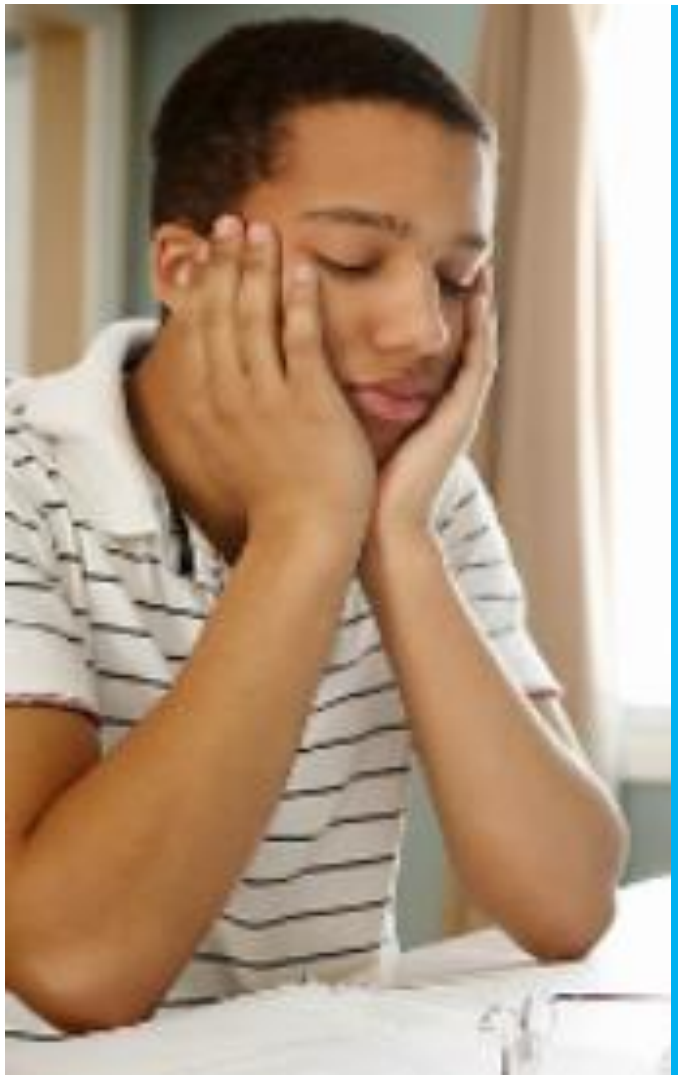
MathCloud in the world

June, 2016 Mathcloud

For the dreams and futures of our children make math a **stepping stone** not a stumbling block.

MathCloud as the ultimate solution

Why Students Struggle in Math



Learn at different speeds

Use the same materials

Don't know what to study

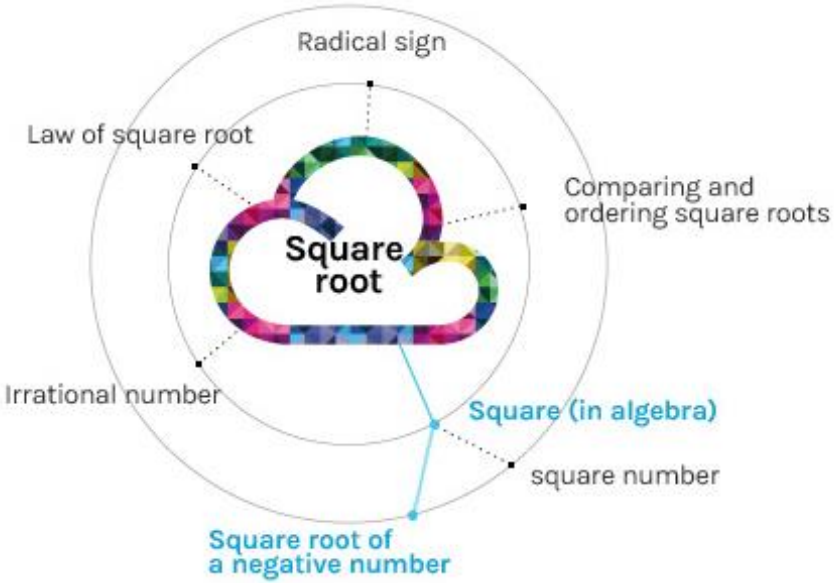
Memorize solutions

↓

Lack critical thinking skills needed to solve problems

MathCloud as the ultimate solution

Smart Cloud



Through Cloud Map, students will be able to learn how to think logically

A tool to show the relationship between **concepts and concepts**, and problems and **problems**

