

Imagine MyPath K–12

Equity and Accessibility



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At Imagine Learning, equity means ensuring all students have access to opportunities that enable them to be successful. With classrooms becoming increasingly academically diverse, an accessible learning environment is the first step toward creating an inclusive experience for students. All students come to school with different strengths—they absorb and process information, express knowledge, and engage in learning differently. By leveraging pedagogy and instructional design frameworks that reduce barriers to learning, Imagine MyPath K–12 provides accessible instruction and scaffolded support so students can develop essential reading and mathematics skills.



Imagine MyPath provides accessible and scaffolded instruction to ensure success among academically diverse learners.

The Research

Equitable instruction provides optimal **access** to fair opportunities to learn (Gutierrez, 2012). To ensure instruction is equitable and inclusive, research recommends applying the **Universal Design for Learning** (UDL) approach to support students' diverse learning needs (Center for Applied Special Technology, CAST, 2018). UDL is an evidence-based framework that creates flexible materials and provides adaptive instruction to make learning accessible (Kieran & Anderson, 2019). Resources and materials are proactively designed to present information in multiple formats (representations), encourage students to communicate their understanding in a variety of ways (action and expression), and embed multiple strategies to engage students (engagement). This approach has been successful in reducing barriers and maintaining high achievement expectations for all students (Cook & Rao, 2018), as well as meeting the ongoing challenge of inclusive teaching (Westwood, 2018).

One of the core tenets of UDL is **scaffolding** with a gradual release (CAST, 2018). The term scaffolding is often used to describe the types of instructional supports provided to students (e.g., question prompts, informative feedback, models, graphic organizers). Scaffolding helps students master a concept that they were initially unable to grasp independently (Molenaar & Roda, 2011; West et al., 2019). Incorporating an array of scaffolds into instruction can make learning more accessible, decrease cognitive load, encourage progress monitoring, and improve achievement (Archer & Hughes, 2011; Belland et al., 2017; Gottlieb, 2013; Lei et al., 2020).

How Imagine MyPath Integrates Research into Practice

Imagine MyPath recognizes that students access, process, and comprehend information differently. Therefore, lessons are proactively designed to personalize instruction and provide inclusive supports to effectively meet students' diverse learning needs. Students begin by taking the Imagine MyPath Assessment, which provides a reliable, valid measure of each student's ability and instructional grade level. Then, Smart Sequencer™ technology creates an adaptive, individual learning path (ILP) for each student. The instructional sequence prioritizes essential reading and mathematics skills. Using built-in Mastery Checks, lessons adapt based on how students demonstrate mastery of new material. This ensures all students have access to opportunities that lead to success with grade-level content. The graphic below provides an example of how Imagine MyPath K–5 adapts to students' knowledge within a lesson and the general instructional framework (note that the reading foundations lessons do not follow this exact activity guide) (Figure 1).

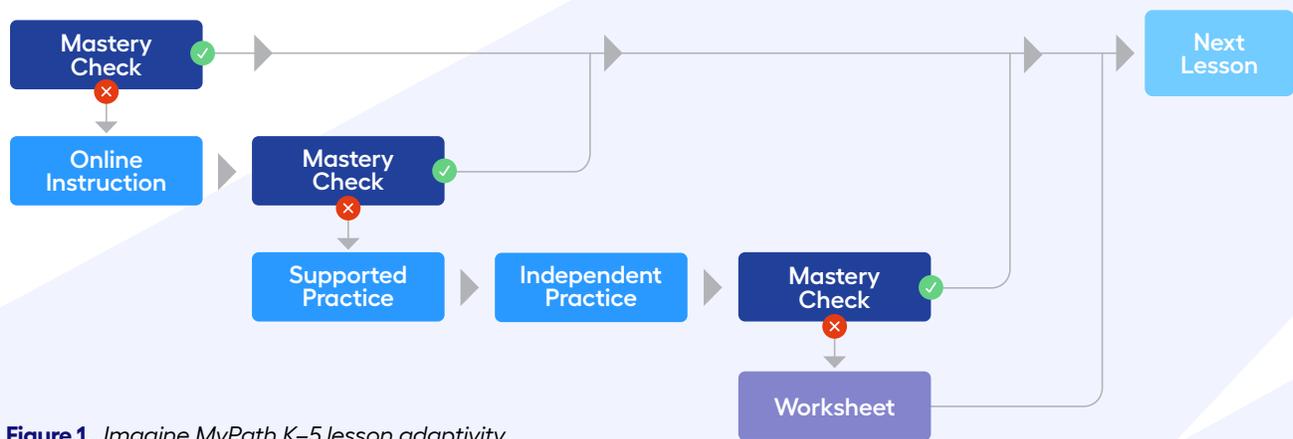


Figure 1. Imagine MyPath K–5 lesson adaptivity.

