



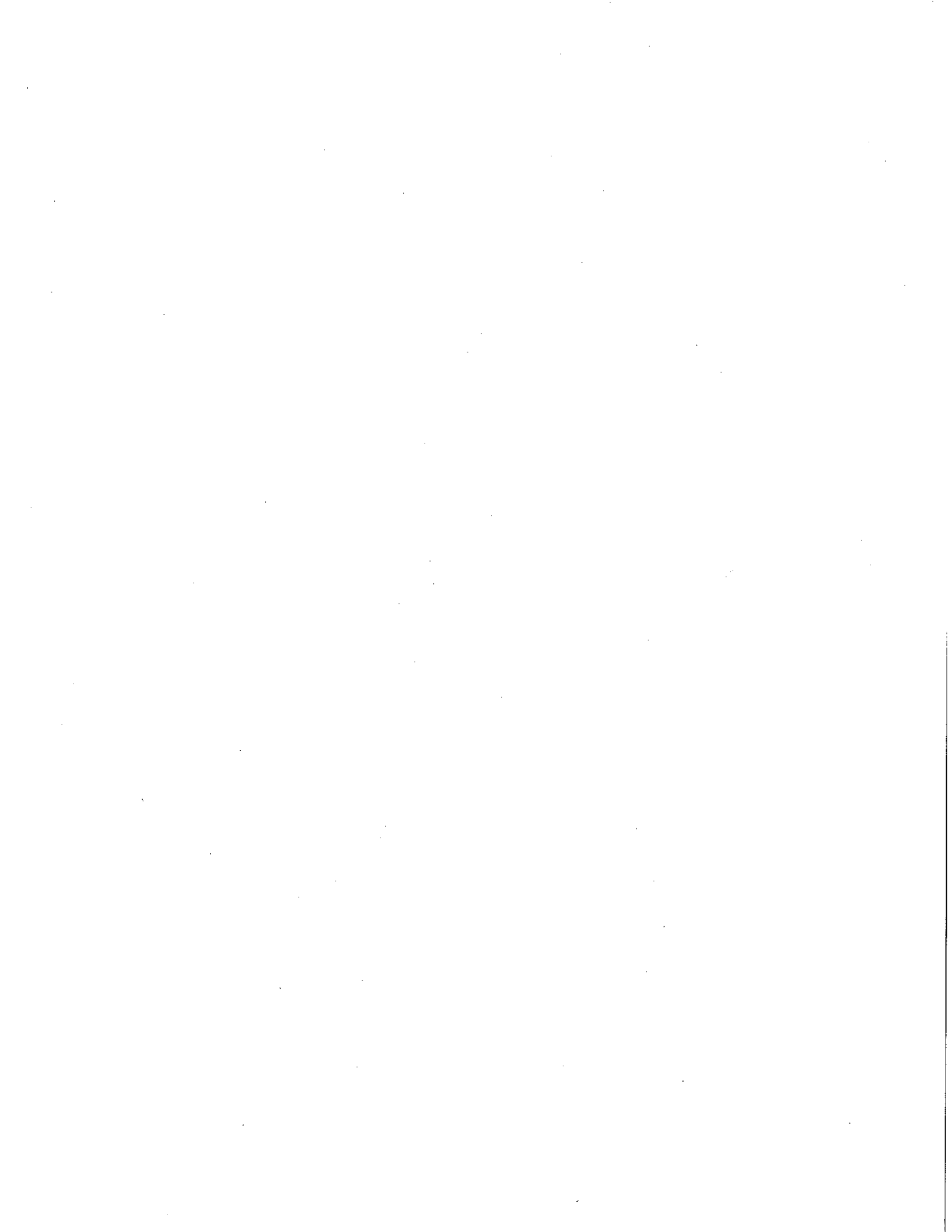
JANET BARRESI
STATE SUPERINTENDENT OF PUBLIC INSTRUCTION
STATE OF OKLAHOMA

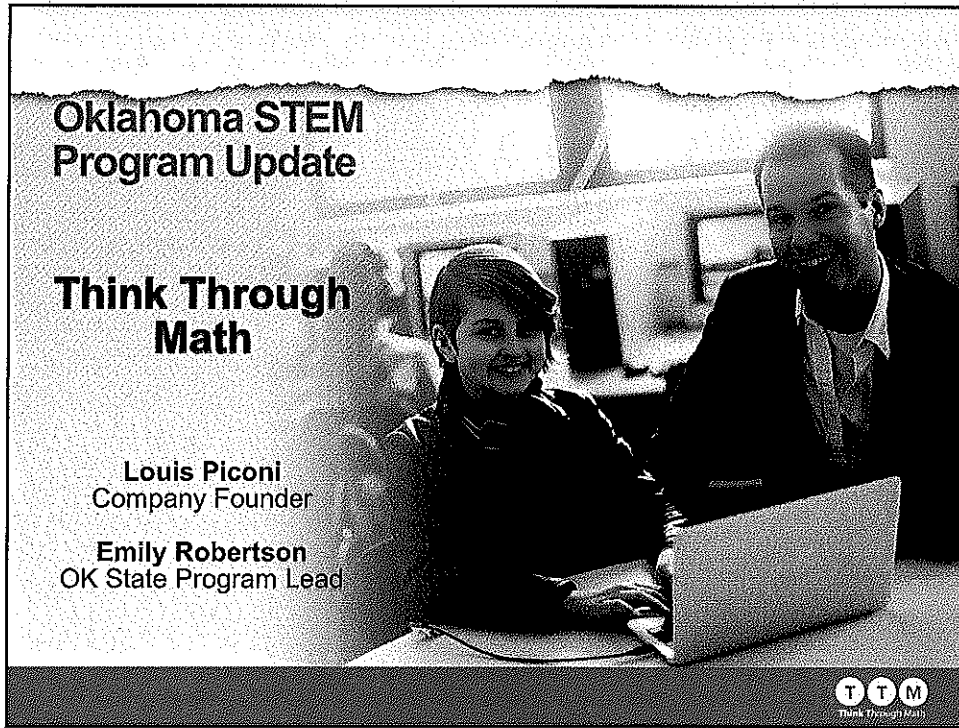
MEMORANDUM

TO: The Honorable Members of the State Board of Education
FROM: Janet C. Barresi *JCB*
DATE: December 18, 2014
SUBJECT: Think Through Math Program Update

The Think Through Math presentation will give a comprehensive program update for the first semester of the 2014-15 school year. The focus will be on current active enrollment numbers, implementation/progress metrics, OCCT testing data correlation to TTM usage, student