Problem-solving skills built on practice will help students to become critical thinkers

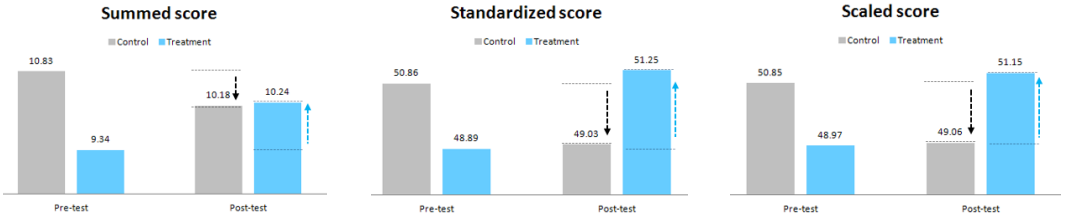
MathCloud in Asia

Effectiveness of Mathcloud (ADB Official Report : Sri-Lanka Project)

"MathCloud program is effective for increasing student achievement in mathematics."

#1 From ADB Review Report, Midterm

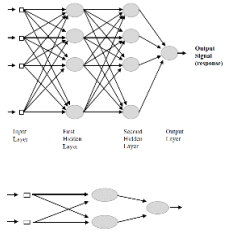
"it is especially effective in helping students improve with the platform's ability to individualize learning materials."
"students who are not very proficient in mathematics are becoming more enthusiastic about the subject due to this program"

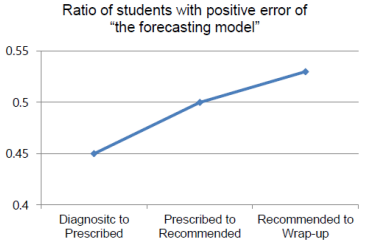


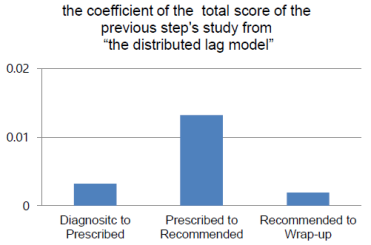
#2 From ADB Review Report, Final

"For this study, neural network models was used for analyzing mathematics achievement of Sri Lankan students that used MathCloud's adaptive learning software....
it is shown to be effective for students' learning progress across all the studies"

"...ratio of students understanding the current step's study well relative to his or her performance in the previous step's study increases over of the duration of the MathCloud program."







MathCloud in Asia

Expansion of MathCloud in Developing Countries

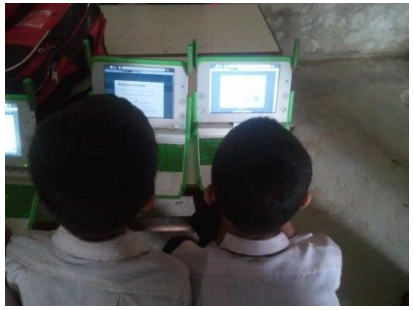
		Project Description	Key Activities
Sri Lanka	Phase 1 (‘11~12)	Confirm on MathCloud’s teaching method through comparison between Control and Treatment Group	Evaluation Paper (2012.09) Evaluation Paper (2013.06)
	Phase 2 (‘13~14)	Localization into Sri-Lanka local language after the successful completion of Phase 1	
	Phase 3 (’15~)	1) Expansion on application of local language 2) Expansion on Phase 1 English program	
Bhutan	Phase 1 (‘14~15)	Localization into Bhutan Curriculum after confirm on Mathcloud	
	Phase 2 (’16~)	Expansion on Phase 1 English program	
Laos	Phase 1 (‘13~14)	Improving teacher quality project with 1,000 participants through ICT	Participated in the **Review Mission** (May 2013)
		From Review Mission, confirmed the effectiveness of our program and decided to expand our application of the Project into other nation al universities	
	Phase 2 (’14~15)	Confirmation on localization of all content for freshmen	
Vietnam	Phase 1 (’13-14)	Improving teacher quality project with 1,000 participants through ICT Selected as a official course for future teachers in HNUE	
	Phase 2 (’14-’15)	1) Expand into Ho Chih Minh University of Education 2) Expand in application within HNUE departments	

