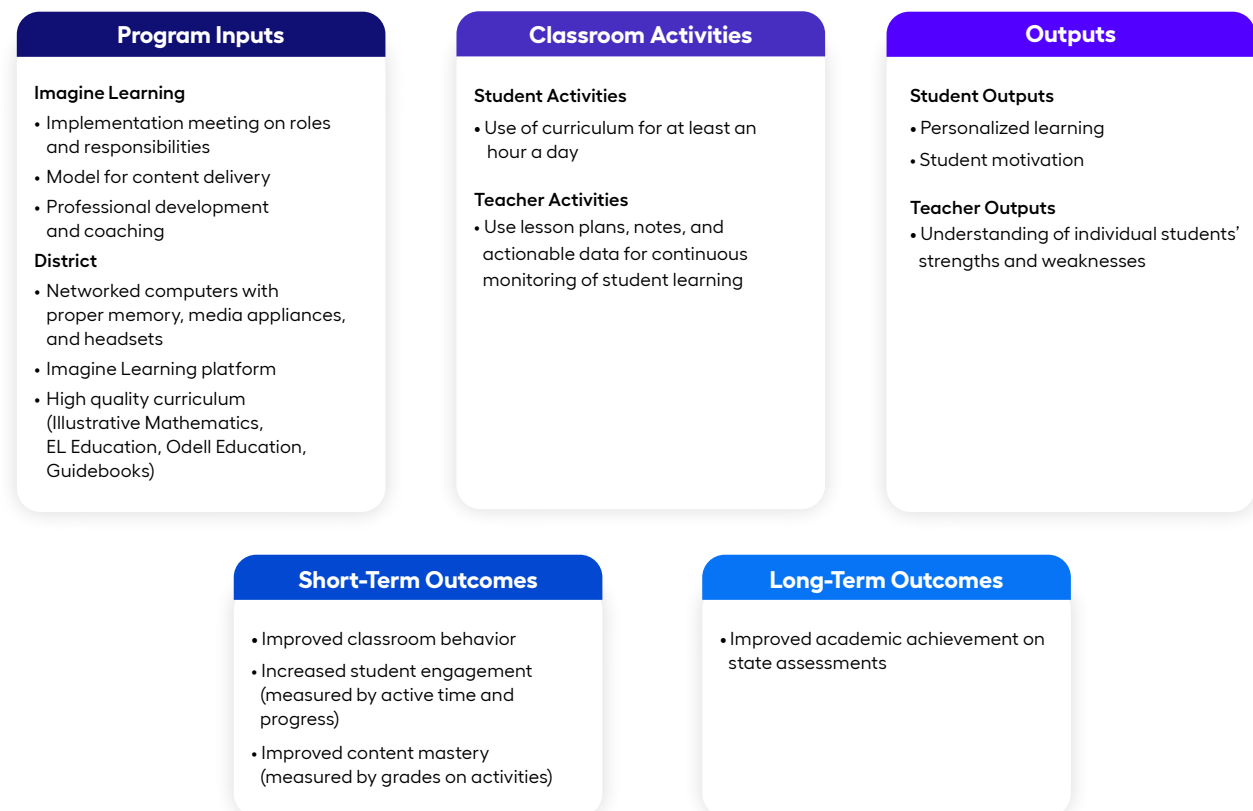
The Solution

Imagine Learning Illustrative Mathematics®, EL Education, Guidebooks, and Odell Education offer an intuitive, easy-to-use digital learning platform designed to make a high-quality core curriculum more supportive for teachers and accessible to students. The platform provides a combination of interactive online and offline math and language arts lessons, instructional videos, activity worksheets, quizzes, and assignments. It tracks student progress and achievement on the lessons and quizzes, and reports the results to the teacher’s dashboard for assessment. Rather than forcing teachers to gather, create, or decipher resources, Imagine Learning provides lesson plans and notes that educators can use to more efficiently plan lessons, orchestrate instruction, and act on data. The program offers synchronous and asynchronous tools that can be flexibly incorporated into online, in-person, and blended classrooms.

