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Showing Growth w/ Collaborative Workbook

Facilitator: Jonathon Lee

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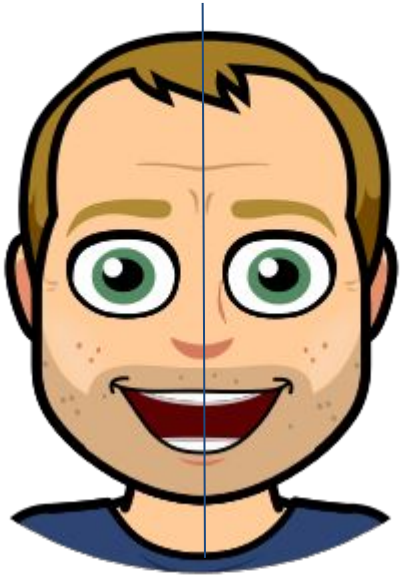

Jonathon Lee
jlee@edplus.org

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- Instructional Specialist
- Workshop Facilitator
- Student SHOWcase
- METC Podcast
- METC TV

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St. Louis RPDC™

- Missouri Model Districts
- Technology Consultant
- Data Consultant
- Collaborative Work

Collaborative Work
&
Missouri Model Districts

IEP

Shrink the GAP

Of Achievement

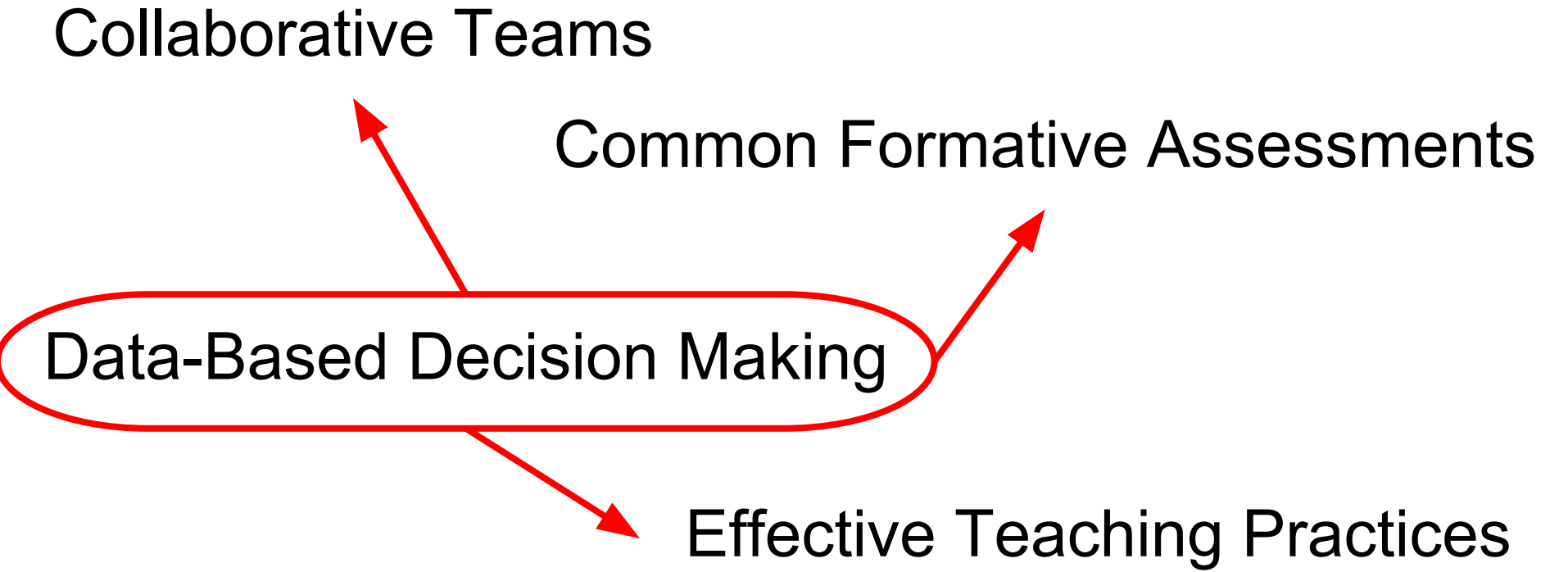
Non-IEP

Based on the work of

John Hattie

Visible Learning

Effective Practices



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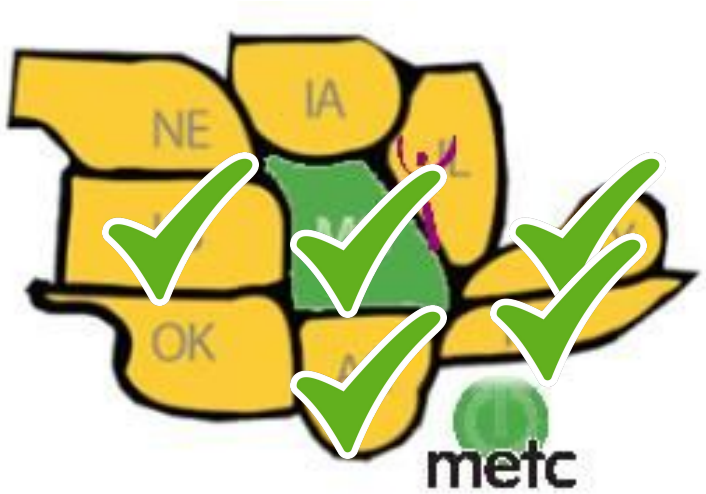
Enter the