ADB
Asia Development Bank

MathCloud in Asia

Expansion of MathCloud in Developing Countries

Nepal, Sri Lanka, Bhutan



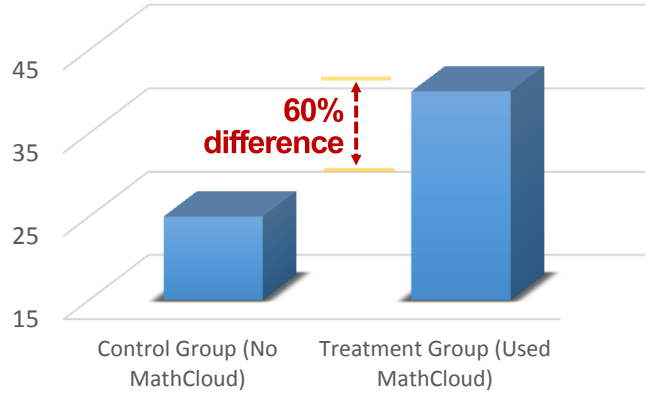
Middle East Asia – Jordan/UAE

Laos/ Vietnam

MathCloud in U.S. Schools

Case 1 : Public High School in New Jersey [In-class]

Students with assessment improvement

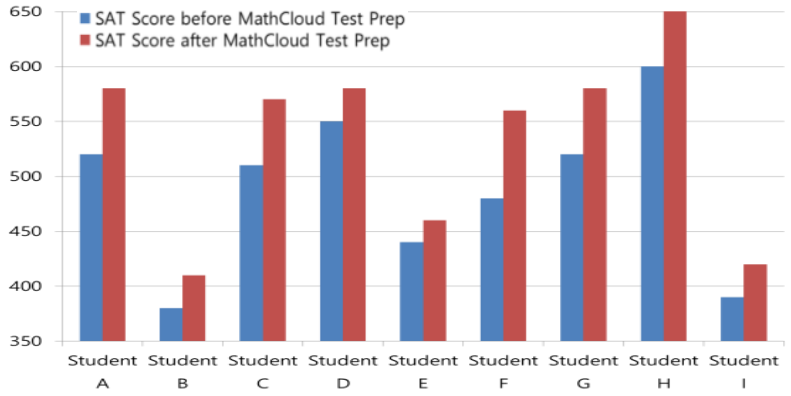


TEACHER	CONTROL		TREATMENT		SUB-TOTAL
	# Students Improved	TOTAL	# Students Improved	TOTAL	
A	11	24	18	25	29
B	3	20	11	20	14
C	11	27	11	28	22
TOTAL	25		40		65

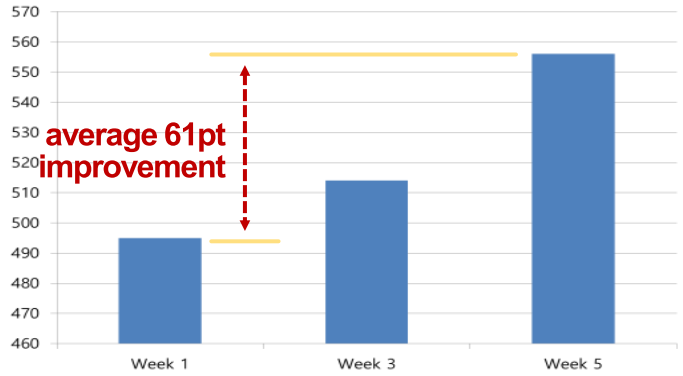
Controlled class that did not use MathCloud in class was compared with treatment class that used MathCloud in class.

Comparing pre-test and post-test results, the improvement on questions that students struggled with on the pre-test was more likely to occur for students that were in treatment class with MathCloud.

Case 2 : Private School in Virginia [After School]



Individual SAT score Improvement



Class average score improvement

(Test scores based on unique Practice Tests)

Students spent 1 month using MathCloud SAT Test Prep Program to prepare for SAT.