Theory of Change

The 2015 Every Student Succeed Act (ESSA) encourages districts and schools to adopt evidence-based programs that have a well-specified logic model that explains how the intervention is likely to improve outcomes. Figure 1 provides a conceptual model of how Imagine Learning is designed to facilitate learning. This theory of change lists the resources that are needed (for example, professional development, computers, headsets, easy-to-use platforms, classroom space) to successfully launch Imagine Learning and documents the targeted activities and resources (Illustrative Mathematics, EL Education, Odell Education, or Guidebooks curriculum, trade books, decodable readers, letter cards, student consumables, teacher guides, digitized assessments, and lesson plans) needed to generate the outputs (data on student progress, engagement, and achievement) that lead to short-term outcomes (content mastery and engagement). The interactive online curriculum makes learning more accessible and engaging to students. The digitized comprehensive curricula come with built-in lesson plans and in-the-moment supports, so teachers can more easily plan lessons because they don't need to create resources from scratch. Consequently, teachers are able to focus their efforts on providing targeted support, rather than trying to decipher teacher-facing materials. Ultimately, these short-term outcomes lead to longer-term outcomes, such as improved academic achievement.

Figure 1: How Imagine Learning Is Designed to Facilitate Learning



Research-Based Solutions

Researchers, practitioners, and experts agree that implementing an effective instructional system—one that simultaneously combines curriculum aligned to college and career readiness standards, formative assessment, feedback, and professional development—is an effective way of fostering student learning (Kaufman et al., 2020). The following research-based practices are the cornerstone of Imagine Learning.

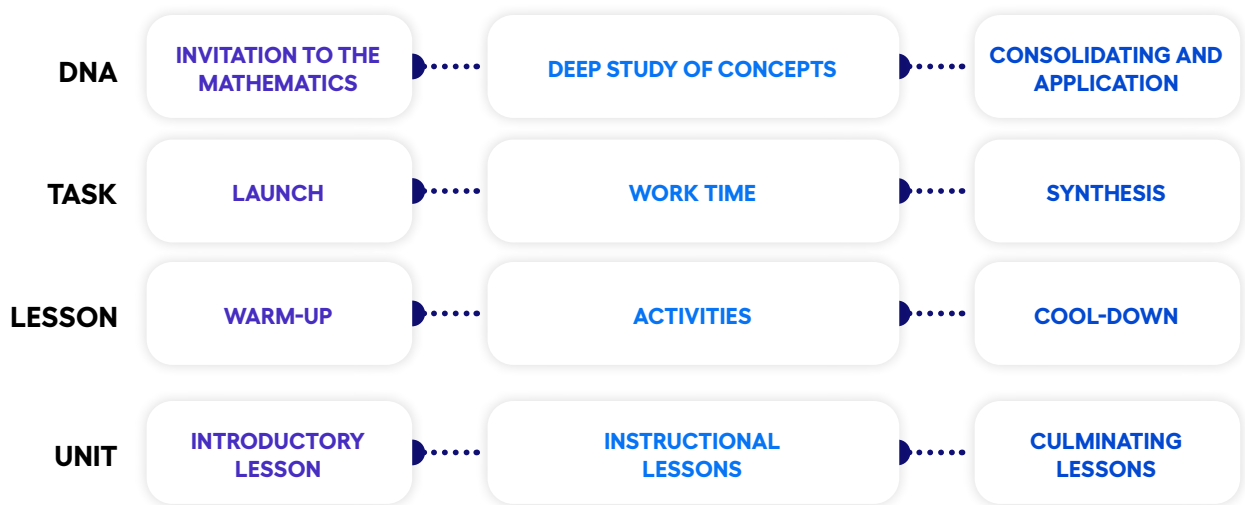
1. Start with a coherent, rigorous curriculum

A coherent curriculum purposefully organizes instruction through an intentional progression of learning activities that is aligned across lessons, assessments, subject areas, and grade levels. Rigorous instruction engages students in deeper learning or “the process through which an individual becomes capable of taking what was learned in one situation and applying it to new situations” (National Research Council, 2012, p. 6). According to the RAND Corporation, more than 30 years of research suggest that a rigorous, coherent curriculum aligned to college- and career-ready standards can improve and deepen student learning (Kaufman et al., 2020, citing Smith & O’Day, 1991).