Google Data Workbook

Also available on Excel 365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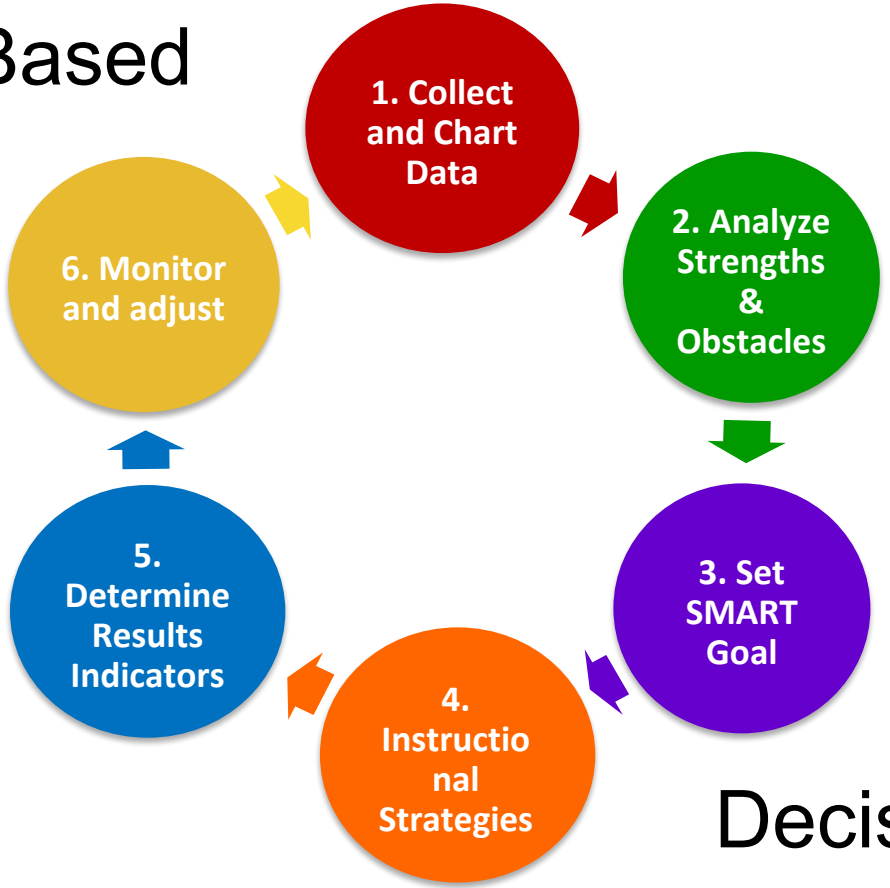
Data-Based



Process

Decision Making

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Power Standards

Works 4 All

Pre-k → 12th

Large Teams → Singletons

Core Subjects → Specialists

Workbook Setup Options

of Teacher/Classes per grade level/ subject

6, 10, 16, 22

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Get the Workbook

https://goo.gl/5U3IZv

Remember the # of classes determines which workbook you need.

Example: 3 teachers each teach 5 sections - They would need 15 class tabs.