9 out of 10 students have shown score improvement after 5 weeks. Average score improvement between the first test and the final test was 61 points.

What School Admin says about MathCloud

"One of the biggest challenges we face is finding mathematics intervention programs aimed at high schools.

By the time students reach high school, there are so many different areas where a student can be struggling with math. It's extremely challenging to diagnose and address each student's individual needs.

I strongly recommend that schools implement MathCloud. It has been a proven solution for improving student performance. This translates into an increase in number of students that are able to graduate high school, and it gives students a valuable tool for independent study."

James Bevere
Principal of Franklin High School, NJ

"MathCloud benefits our students and teachers. The content is rigorously representing grade level expectations and navigating the platform is user-friendly.

The online courses enable students to more easily understand mathematical concepts as well as the real-world application of mathematical skills."

Nubeja Allen
District Math Supervisor of Franklin Township, NJ

MathCloud in U.S. Schools

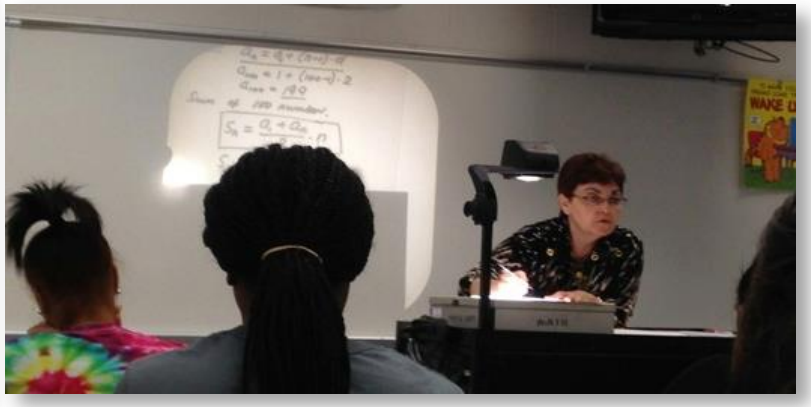
What School Teacher says about MathCloud

“MathCloud was a great way for the teacher to be able to quickly asse ss students. I was able to see exactly which topics in each cluster the students were struggling with. This allowed me to tailor my instruction based on student data.”

- Katie Mallon, Franklin High School

MathCloud in U.S. Schools

MathCloud in Classroom – Blended Learning



MathCloud in Classroom – Blended Learning

MathCloud in U.S. Schools

MathCloud in the center of U.S. Education

Franklin High School
500 Elizabeth Avenue
Somerset, NJ 08873
Phone (732)302-4200 FAX (732)302-4212
www.franklinboe.org

December 4, 2013

Dear Parents/Guardians:

On March 5th, 6th, and 7th, Franklin High School, as legislated by the State of New Jersey, will be administering the High School Proficiency Assessment (HSPA). **Taking and passing the HSPA is a graduation requirement for all New Jersey students.**

Due to the importance of this exam, the school administration has partnered with a private education company called 'MathCloud' to provide practice math HSPA exams from Monday, December 16th till Thursday, December 19th. This exam will provide valuable practice for the March HSPA and will also help us create a personalized course of study for the exam.

Students have been placed into one of four groups based on the alphabetical order of their last name. The following information indicates when they will be taking their practice HSPA exam.

If last name begins with:	**Exam Date:**
A, B, C or D	Monday, December 16th
E, F, G, H, I, J or K	Tuesday, December 17th
L, M, N, O, P, Q or R	Wednesday, December 18th
S, T, U, V, W, X, Y or Z	Thursday, December 19th

On the day of the exam, they will be asked to report to the **High School Cafeteria** at **7:45 AM**. The exam will begin ***promptly at 8:00 AM*** and will end by 10:00 AM.

Test takers are reminded to bring a pencil and a calculator (graphing calculator is recommended). In the event that a student does not have a calculator, one will be provided at the location.
As mandated by the State of New Jersey, cell phones are strictly prohibited at exam sites.

There will be absolutely no talking allowed during this test. Any student who is caught engaging in any other behavior that violates the testing environment will be removed to a solitary room where he/she will finish the test under close supervision.