Our Solution: Imagine Learning offers rigorous curricula from Illustrative Mathematics, EL Education, Odell Education, and Guidebooks, all of which scored all green on EdReports, a nonprofit that provides independent reviews of instructional materials designed to improve Grades K–12 education. The EdReports rubric supports a sequential review process through three gateways. Green ratings from EdReports indicate that a curriculum meets expectations for every gateway of the EdReports review system.

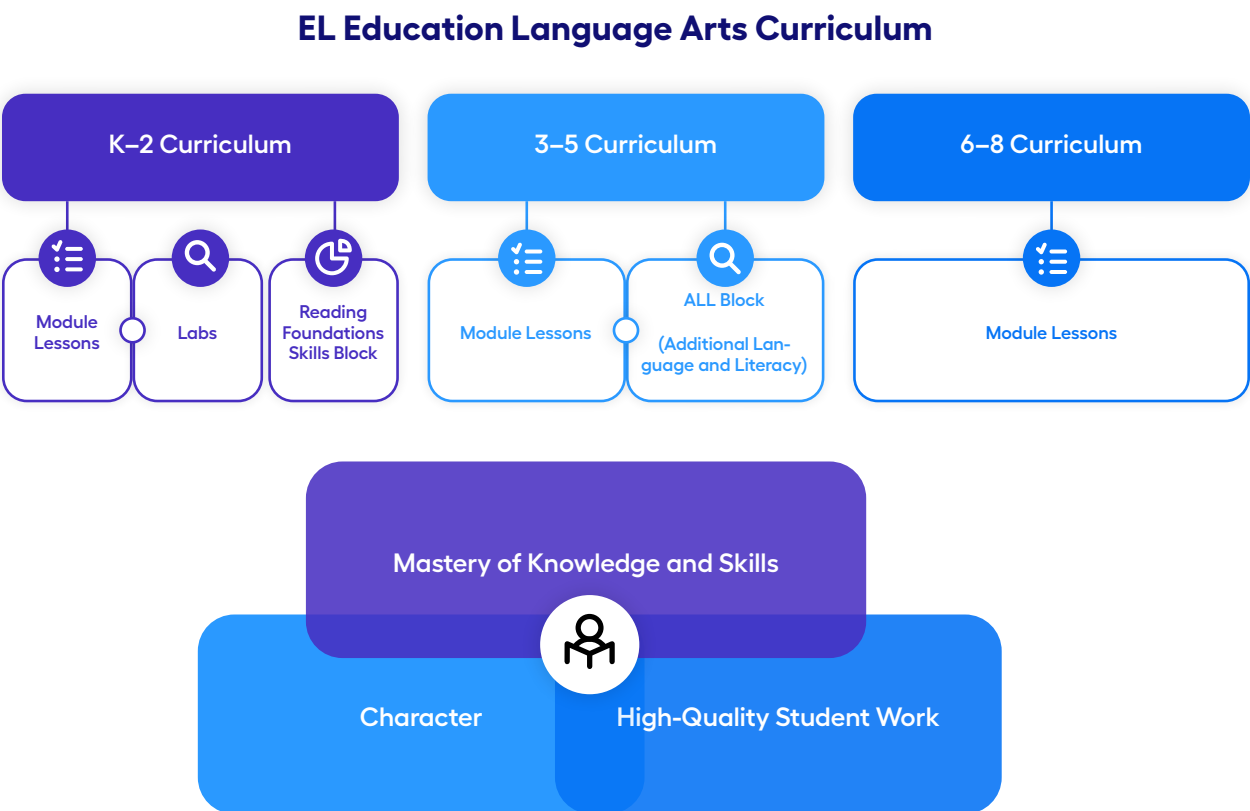
- Imagine Learning Illustrative Mathematics K–12 is a problem-based curriculum that is designed to provide conceptual understanding, procedural fluency, strategic competence, adaptive reasoning, and a productive disposition. Students learn by doing, working their way through problems in both mathematical and real-world contexts and constructing arguments using precise language (**Figure 2**). EdReports found that Illustrative Mathematics for Grades 6–12* meets the expectations for the Focus and Coherence, Rigor and Balance, and Supports and Usability gateways.