outcomes/incentives/contests, teacher professional development, and the overall state investment.

JCB/JD





**Oklahoma STEM
Program Update**

**Think Through
Math**

Louis Piconi
Company Founder

Emily Robertson
OK State Program Lead

TTM
Think Through Math

AGENDA
TTM OKLAHOMA STEM PRESENTATION

- PART 1: TTM Formula for Success
- PART 2: STEM Program Metrics
- PART 3: META Results
- PART 4: Site Based Results
- PART 5: Teacher Talk

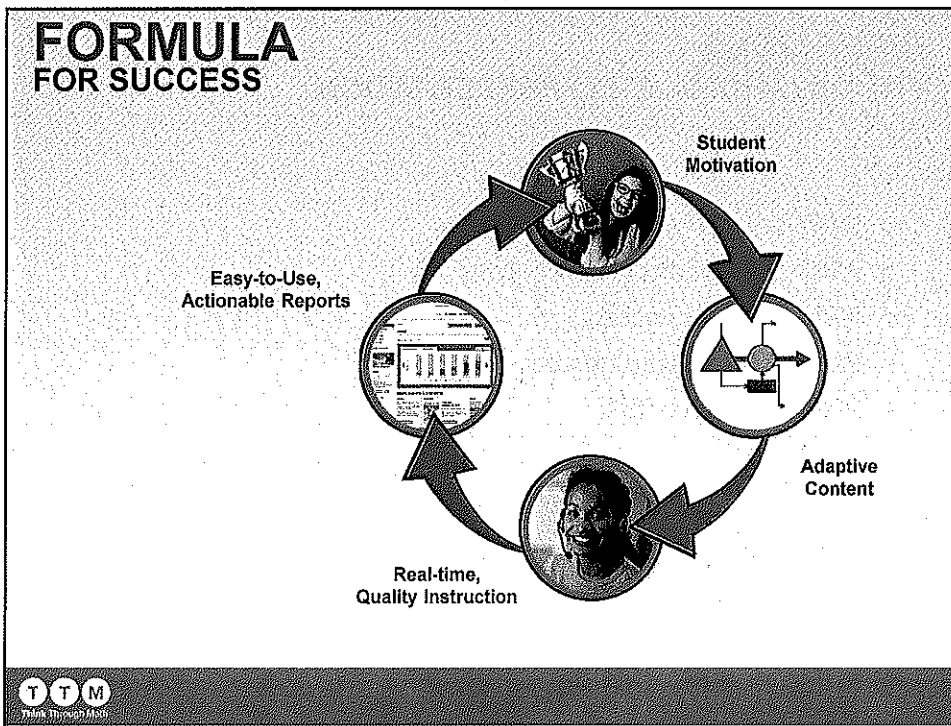
TTM
Think Through Math

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**PART 1:
TTM FORMULA FOR SUCCESS**

