

## **Problem Statement**

Personalized learning support can be costly and complicated for classroom teachers to implement. DoodleMath is a K-5 math practice solution that builds student fluency and confidence, personalized to each student's learning needs in math. Geared at supplementing classroom instruction, DoodleMath provides a self-paced, fun, interactive, skill-based math program that adjusts to the unique learning needs of every student.

<b>Inputs</b> What We Invest:	Participants Who We Reach:	Activities What We do:	Outcomes What Changes or Benefits Result		
			Short-Term	Intermediate	Long-Term
Provider:  • A research-based online math practice program that provides students with personalized, evolving work programs and motivating, scaffolded activities designed as supplementary to classroom instruction  • Carefully-authored, highly-interactive content that aligns to K-5 curriculum and standards via a personalized work program¹ for each student  • Reporting of student progress via student, educator, and parent dashboards  • Web based delivery of content with accessibility options (colored overlays and audio dictation for all questions)  • Online support via FAQs, how-to content, and dashboard support team via help center  • Dedicated partner success advisor	K-5 students Educators Parents and guardians Administrators	Students complete preliminary self-assessment and baseline assessment to measure their confidence in math and determine their ZPD <sup>2</sup> Students gain access to their personalized math work program  Students work independently on math activities and Assignments <sup>3</sup> (high frequency users are thjose who use the program "little and often" or at least 10 mins per day <sup>4</sup> ) tied to their ZPD and knowledge gaps (e.g., New This Week, 6-a-Day)	Product Use Outcomes  Students develop an expanded understanding of math and how math concepts can be applied to their lives through fun and purposeful activities  Students have increased confidence as they learn math and apply their knowledge in activities tailored to their strengths and needs	Students have increased self-assurance excitement for learning math  Students reflect on and learn from mistakes, and find relevance and personal meaning while developing a mathematical	Students' interest, self-efficacy, and motivation to learn math increases  Students have the math skills and knowledge to succeed in elementary school and beyond
		Students are supported through scaffolded explanations, hints, and activities including adding activities to Tricky Questions  Students earn rewards (incl. stars, badges, certificates, streaks) after completing	Students build resilience by working through incrementally challenging tasks with increased independence	growth mindset <sup>5</sup> Gaps in students' math  knowledge and understanding are narrowed	Students measurably improve their math content knowledge and skills
		activities and Assignments  Students view their usage and achievement data  Students collaborate with classmates and show encouragement		Students engage in math learning experiences and apply newly attained skills to experiences outside of the classroom	Students develop a lifelong passion for learning math
					Students build fluency and conceptual understanding in math
		Educators access educator dashboard weekly to view and export student activity,	Implementation/Contextual Outcomes		
		manage rewards to encourage routine use of the program, and view student progress data in order to apply that information to their classroom and small group instruction	Educators spend less classroom time on skills practice instruction  Educators focus instructional time on problem solving, building conceptual understanding, and application of skills to real-world math problems	Educators construct learning experiences where self-efficacy and reflection are present and promoted in students' acquisition of new math skills	
		Educators can assign and reassign baseline assessments  Educators may create custom rewards for students  Educators may prescribe Assignments-including those created themselves-to students or student groups by topic, math concept, and curricular standard	Educators access progress data to Identify students' knowledge gaps in math and differentiate instruction based on students' unique learning needs	Educators routinely address learner variability and increase opportunities for differentiated practice and application in their classroom	Educators become more effective practitioners by differentiating learning and using data to regularly drive instructional decisions in the classroom
		Parents and guardians access parent dashboard to view and their student's usage and achievement data, manage rewards, and update their information	Educators observe increased student engagement and interest in math through use of the program		
Internet-enabled devices		Parents and guardians receive messages sharing student progress via their dashboard	Parents and guardians have access to information about their student's progress in	Parents and guardians gather insights on their student's fluency and skill development	Parents and guardians become more in touch with their student's development in math and more confident
Time and resources to allow students requisite access to, and use of the DoodleMath program		Parents and guardians can link existing home user accounts to their student's school	math in math and provide suj at home		in their ability to support their student
		Parents and guardians can solve queries (independently of teachers or administrators) using how-to content and the help center within the platform	Administrators promote use of personalized math programs to improve math proficiency and fluency across their school/district	Administrators provide direct support for adoption of the program to improve students' math outcomes across their school or district	Administrators support the development of a mathematical growth mindset for students and teachers
		Administrators review students' usage and progress data by student, teacher, and school  Administrators can download a whole-school annual impact report	Administrators have more information about student progress in math learning and skill development in their school/district	Administrators use student data to make informed decisions about math instruction and learning in their school/district	Administrators promote and foster a culture of data-informed math instruction throughout their school/district
<sup>1</sup> DoodleMath uses a proprietary algorithm called Proxima to create a work pro <sup>2</sup> The concept of a student's zone of proximal development (ZPD), originally de	gram for each student that adjusts based on their perform veloped by Lev Vygotsky (Vygotsky, 1978), refers to the di	ance throughout the program.  The program of the program of the program of the pand what he or she can achieve with guidance and encouragement from a skilled partner.		Administrators direct and allocate resources and supports for math instruction for educators and schools in most need	

Learn Platform 2023©

Prepared for Discovery Education, January, 2023



Assignment of the specific of the specific activities that include interactive, organized wedgened or yet very vigotatey (vigotatey (vigotatey, 19/6), refers to you specific organized and even with a structure man or set for each activities that include interactive, organized man or set for each activities that include interactive, organized man or set for each activities that include interactive, organized man or set for each activities that include interactive and or set