



GSV Ventures

K-12 Math Landscape Overview

NOV 2022

K12 Math Product Overview

B2B Focus



D2C Focus

Selection of Up and Coming Players



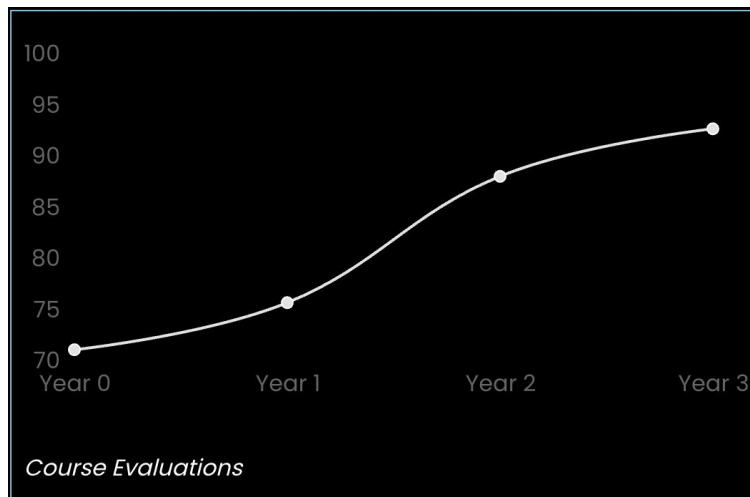
Known For	A cutting-edge platform using realistic, conversational AI to scale top teachers' 1:1 instruction, led by ex-Google executive	A digital math tool revolutionizing student math journey's by using real-time feedback on handwriting recognition	A platform enabling real-time intervention with ML; students found to improve by +38%	Revolutionizing students' relationship with learning math via engaging curriculum focused on speed
Date	2022	2022	2020	2020
Region	North America	Global	North America	Global
Size	<ul style="list-style-type: none"> • Kyron launched in Sept. 2022 with seed funding • Kyron is forming an educator council as they develop their product 	<ul style="list-style-type: none"> • Used by 15k+ teachers • 2.2k+ monthly active teachers • 43+ district customers 	<ul style="list-style-type: none"> • 40m+ questions answered on the platform • Translated into 100+ languages 	<ul style="list-style-type: none"> • Used by 30k+ students • 1M+ teaching hours • 2M+ questions solved
Overview	Uses conversational AI to scale the best teachers, bringing high-quality one-on-one teaching to all students	Leverages handwriting recognition technology, student-centered instructional practices, and Common Core math curriculum to show student work	Digital math assignments with instant auto-grade, allows teachers to create homework and quizzes almost instantaneously	Math-learning platform based on a curriculum to help students become quicker at math and apply it to the real world

Up and Coming K12 Math Trends

- **Tech-enabled solutions to scale 1:1 or small group tutoring:** As learning gaps continue to be a point of priority for US schools, districts seek to provide high-quality tutoring to students with the knowledge that ESSER funding will eventually run dry—this presents an opportunity for cost-effective, tech-forward tutoring companies who are able to scale quality instruction.
- **Use of generative AI:** With GPT-3 coming to the forefront, the AI solutions available today are much more feasible for edtech use versus even a year or two ago. Generative AI will be able to power solutions such as more natural-sounding virtual tutors, as well as creation of math content for teachers.
- **Show-your-work practice platforms:** With learning gaps comes need to revise and revisit concepts—teachers are emphasizing need for additional supplementary curriculum content, and a platform to help them see where students get stuck on a given concept.
- **Formative assessments within an end-to-end platform:** Legacy edtech players continue to prioritize integration of formative assessments into their existing curriculums (e.g., Amplify’s acquisition of Desmos to build a core curriculum leveraging diagnostic assessments, Cambium’s continued investment in ClearSight formative assessments).

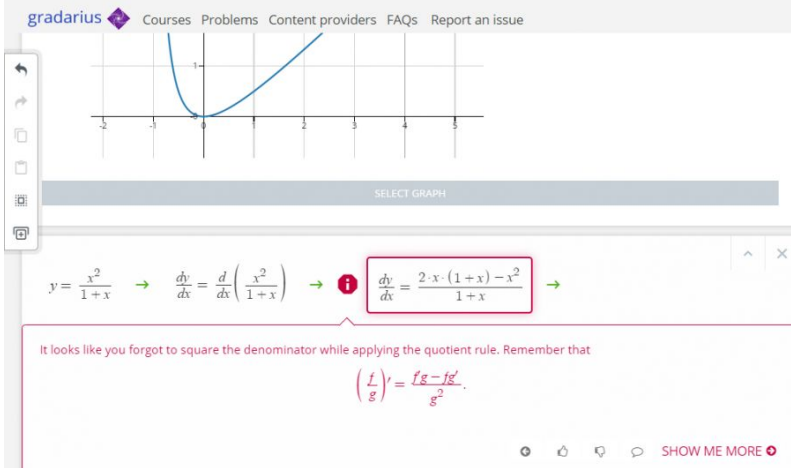
Case Study: gradarius

Gradarius is an Innovative, Research-Backed Math Platform...