TTM
Think Through Math

3



LIVE TEACHERS ONLINE

"I can raise my hand anytime."

DAY	TIME
Monday–Thursday	6:30 a.m.– 11:00 p.m.
Friday	6:30 a.m.– 9:00 p.m.
Saturday	10:00 a.m.– 2:00 p.m.
Sunday	5:00 p.m.– 9:00 p.m.



5

SHORT-TERM MOTIVATION

Team or Individual Models



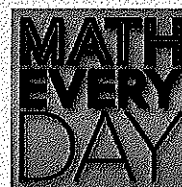
October



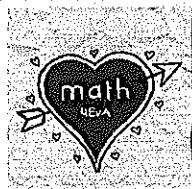
November



December



January



February



March



June-July



6

LONG-TERM MOTIVATION

Social Motivation for Math



American Red Cross



WOUNDED WARRIOR PROJECT



BOYS & GIRLS CLUBS OF AMERICA



Big Brothers Big Sisters



7

CUSTOMIZED FOR OKLAHOMA

SY2014-2015 Professional Development

Regional Training Sessions - 29

Site Training Sessions – 267

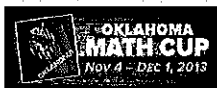
Site Coaching Visits – 50

Site Administrative Visits - 51

Motivation Programs



Red River Rumble – A state v. state competition designed to motivate students to do extra math as part of teams that compete for state pride.




Oklahoma Math Cup – A school v. school competition designed to recognize the top classes and schools in OK.



Special Opportunities – Students can do math and donate their TTM points to charities. For example, on Veterans Day 2014, OK students were part of a group that did extra math to donate \$9,870 to The Wounded Warrior Project.




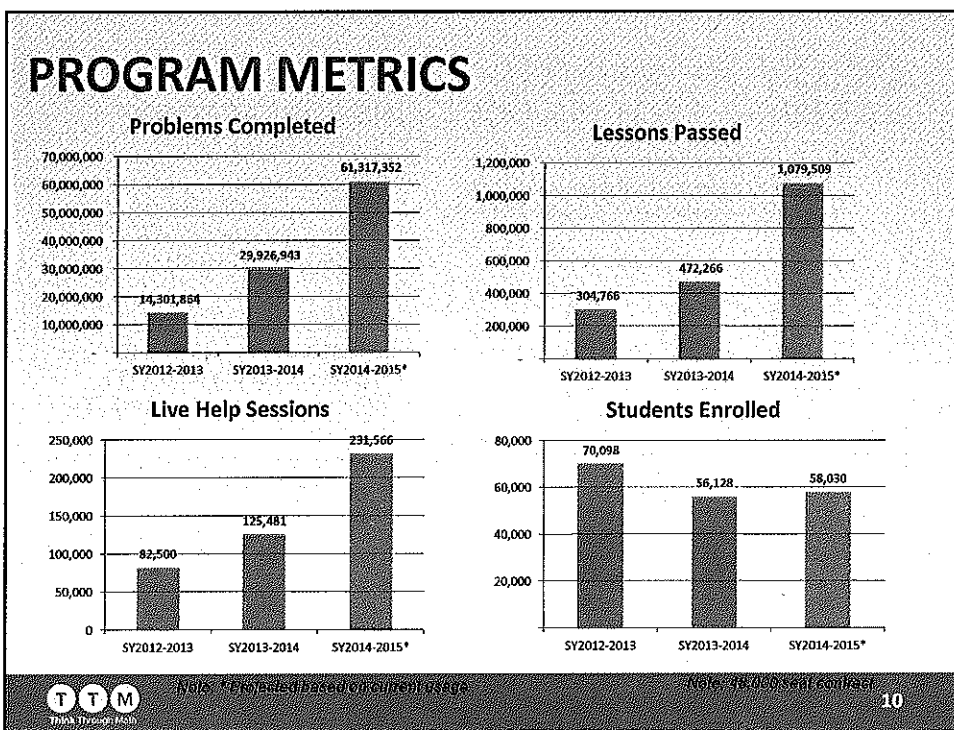
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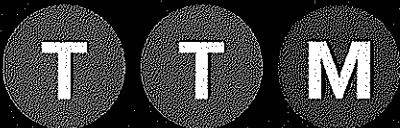