Figure 2: Imagine Learning Illustrative Mathematics Framework



- Imagine Learning EL Education’s K–8 Language Arts is a comprehensive, research-informed Grades K-8 Language Arts curriculum aligned to college- and career-readiness standards. The program is backwards designed, equity focused, and centered on compelling, real-world content (Figure 3). EdReports awarded EL Education the highest score for its Grades K–8 ELA curriculum, receiving 96 percent of available points for Standards Alignment, Quality, and Usability.

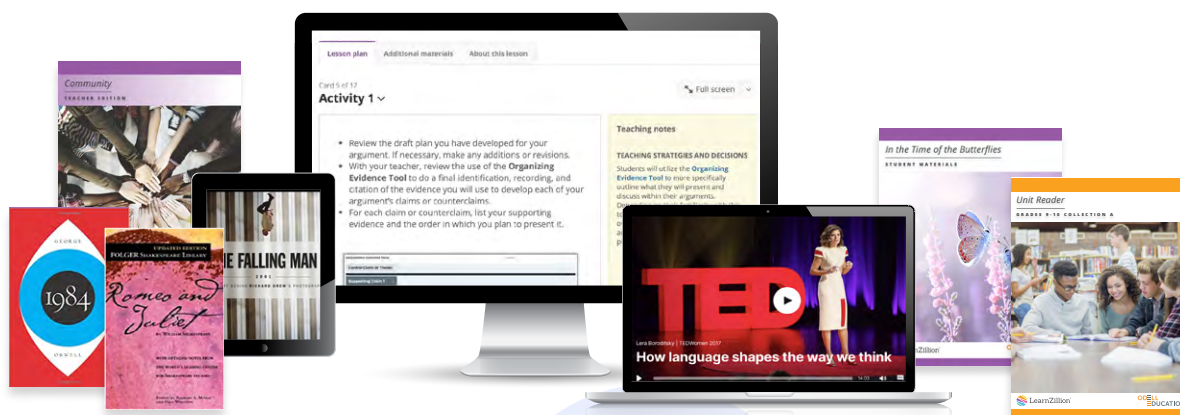
Figure 3: Imagine Learning EL Education Language Arts Curriculum Framework



- Imagine Learning Odell Education High School Literacy Program is a comprehensive program that empowers students with literacy skills for college, career, and civic life by fostering critical thinking, creativity, collaboration, and learner agency.






It inspires creativity, builds knowledge, and enhances students' skills through student-centered and student-led analyses of robust texts and topics. The instructional units encourage students to pose questions, inquire deeply, reflect, and evolve as independent thinkers and engaged participants in a learning community. The program firmly root literacy in texts and ideas: students explore texts worth reading and ideas worth considering.

Figure 4: Imagine Learning Odell Education High School Literacy Program Framework



- Imagine Learning Guidebooks is a language arts program that fosters a love of deep reading and skilled writing, connecting across multiple genres, and creating a web of meaning critical to the development of reading and writing skills. EdReports found that Guidebooks meets expectations for standards and usability. Included texts were found to be appropriately rigorous, engaging, and organized to support students as they build knowledge of topics and themes. EdReports noted that the questions and tasks students complete as they practice reading, writing, speaking, and listening are focused on close reading.

Figure 5: Imagine Learning Guidebooks Framework

	Authentic, grade-level text sets
	Integration of reading, writing, speaking/listening, and language standards
	Backward design
	Embedded supports for diverse learners
	Consistent unit and lesson structures

2. Use technology to make curriculum delivery easier across a range of implementation models

A large body of research suggests that educators need targeted support to “use standards-aligned curricula in a way that meets their states’ standards” (Kaufman et al., 2020, p. 4).

Our Solution: Imagine Learning EL Education, Odell Education, Guidebooks, and Illustrative Mathematics digital platform are designed to save teachers 45 minutes per day by stripping away the drudgery of prep and replacing it with a full suite of effective tools and digital materials, including easy-to-use lesson plans and built-in teacher guidance—saving three to four hours a week overall. Digital curriculum editions are user friendly, accessible, and comprehensive, giving educators the resources they need to launch the curriculum with confidence and fidelity. The program can be used synchronously, asynchronously, or in a hybrid setting.