- Founded in 2018, Gradarius is a customizable learning system pre-loaded with course materials
- The system provides instant instruction, evaluation, and analysis—allowing students to learn as they complete assignments step-by-step on the platform
- Created by professors leveraging NSF-backed research

... Exemplifying the Best of Latest Math Solutions Trends via Real-Time Feedback



gradarius Courses Problems Content providers FAQs Report an issue

SELECT GRAPH

$$y = \frac{x^2}{1+x} \rightarrow \frac{dy}{dx} = \frac{d}{dx} \left(\frac{x^2}{1+x} \right) \rightarrow \frac{dy}{dx} = \frac{2x \cdot (1+x) - x^2}{1+x}$$

It looks like you forgot to square the denominator while applying the quotient rule. Remember that

$$\left(\frac{f}{g} \right)' = \frac{fg - fg'}{g^2}$$

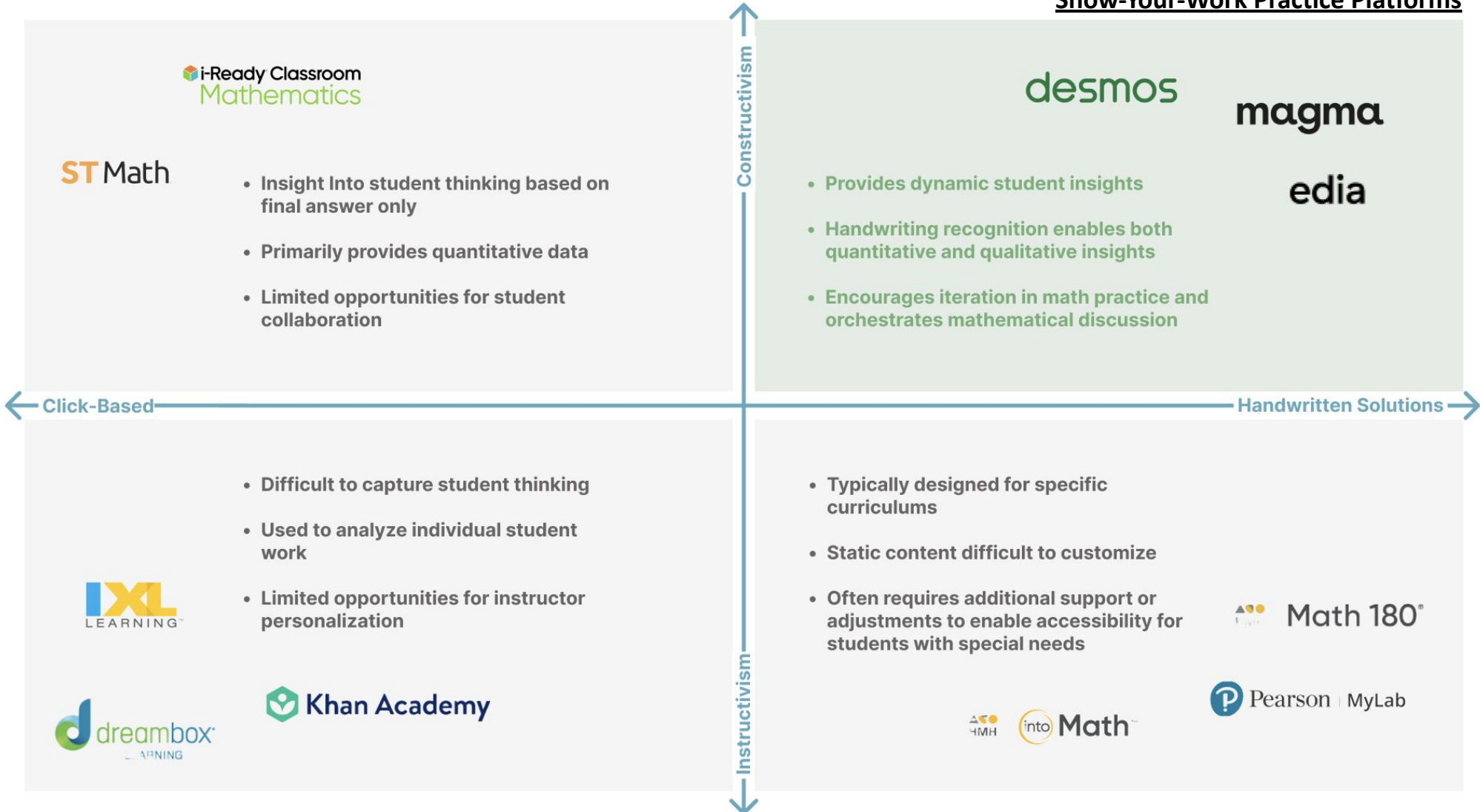
SHOW ME MORE

- **Tech-enabled to scale small group instruction**
 - Students can reap the same benefits as with time spent in instructor office hours
- **Use of generative AI**
 - Leverages AI with opportunity for further learning personalization
- **Show-your-work practice platform**
 - Software checks every progress step
- **Formative assessments**
 - Continuously offers layered, targeted assistance