Think Through Math

PART 2: STEM PROGRAM METRICS



9





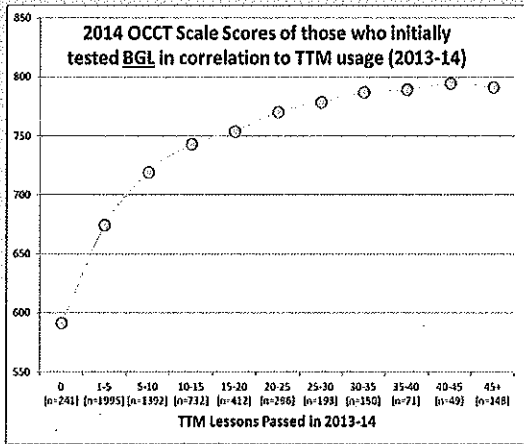
Think Through Math

PART 3: META RESULTS


11

OCCT RESULTS

SY2012/13 v. SY2013/14, OCCT "UNSATISFACTORY"




TTM Lessons Passed in 2013-14	Sample Size (n)
0	241
1-5	1995
5-10	1392
10-15	732
15-20	412
20-25	296
25-30	193
30-35	150
35-40	71
40-45	49
45+	148

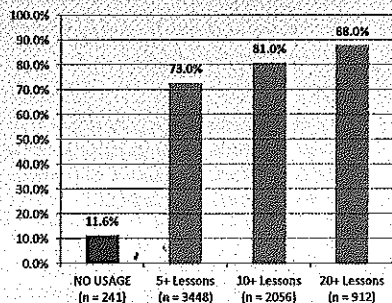
Sample
5,684 students scoring "Unsatisfactory" on OCCT during SY2012-2013

SY2013-2014 Results
Students in 1-5 lessons passed category on TTM moved to Limited Knowledge

Students in 5+ lessons passed on TTM moved to moved to Proficient



OCCT RESULTS WHAT THE RESULTS MEAN



Results

Of the sample students that did NOT actively use TTM in SY2013-2014, the OCCT Proficiency rate was 11.6%. This is our control group.

Students that used TTM and passed 5 or more lessons scored OCCT Proficient at a rate of 73%.

Students that used TTM and passed 10 or more lessons scored OCCT Proficient at a rate of 81%.

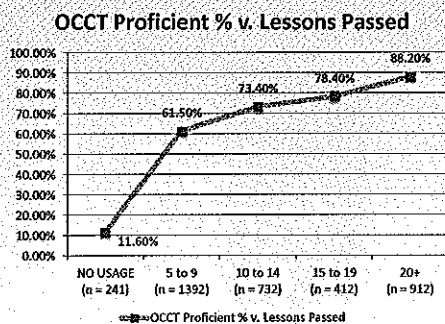
Students that used TTM and passed 20 or more lessons scored OCCT Proficient at a rate of 88%.

Sample

5,684 students scoring "Unsatisfactory" on OCCT during SY2012-2013



OCCT RESULTS WHAT THE RESULTS MEAN



Results

Of the sample students that did NOT actively use TTM in SY2013-2014, the OCCT Proficiency rate was 11.6%

Students that used TTM and passed 5 to 9 lessons scored OCCT Proficient at a rate of 61.5%

Students that used TTM and passed 10 to 14 lessons scored OCCT Proficient at a rate of 73.4%

Students that used TTM and passed 15 to 19 lessons scored OCCT Proficient at a rate of 78.4%

Students that used TTM and passed 20+ lessons scored OCCT Proficient at a rate of 88.2%