The exam will be taken on the computer, and instructions on how to access the exam will be provided on the morning of the exam. Because the exam is computerized, students will be able to see their performance as soon as they finish. In early January, students will receive a personalized report about their performance on the exam and a recommended course of study to prepare for the March HSPA.

Please contact your child's school counselor or me if you need more information.

Sincerely,

Director of Guidance

Cc: James Revere

ATTENTION JUNIORS!

Are you HSPA Ready?

Come Find Out!

Franklin High School
Practice Math HSPA Exam

High School Cafeteria • 7:45 AM - 10:00 AM

If your last name begins with:	Your test date is:
A through D	Monday, December 16
E through K	Tuesday, December 17
L through R	Wednesday, December 18
S through Z	Thursday, December 19

Please bring **pencil**, **paper**, and a **calculator** on your assigned date. Report to the cafeteria at 7:45 AM. Testing will begin *promptly* at 8AM. For more information, please see Vice Principal Domena or Vice Principal Chmiel.

presented by MathCloud™ Pursue mastery in mathematics

MathCloud in the center of U.S. Education

Placement Test

Before test – Official Letter from School and Presentation

Franklin High School
500 Elizabeth Avenue
Somerset, NJ 08873
Phone (732)302-4200 FAX (732)302-4212
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Sincerely,

Director of Guidance

Cc: James Beyers

MathCloud in the center of U.S. Education

Professional Development

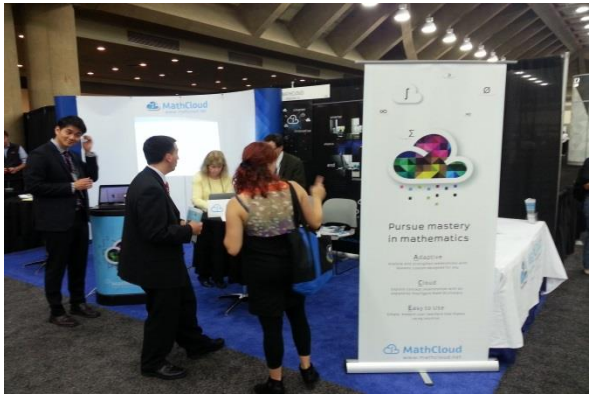
Hands On
Implementation Support

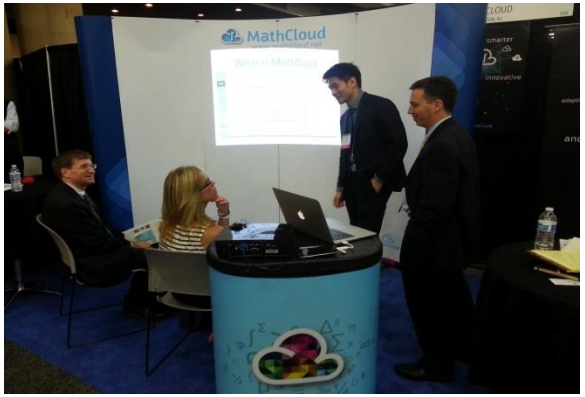
Attending conference and competition

NCTM Conference
(Regional Conference. Baltimore)

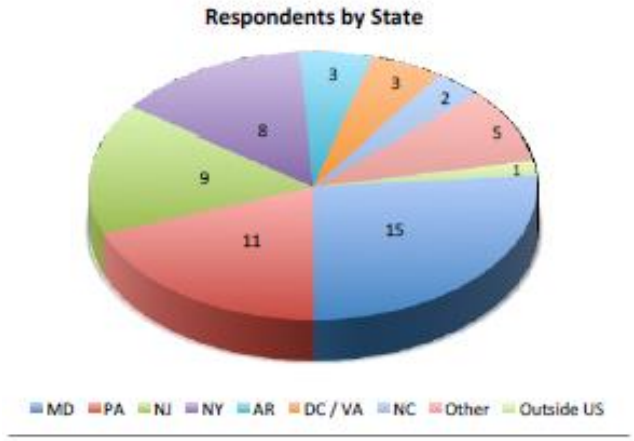
MathCloud's booth in the Exhibit Hall saw significant traffic on both days of the conference. Visitors inquired about how MathCloud would work best in their classroom and attended short presentations to fully understand the product. MathCloud collected contact information from about 60 individuals. Registrants included potential participants in MathCloud's beta program, as well as department chairs, math specialists, and college lecturers. MathCloud left with numerous opportunities for both its teacher-level Classroom Beta program and school- and district-level pilot programs.