Appendix

Where Show-Your-Work Practice Platforms Play

Show-Your-Work Practice Platforms



Selection of Legacy Products



Curriculum Associates®

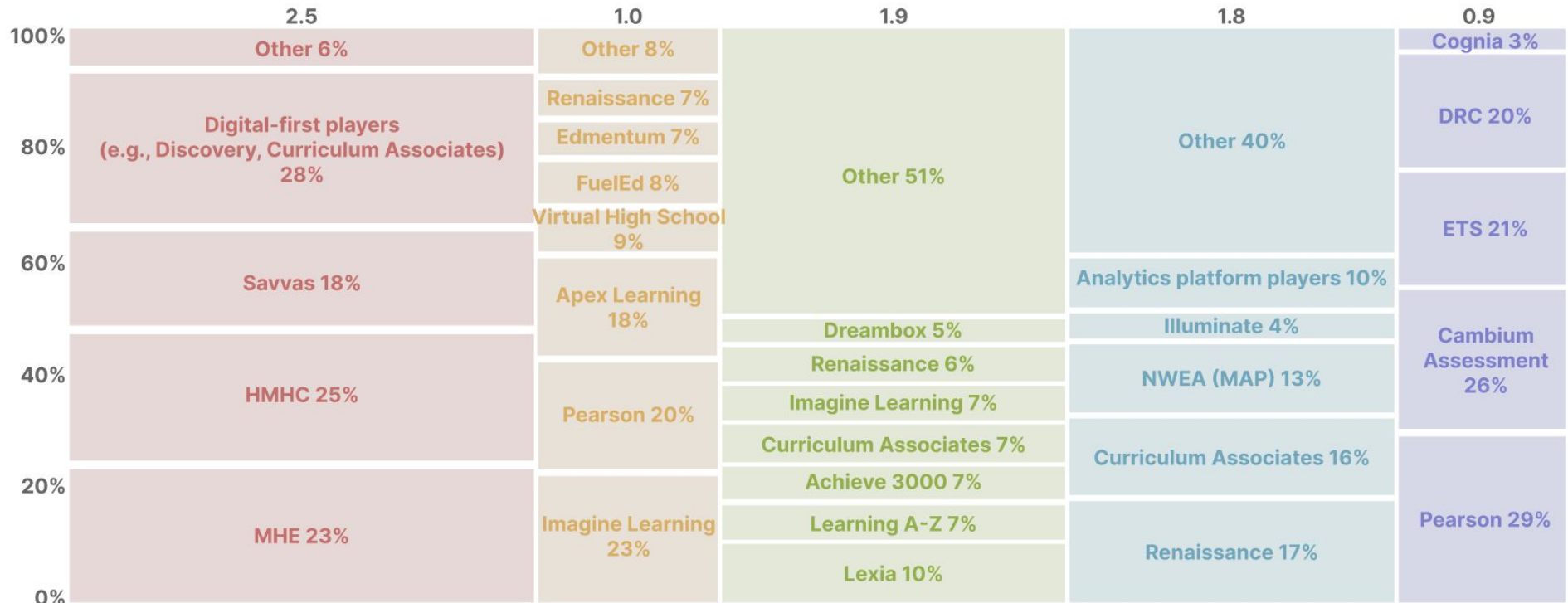


Known For	Interactive, adaptive and self-paced; emphasis on conceptual understanding and inquiry-based learning with predictive insights	Video-free supplemental teaching library with more breadth in later grades; Offers real-time adaptive learning paths	Integrated data-driven product. Robust teacher dashboard, designed with teachers/school districts in mind - tracks usage, proficiency and growth	Free for individual teachers and classrooms; Offers live instruction with strong scaffolding and corresponds with Eureka Math
Date	2004	1998	2011	2012
Region	North America	Global	Global	North America
Size	<ul style="list-style-type: none"> • 6M students using Dreambox • 400k active teachers • 1.5B lessons completed 	<ul style="list-style-type: none"> • 13M students • 850K teachers • 300K parents • 111B questions answered 	<ul style="list-style-type: none"> • 10M students • 23k schools 	<ul style="list-style-type: none"> • 1 of 4 elementary students • 11B problems completed
Overview	Supplemental K-8 digital adaptive math program (also offers DreamBox Reading)	Personalized K-12 math (and other subjects) curriculum with real-time analytics	Comprehensive core K-8 mathematics program	Standalone and supplemental math curriculum

K12 (All Subjects) Competitive Landscape [ESTIMATED]

2020 U.S. K12 Institutional Spend (Directional), \$Bn

Total = ~\$8Bn



Core Curriculum

Comprehensive Courseware

Supplemental Curriculum

Classroom Assessment (Formative + Benchmarking)

Summative Assessment

~40% English
 ~30% Math
 ~10% Science
 ~20% Other