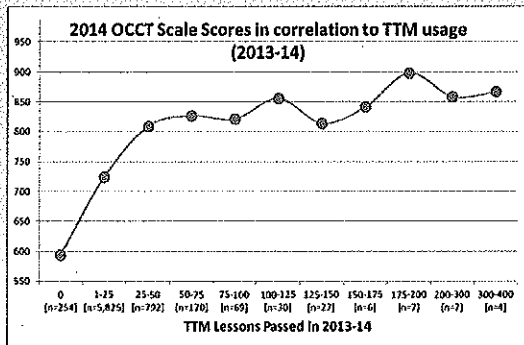
Sample

5,684 students scoring "Unsatisfactory" on OCCT during SY2012-2013



OCCT RESULTS

SY2012/13 v. SY2013/14, OCCT GENERAL POPULATION



Sample

7,191 students taking OCCT in SY2012-2013

SY2013-2014 Results

Students passing 25 lessons on TTM averaged a score in the Advanced range

Students passing up to 25 lessons averaged a score in the proficient range

Non-users averaged a score in the Not Satisfactory range

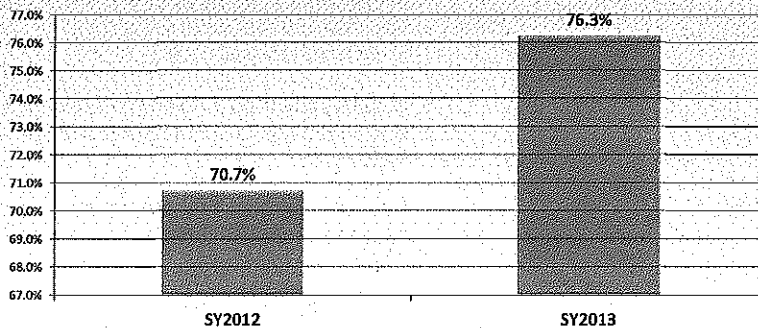


OKLAHOMA

OCCT SAMPLE SY2012-2013

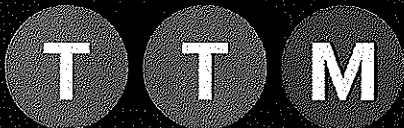
N = 820, 5 SCHOOLS w/ STUDENTS IN GRADES 3-8

TTM User OCCT Passing Rate Change SY2012 to SY2013




Overall, results were significantly positive with the percentage of "Proficient" students increasing by 5.52%. In other words, 70.7% of the sample students passed the OCCT for their respective grade level in 2012 and 76.3% of those same students passed in 2013 after using Think Through Math.



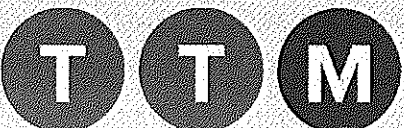


Think Through Math

**PART 4:
SITE BASED RESULTS**




17



Think Through Math

SY2013-2014

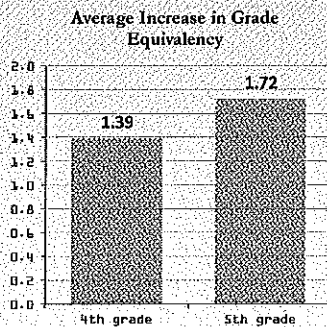


18

OKLAHOMA

Chisholm Elementary 4th and 5th Grade

TTM QUICK FACTS	
Students Enrolled	205
Students Started	204
Lessons Completed	9712
Lessons Per Student	47.6
Students w/5+ Lessons	201
Court Help	16,133
Live Help	2,144
Grade Equivalent	41.46
TTM Math Change	+16.9%



"We love how Think Through Math is self paced, challenging, and offers incentives that are real world related. Even though this is supplemental to the regular classroom material, it is well worth the time to implement."

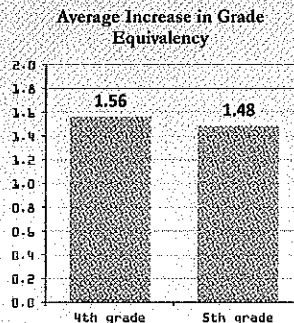
- Lisa Detrixhe, Title 1 Teacher, Chisholm Elementary



OKLAHOMA

Marlow Elementary 4th and 5th Grade

TTM QUICK FACTS	
Students Enrolled	187
Students Started	180
Lessons Completed	7590
Lessons Per Student	42.2
Students w/5+ Lessons	162
Court Help	7,423
Live Help	802
Grade Equivalent	41.51
TTM Math Change	+15.9%



"I just wanted to thank you sooooo much for the Think Through Math program. We received our test scores back and several of my students who would of scored Proficient on the OCCT Math test actually scored ADVANCED! I would love to take all the credit and say it was because of my awesome teaching ability but it wasn't only that. I believe my teaching curriculum combined with the Think Through Math program attributed to several of my students' Advanced score on the OCCT Math Test. Thank you!"