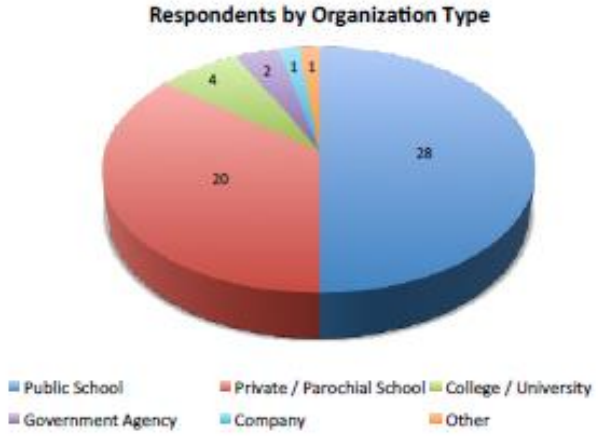
SIIA(Software and Information Industries Association)
(Final Nominee. New York)

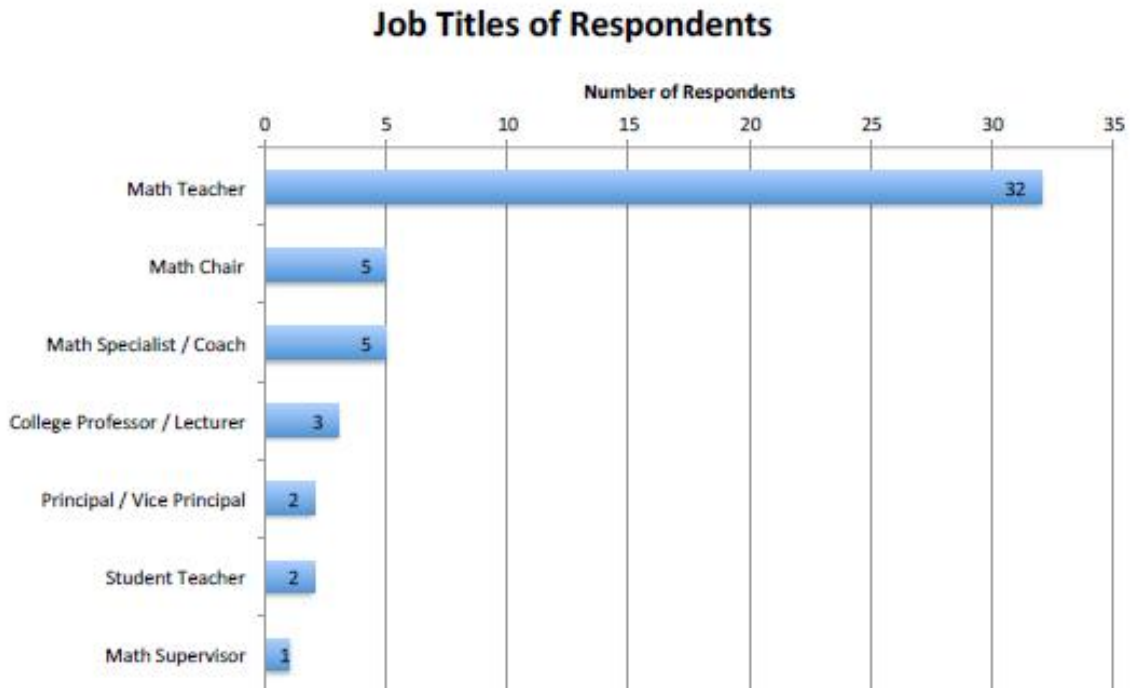




APPENDIX A: Profiles of Respondents at NCTM Regional Conference







MathCloud in the center of U.S. Education

- MathCloud has experience in conducting after-school programs in a public school in New Jersey, and network building with the district's Board of Education and students' parents

Conduct Classes

Conducting focused group MathCloud classes

- Conducted classes for students who performed "less than proficient" in MathCloud's practice NJ HSPA test that all 11th graders took
- Students were part of the after-school program for a month and encouraged to attend regularly for improvement in performance
- Most students have demonstrated "growth," where there was an improvement from the initial assessment and final assessment in the system