- **Teacher-facing experience:** Imagine Learning EL Education, Odell Education, Guidebooks, and Illustrative Mathematics help educators more easily plan lessons, act on data, and target instruction. The program provides lesson plans with easy-to-use slides as well as student-facing materials (lesson cards) and notes for teachers. Lesson cards include student-facing activities, text-dependent questions and prompts, directions and expectations, and formative assessments. Teaching notes include suggested pacing for each activity, directions for how to orchestrate the lesson, possible student responses, ideas for differentiation for English learners and students with diverse learning needs, and embedded links to protocols used during instruction. The program empowers teachers to assign lessons and assessments to one, some, or all students as needed, collecting instant data and personalizing instruction on the fly.

Figure 6: Teacher Experience in Imagine Learning

The figure displays two screenshots of the Imagine Learning teacher interface. The left screenshot shows a lesson plan for "Lesson 4: Introducing the Universal Declaration of Human Rights". It includes a "Let's Discuss" activity card titled "Back-to-Back and Face-to-Face" with a suggested pacing time of 5 minutes. The right screenshot shows a lesson plan for "Lesson 2: Introducing Proportional Relationships with Tables". It includes a "2.1 Warm-up" activity card with a table showing the relationship between the number of cases ordered and the number of rolls of paper towels.

number of cases they order	number of rolls of paper towels
1	12
3	36
5	60
10	120

- **Student-facing experience:** Imagine Learning enables students to work on lessons independently. For example, in Illustrative Mathematics, each lesson includes a warm-up, activities, a cool-down, and practice problems. Student-facing learning goals appear in student workbooks at the beginning of each lesson and start with the word “Let’s.” They also appear on the first slide of all digital lessons. These goals invite students into the work of that day without giving away too much or spoiling instruction.

In EL Education, students have access to lesson instruction, interactive digital activities, module overview videos, and more designed to engage and excite. In Odell Education, learner agency is a key focus of the curriculum.

Students build learning communities and develop a sense of responsibility for their learning by working collaboratively toward a common goal. Along the way, they are empowered to make decisions on which topics to explore more deeply as they embark on a research project with their peers, working in teams on specific subtopics and deciding how to best present their findings.

Figure 7: Student Experience in the Imagine Learning Classroom platform

The figure displays four screenshots of the Imagine Learning Classroom platform interface:

- Lesson 2: Introducing Proportional Relationships with Tables**: Shows the lesson title, a warm-up question "What are we doing today?", and a yellow box stating "Let's solve problems involving proportional relationships using tables."
- 2.5 Cool-down**: Contains a text prompt: "When you mix two colors of paint in equivalent ratios, the resulting color is always the same. Complete the table as you answer the questions." Below this is a table with two columns: "cups of blue paint" and "cups of yellow paint". The first row has "2" and "10". The second row has "1" and a blank space. Below the table are two paint cans, one blue and one yellow.
- Activity 1**: Features a video player showing a group of people walking in a park. The video player has a play button and a progress bar.
- Learning Target**: States "Can I use a variety of strategies (e.g., context clues, word study, and vocabulary resources) to determine the meaning of unfamiliar words related to change agents?". Below this is a bar chart with three bars of increasing height (purple, orange, green). Below the chart is a text prompt: "Reflect on your progress toward the learning target by rating your comfort level." At the bottom are three buttons: "Uncomfortable", "Somewhat Comfortable", and "Comfortable".

3. Provide high-quality professional development to empower teachers

Research confirms that the success of any educational program depends on whether the program is implemented with fidelity (Durlak & Dupre, 2008). Studies show that implementation quality is determined in large part by the training and ongoing support school staff receive (Shapley et al., 2010).

Our Solution: Imagine Learning delivers high-quality professional development that prepares teachers to implement the curriculum with fidelity. A Customer Success Manager brings together district officials, school leaders, and teachers to develop an implementation model, set measurable benchmarks (e.g., 60 minutes per week), and create a plan to achieve goals. During training, educators learn about the program's theory of change, as well as how to navigate content both inside and outside of the learning-management system. Teachers walk away with practical classroom-management strategies, as well as best practices for growing relationships with students, facilitating interactive discussions and activities, and using data to drive instruction. Professional development is also embedded in the program.