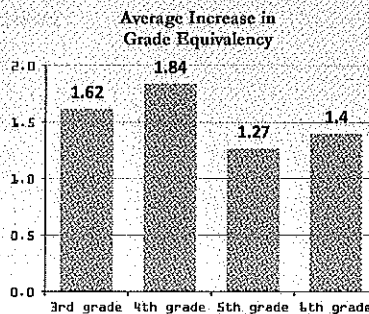
- Erika Thomas, Teacher, Marlow Elementary



OKLAHOMA

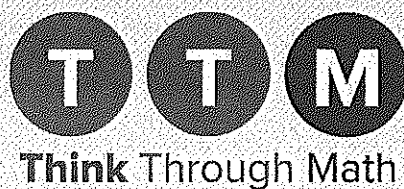
Perry Elementary Grades 3,4,5,6

TTM QUICK FACTS	
Students Enrolled:	123
Students Served:	808
Lessons Completed:	1,896
Lessons Per Student:	217
Students w/5+ Lessons:	136
Council City:	7,246
Live Help:	676
Grade Equivalency:	11.8
Year to Rank Change:	177%



"We had amazing growth with Think Through Math and this is a challenging group of students to get growth out of. I'm completely sold on this program and personally love it. They ALL gained in confidence that they can do math now."

Theresa Jones, Title I Teacher, Perry Upper Elementary



SY2012-2013

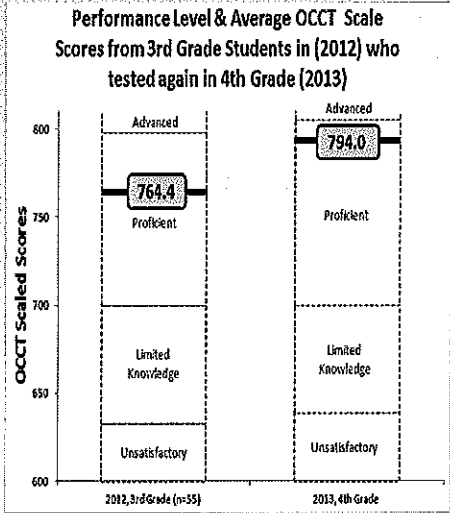


OKLAHOMA PUTNAM CITY, TULAKES ELEMENTARY

TTM QUICK FACTS

Students Served	163
Lessons Completed	2,875
Lessons Per Student	17.6
% Lessons Below Grade	87%
Evening/Weekend Work	21%
Coach Help	5,264
Live Help	605

The TTM Tulakes 3rd to 4th Grade cohort achieved a 12.6% increase in the number of students reaching "Proficient" on the OCCT as opposed to the statewide increase of 3.18%. Additionally, the cohort students improved their mean OCCT score by nearly 30-point (see graphic). 5th grade students using TTM increased their rate of reaching Proficient by 6.2% while the statewide passing rate changed by -2.8%.



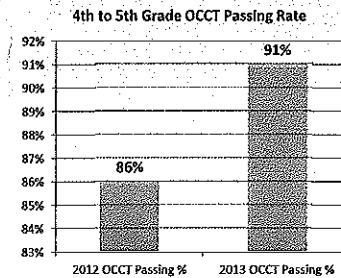
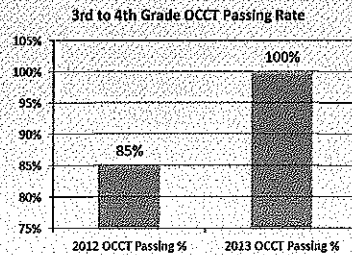
OKLAHOMA OKLAHOMA UNION PS

TTM QUICK FACTS

Students Served	140
Lessons Completed	4,036
Lessons Per Student	28.8
% Lessons Below Grade	24%
Evening/Weekend Work	12%
Coach Help	2,352
Live Help	24

75 students used TTM spanning 2 cohort groups, 3rd to 4th and 4th to 5th grades. The cohorts shifted their percent of OCCT passing scores, respectively, by 15% and 5.71% respectively.