Regular Reporting

Meeting with BOE *Meeting with School Admin* *Parent Night*

- Held meetings regularly with Board of Education of New Jersey to demonstrate our results and findings
- Held Parent Night to attract and communicate with students' parents to increase awareness in importance of after-school programs in improving the academic performance of students

MathCloud and its services

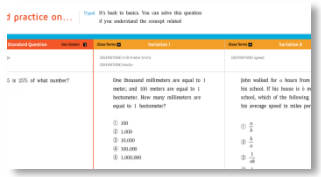
A Visual Dictionary for Mathematic Concepts, MathCloud

- *A comprehensive, and personalized dictionary that provides a visual relationships of all mathematical concepts from elementary to high school to help strengthening integrated thinking skills*
- *A dynamic, and individualized practice that helps you to decipher weakness and help you to overcome that weakness through different learning tools, such as videos and examples.*
- *A credible, transparent communication system with students and parents to provide information on the overall status of individual student and how to succeed in a sustainable basis*

MathCloud's Key Strengths

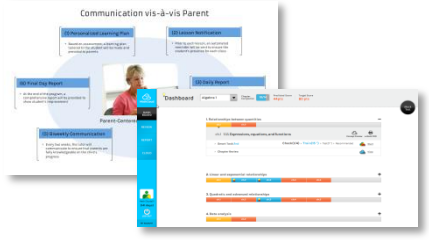
Point 1. Personalized Dictionary

Use Cloud Map to understand the relationship between mathematical concepts and make it your own
A math concept may be related to multiple concepts that may be more complex or simple. Cloud Map visualizes the relationship and status of each math concepts to help increase the understanding in mathematics in a more dynamic format.



Point 2. Personalized Practice

Enhance creative, and integrated thinking skills through concept-based approach
MathCloud offers a diverse range of videos and examples from elementary to high school mathematics to help students to understand math in a more systematic way.



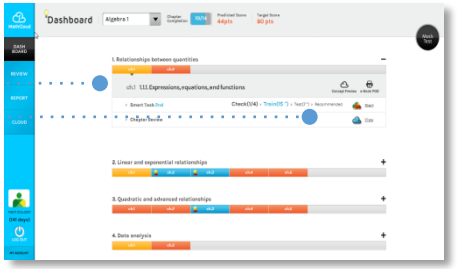
Point 3. Communication with Students and Parents

Able to assess the student's current status to provide more accurate information to the parents
MathCloud continuously communicate with parents based on data-based assessment to provide an accurate picture on current status of each students and propose ways to succeed.

MathCloud Structure

DashBoard

Allows to see individual status at a glance through different colors



Smart Review

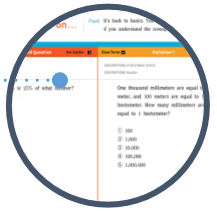
Check incorrect or bookmarked questions from all problem types you have encountered in the system and practice.

Smart Task

Provides personalized practice that covers both your strengths and weaknesses to help you improve in mathematics

Bring It

Provides practice to understand weak problem types and allows to understand the new based on the old information, helping students to know for a longer time.



Cloud Map

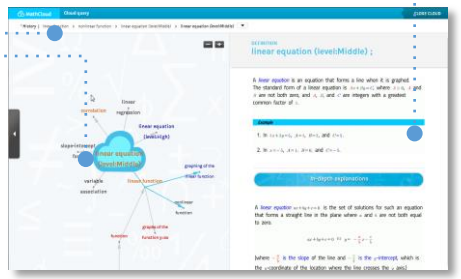
Complements every problem in the system; a visual dictionary that lays out the relationships in all mathematical concepts.

Definition

The definitions are explained in the easiest language; also contains formulas and proofs for necessary ones.

Visual Relationship

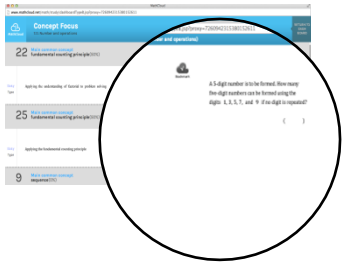
All terms are expressed in relationship to another, and helps students to understand better through visualization of its characteristics.