UNIVERSAL DESIGN FOR LEARNING

Imagine MyPath infuses UDL principles to support students' understanding and application of grade-level reading and mathematics concepts. Lessons integrate multiple means of representation, action and expression, and engagement to provide inclusive instruction.

- *Multiple Means of Representation*—Lessons present information in different modalities (e.g., text, audio, visual representations, virtual models). This allows students to make sense of the information in multiple ways.
- *Multiple Means of Action and Expression*—Lessons encourage students to communicate their thinking in a variety of ways. Activities provide different question-response formats, such as multiple-choice, drag and drop, charts, graphic organizers, and embedded interactive manipulatives.
- *Multiple Means of Engagement*—Lessons incorporate different strategies to capture students' attention. Clear lesson goals, expectations, and data dashboards help students monitor their progress. Positive behavioral support with digital rewards (e.g., points, stars) and customizable features (e.g., sidekicks, backgrounds) motivate students to persevere through their learning paths.

Figures 2, 3, 4, and 5 demonstrate how Imagine Learning integrates different elements of UDL into a mathematics lesson. In this lesson, students learn how to count by 2, 5, and 10. Lessons begin by displaying clear lesson goals so students know what they are learning and understand the connection between the goal and activities. Lessons also present information in different modalities. Mathematically, presenting information in a real-world context in addition to the use of visual representations help students make sense of the information in meaningful ways. Students have access to features that allow them to adjust the volume, expand to full screen, and click the paper icon to view the transcript (see Figure 3). The transcript includes text for all the words that are spoken in the video. In addition, students answer Mastery Check items throughout a lesson to demonstrate understanding. These offer students diverse ways of expressing what they have learned. With each Mastery Check, students earn rewards (stars) to sustain their attention and motivate them to persevere through challenging tasks.

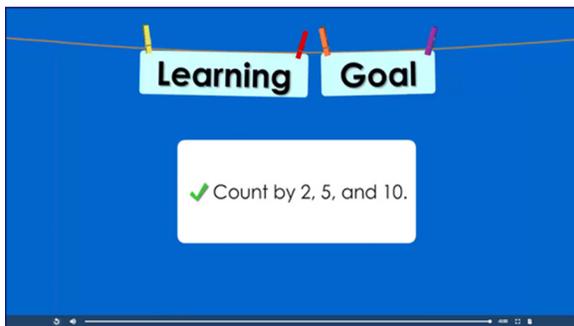


Figure 2. Lessons present clear learning goals.

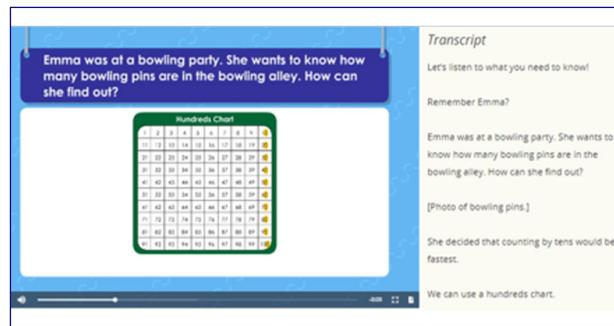


Figure 3. Lessons present information in multiple modalities.

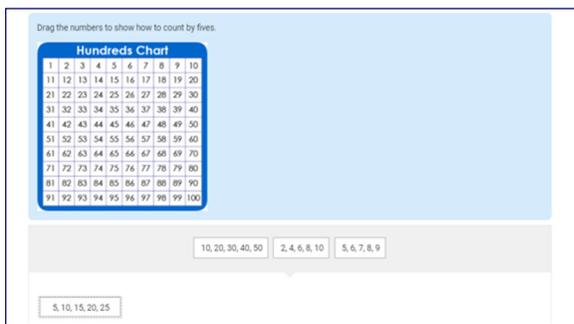


Figure 4. Students demonstrate understanding with different response item types.