"My teachers and students like TTM. I hope OSDE keeps funding it for schools. Last year 98% of my 4th graders passed math!" - Brenda Taylor, Teacher

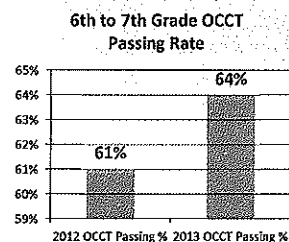
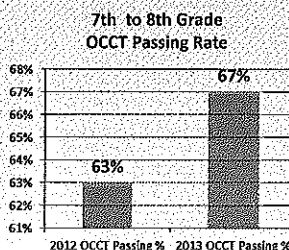


OKLAHOMA ANADARKO PS, ANADARKO MIDDLE SCHOOL

TJM OTHER FACTS

Students Started:	116
Lessons Completed:	6344
Lessons Per Student:	54.7
% Lessons Below Grade:	53%
Evening/Weekend Work:	55%
Coach Help:	2431
Live Help:	351

Measured cohorts were made up of students in two grade groups. Students moving from 6th to 7th grades and 7th to 8th grades were measured for OCCT changes after using TJM during SY2012-2013. Both cohorts improved their percentage of students passing the OCCT after using TJM. The 7th to 8th grade cohort improved their passing rate by 3.67% while the state average was -3.05%.



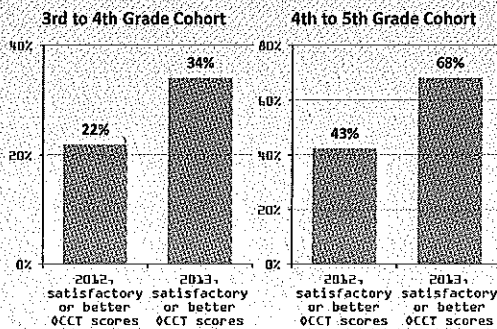
OKLAHOMA TULSA PS, SPRINGDALE ELEMENTARY

TJM OTHER FACTS

Students Started:	125
Lessons Completed:	3115
Lessons Per Student:	24.92
% Lessons Below Grade:	28%
Evening/Weekend Work:	24.6%
Coach Help:	1507
Live Help:	310

Results were very strong with the 3rd to 4th grade cohort increasing their OCCT passing rate by 12 percentage points and the 4th to 5th grade group improving by 25 percentage points.

"This has been an excellent program, my students have thoroughly enjoyed using TJM. It has been a great tool to have in my classroom."
Michelle Gilbert, Teacher, Springdale Elementary, Tulsa PS



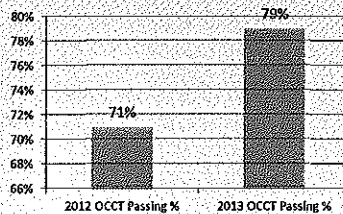
OKLAHOMA TULSA PS, OVERHOLSER ELEMENTARY

T T M QUICK FACTS

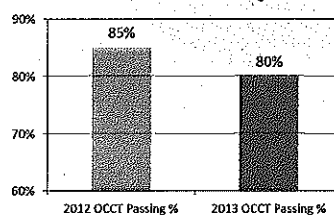
Students Served:	105
Lessons Completed:	5315
Lessons Per Student:	40.92
% Lessons Below Grade:	42%
Evening/Weekend Work:	24.0%
Coach Help:	13/173
Extra HJ's:	1310

The results were mixed with 3rd to 4th graders improving their passing rate by 8 percentage points showing nearly a +5 percentage point net difference from the state average for 3rd to 4th graders. However, the 4th to 5th grade cohort decreased by 5 percentage points overall. It is worth noting that the statewide 5th grade passing rate for 4th to 5th graders was down by almost 3%.

3rd to 4th Grade OCCT Passing Rate



4th to 5th Grade OCCT Passing Rate



Think Through Math

PART 5: TEACHER TALK



OKLAHOMA TEACHER TALK PUTNAM CITY, TULAKES ELEMENTARY

"I want to share with you the success of our 4th grade students at Tulakes Elementary in Putnam City Schools, Oklahoma City, OK. Upon receiving our initial state test scores in math, the first words that came from the 4th grade teachers were "Wow! Way to go kids!! OMG! Yay!! and Think Through Math!!"

Tulakes Elementary is a 100% poverty school located in one of the most populated square miles in Oklahoma. The crime rate of the area is extremely high, and our children fight battles that no child should ever have to endure. Greatness is what they accomplished this past spring.

Our grade level had approximately 75 students take the regular state math test, and we achieved a 93% passing rate! The highest recorded math score among the elementary schools in our district. Two of our 4th graders, one African American male and one African American female, attained perfect scores! We credit a significant amount of our success to the Think Through Math initiative.