Cloud Search

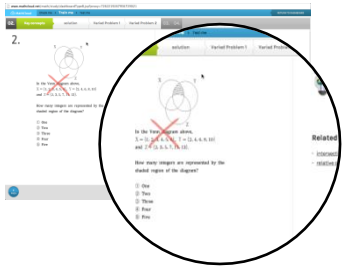
All terms are easily searchable through CCSS Code or concepts.

MathCloud Learning Process



Concept Focus

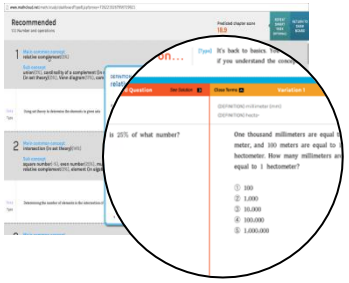
Expose to key concepts you need to know in the chapter; use Cloud for practice



Train Me

Based on the result from Check Me, different problem types and level will be provided.

Review incorrectly answered question and practice similar problem types to fully master.



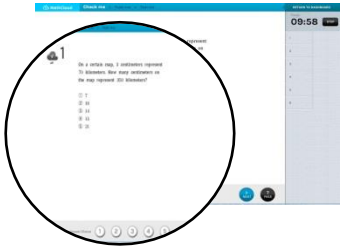
Recommended

System recommends problem types appropriate for you based on answer pattern and understanding rate.

Use this function to study in a more efficient manner.

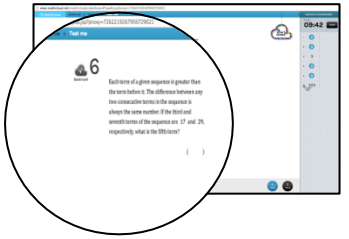
Check Me

Analyze the weakness through selected problem types. Your weakness will be covered in Train Me, the next step.



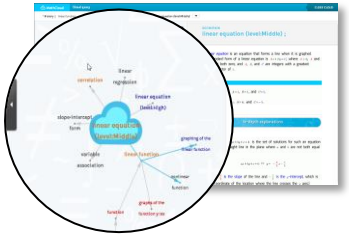
Test Me

Final assessment on the understanding of the chapter, an opportunity to check finally on your overall performance.



Smart Cloud

Through Smart Cloud, you can review key concepts and its related sub-concepts (definitions, examples, and proofs) to help your study.



Parent–Centered Communication System

Communication vis-à-vis Parent

(1) Personalized Learning Plan

- Based on assessment, a learning plan tailored to the student will be made and provided to parents

(2) Lesson Notification

- Prior to each lesson, an automated reminder will be sent to ensure the student's presence for each class

Parent-Centered Communications

(6) Final Day Report

- At the end of the program, a comprehensive report will be provided to show student's improvement

(3) Daily Report

- After each lesson, a brief summary on the day's progress will be sent to the parent for review

(5) Biweekly Communication

- Every two weeks, the tutor will communicate to ensure that parents are fully knowledgeable on the child's progress

(4) Weekly Report

- At the end of each week, a brief summary on student progress, homework, and other reminders will be sent for review

Use MathCloud as Your Learning Tool

STUDY POINT 1. LOOK AT THE BIG PICTURE

Utilize Dashboard to establish a solid schedule and study by chapter to decipher a weak area. Year-based learning is the way we have learned in the past year; once you realize what you need to study, math will become much accessible for you.

STUDY POINT 2. USE IT LIKE A DICTIONARY

MathCloud contains all problems for every Common Core State Standards (CCSS) to provide best practice for students. In addition, all study materials have both videos and examples to help students who many need different tools to study.

STUDY POINT 3. USE IT TO PREPARE FOR ADVANCED COURSES

If you are a student who are interested in Mathematics and want to study further, it's even more important to understand mathematics in a conceptual manner. Due to its structure, MathCloud can help students to learn concepts that haven't been learned before. Start from easy concepts to reach more complex concepts. As you go through, you would be able to see the "big picture," or study on your own.

If you have learned it before, you can easily move ahead to the next; if you have not or it is your weakness, use it as a review tool to overcome your weakness.