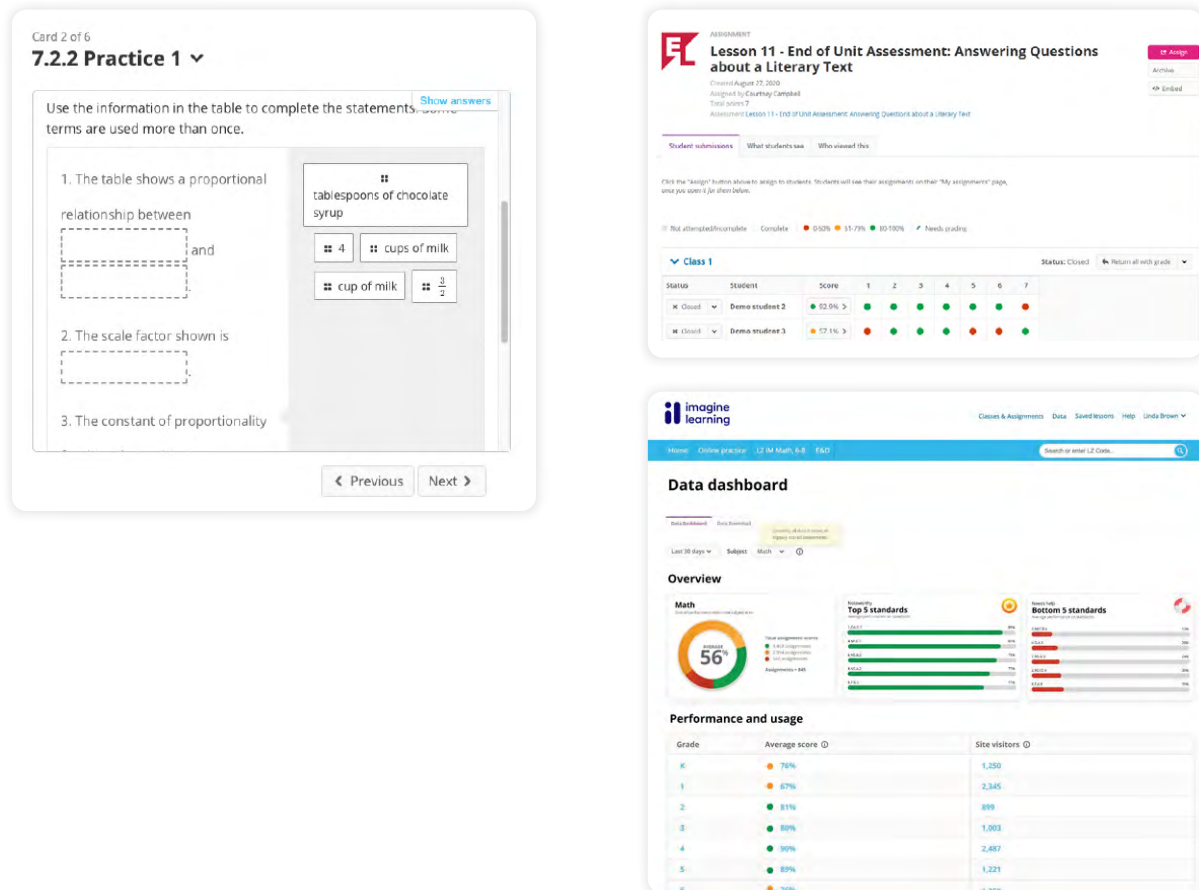


4. Integrate assessment to provide actionable data that teachers need

A meta-analysis of multiple studies demonstrates that formative assessment—the process of using ongoing assessment to inform instruction—has a positive effect on student learning, with teacher professional development and technology-based formative assessment among the most effective methods of implementing formative assessment (Kingston & Nash, 2011). Research indicates that formative assessment is most effective for students when assessment data are used to clarify learning goals; continuously monitor and diagnose student performance relative to these learning goals; provide instructional feedback; make instructional decisions in response to students' learning progress; and involve students in their own assessment (National Research Council, 2012).

Our Solution: Imagine Learning has integrated digitized unit assessments and practice items so that teachers get real-time, auto-calculated formative feedback on student mastery, and students get more practice with tech-enabled questions. Digital assessment items give teachers the data they need for strategic instruction while providing students with the necessary practice for culminating assessments. Teachers have the freedom to use existing assessments from Imagine Learning curricula or create their own.

Figure 8: Assessment for Students and Actionable Data for Teachers



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