Once we, as teachers, were trained on how to implement TTM with our classes, within a few days we presented our students with the information. They fell in love with the ideas of creating avatars, having their names on the leader board, donating to charities, and competing with other students across the state and nation! The easy use of the program motivated us to actively engage and encourage our students to use TTM in the computer lab, at home, at the public library, and any time they had internet access. We had students that spent ENTIRE WEEKENDS on TTM, trying to beat the Sunday night deadline. Some students even spent their whole spring break working on TTM.

What was really rewarding is when our children realized how much fun they were having while learning. TTM became serious business to our students and they had a blast with every challenge.

- Kenyella Waiters, Teacher, Tulakes Elementary



OKLAHOMA TEACHER TALK

"My kids love TTM and I am a believer in it. Especially after I just had a low achieving student stand up and teach a concept at my smart board and turn on a handful of other kid's light bulbs about the concept. And he just casually said, 'Yeah, I learned that on Think Through Math last night' and headed to his seat."

- Kara Scifres, Teacher, Lincoln Elementary, Ardmore Public Schools



OKLAHOMA TEACHER TALK

District	Campus	Name	Quote/Feedback	Role
Chisholm Public Schools	Chisholm Elementary	Lisa Detrikhe	"We love how Think Through Math is self paced, challenging, and offers incentives that are real world related. Even though this is supplemental to the regular classroom material, it is well worth the time to implement."	Teacher
Okemah Public Schools	Okemah Middle School	Shaunda Painter	"My students love Think Through Math! The contests and incentives make math fun for them, and in return, their willingness to learn has definitely increased. Think Through Math is by far the best math program I have ever used."	Teacher
Crutcho Public School	Crutcho	Keith Lewis	"Think Through Math has quickly become one of my favorite programs. The remediation is awesome, I love the live online tutors available whenever my students are working, the audio feature is amazing for any student struggling with reading, AND the Spanish is perfect for my ELL students."	Teacher



31

OKLAHOMA TEACHER TALK

District	Campus	Name	Quote/Feedback	Role
Moore Public School	Winding Creek Elementary	Paula Gifford	"Our teachers and students love the program, and it is of great academic benefit to our students. We currently are the only Title I elementary school in Moore Public Schools that has an A on our school report card, and I give much credit to our increased math scores to TTM. Thank you for providing such a wonderful program for our school!"	Principal
Jennings Public School	Jennings Elementary	Derrick Meador	"Think Through Math is the best adaptive learning program I have seen. The ability to connect to a live tutor separates them from their competitors. Our student test scores and overall grade level have improved significantly since beginning this program."	Principal
Fox Public Schools	Fox Elementary	Mark Williams	"I absolutely love Think Through Math. The kids have finally found something to get excited about. They realize they can accomplish things in math they didn't think they could do in the beginning. And the younger kids who didn't get to do Think Through Math this year are looking forward to doing it in the future."	Principal
Mid-Dei Public Schools		Gina Wright	"Think Through Math has enabled our teachers to differentiate instruction at the student level. Students enjoy the ability to work through problems with the help of their classroom teacher, or through the multiple levels of help within the program. Due to the 24-7 online nature of the program, the home access availability can be a conversation starter between schools and families regarding student academic needs in mathematics."	Math and Science Instructional Facilitator



32

OKLAHOMA TEACHER TALK

District	Campus	Name	Quote/Feedback	Role
Verdigris Public Schools	Verdigris Elementary	Kelly Keith	"The Think Through Math Program provides great incentives for students to want to practice math concepts that directly support the classroom. I have also had several parents tell me how much they like TTM because their children beg them to work on TTM at home."	Teacher
Turner Public Schools	Turner Elementary School	Jessica Mitchell	"Think Through Math has been a great motivator for my students. My students work hard to try to get lessons and points so they can be on the top of the leader board. I feel that TTM is beneficial because it not only motivates them but allows them to work at a level that works for them without frustration."	Teacher
Bartlesville Public Schools	Grissom ES	Cindy Lee	"Think Through Math has enabled our teachers to differentiate instruction at the student level. Students enjoy the ability to work through problems with the help of their classroom teacher, or through the multiple levels of help within the program. Due to the 24-7 online nature of the program, the home access availability can be a conversation starter between schools and families regarding student academic needs in mathematics."	Teacher