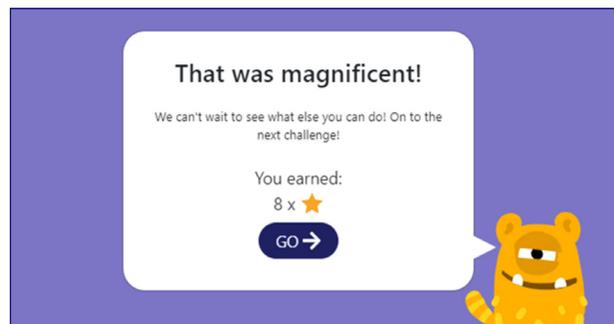


Figure 5. Students earn points when passing lessons.

SCAFFOLDING

Imagine MyPath utilizes computer-based scaffolding to individualize each student's unique learning journey. To help students master reading and mathematics content, a variety of scaffolds are used to balance the level of challenge and support provided. Built-in scaffolds extend, enrich, and intensify learning by offering helpful hints, cues, or adapted activities.

Graphic organizers, concept maps, T-charts, Venn diagrams, sequential graphics, and timelines are used to scaffold learning. These scaffolds highlight important ideas, compare and contrast concepts, represent relationships, depict chronology, and illustrate cause and effect. For example, in Figure 6, the teacher narrates a story about a predator and prey to introduce domain-specific vocabulary words (e.g., adaptation). The teacher uses a graphic organizer to enhance word learning by defining the word, identifying characteristics, and providing examples and non-examples.

Scaffolds also reinforce students' native language, which helps strengthen vocabulary and biliteracy. Onscreen text can be translated into more than 60 languages, including Arabic, Bengali, Chinese, French, German, Hebrew, Hindi, Hmong, Korean, Kurdish, Russian, Spanish, Swahili, and Vietnamese (Figure 7).

Combinations of video, audio, text, visuals, and narration are integrated into Imagine MyPath lessons. During a lesson, students can pause, rewind, or repeat videos if needed. Onscreen arrows, highlighting, circling, and digital pointing reinforce concepts. In Figure 8, the onscreen teacher delivers instruction using real-world photographs during narration, simultaneously highlighting key words and phrases to draw students' attention to the use of descriptive language. Students can also access a transcript to follow along. After receiving explicit instruction, students engage in guided practice where they receive immediate, scaffolded feedback before moving on to practice the skill independently.



Figure 6. Graphic organizers support learning.

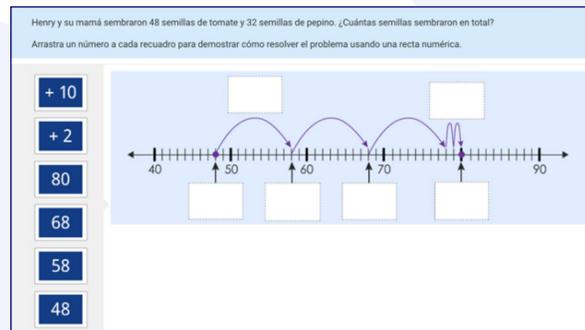


Figure 7. Mathematics lesson in Spanish.

Descriptive Language

Descriptive language is language that appeals to the reader's senses.

The bright sun was warm on my shoulders, and the sand was hot under my bare feet. The salty ocean breeze tickled my nose as I looked at the shimmering blue water.



Transcript

TEACHER: When you visualize, you create a picture in your mind or a mental image. Creating a mental image is important because it'll help you understand and appreciate a story more. To visualize, look for descriptive language in a text or look for details that will help reveal the setting. Make a text-to-self connection or think about how those details relate to your own life. Combine text details and a text-to-self connection to create a mental image. Now let's look more closely at descriptive language. Descriptive language is language that appeals to a reader's senses, so sight, hearing, smelling, tasting, and feeling. I'm going to read through this short passage, and I'm going to try to create a mental image using the descriptive language. The bright sun was warm on my shoulders, and the sand was hot under my bare feet. The salty ocean breeze tickled my nose as I looked at the shimmering, blue water. So here, bright sun and blue water helps me to visualize what this setting might look like. Warm sun and hot sand helps me to imagine what this setting might feel like, and salty ocean breeze helps me to think about what this setting might taste like and what it might feel like. So, I would put all these details together, and I

Figure 8. To strengthen understanding, lessons integrate multiple scaffolds into a lesson.

Conclusion

The use of technology holds promise for addressing the inequities in education which is why equity is one of Imagine Learning's five guiding values. The company is dedicated to making education more equitable in the ways in which we design learning experiences. By harnessing elements of the UDL framework, Imagine MyPath is designed to optimize and improve learning. UDL principles, along with scaffolded support, help make learning inclusive and transformative. By providing rigorous instruction and maintaining high standards for all students, Imagine MyPath continues to provide rich opportunities that enable students to reach their full academic potential.

References

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