Options are:
Workbook 6 - Workbook 10 - Workbook 16 - Workbook 22

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Let's Take a Look

goo.gl/ZhpW3K

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Resource Slides

DATA PAGE

Data

D	E	F	G	H	I	J	K
Sperry	Wideman	Madlinger	** Denotes	IEP			
Taylor	zzAndy		zz Denotes	AA			
Maggie	Angie	Chelsea	qq Denotes	ELL			
zzStephanie	Ann		yy Denotes	boys			
Theresa	Anna	Chris	xx Denotes	Other			
Ann	qqAnthony	Cindy	Student group:	Grade 3			
qqSam	Ashley	**zzClint		Pre-Test		Post-Test	
Maria	yyAustin	Colleen	Date of Assessment:	2/24/2016		3/14/2016	
Mario	Becky	Corey	Standard Assessed:	3.NBT.A.3			
Abby	**Ben	Curt	Points possible:	10		10	
Adam	Beth	Dana	Proficient:	8		8	
**Alice	yyBrad	yyDavid	Close to proficient:	6		6	
Allan	Bret	Debbie	Far to go:	4		4	
yyAlison	Brie	Dennis	Intervention:	0		0	
Amanda	zzBrittnay	qqDorothy	Configure SMART goal:	YES			
qqAmy	Carol	Drew	Total # of Students taking:	Pre-Test	175	Post-Test	145
zzAndy	Cathy	zzLee					
Angie	qqChelsea	Todd	District:	EdPlus	School:	CW	
qqAnn	Chip	**Aves Tera	Total # of Students in Grade:	171	Total # IEP:	25	
Anna	zzChris	yyTed	Total # of Teachers in Grade:	5	Date Submitted:	5/15/2016	
qqAnthony	Cindy	**Sarah	Content Area	Math	Consultant:	The King	
Ashley	**zzClint	Erin					
yyAustin	Colleen	**qqKathy					
Becky	Coreyxx	qqJon					
**Ben	Curtxx	**Sam					
Beth	Dana	yyBeth					
yyBrad	yyDavid	**jamie					
Bret	Debbie	Charlie					
Brie	Dennis	**Carlqqzz					
zzBrittnay	qqDorothy	Molly					
Carol	Drew	Sammy					
30	30	28	171				

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Teacher2

Collect and chart Data

Step 1

- Number and percentage of students in each performance group
- Disaggregated by teacher
- Assemble data prior to data team meeting

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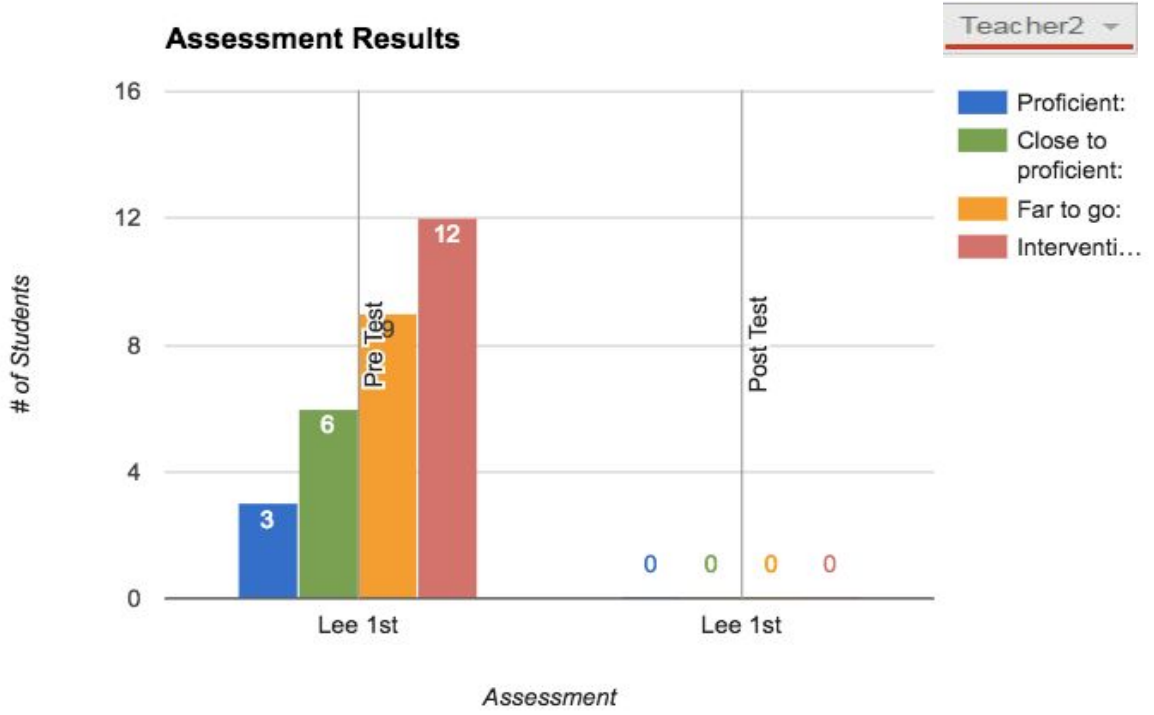
Grade 3

Standard Assessed:

Student Name	Pre-Test
zzStan	5
Todd	4
**Tera	6
yyTed	3
**Sarah	2
Erin	7
**qqKathy	3
qqJon	4
Jon	10
**Sam	9
yyBeth	6
**jamie	8
Charlie	5
**qqzzCarl	4
Molly	5
zzqqEarl	6



Level 4	Level 3	Level 2	Level 1	
10%	20%	30%	40%	
Jon, **Sam, **jamie	**Tera, Erin, yyBeth, zzqqEarl	zzStan, Todd, qqJon, Charlie, **qqzzCarl, Molly, Stacy	yyTed, **Sarah, **qqKathy, Thomas, zzStephanie, Julie, yyJenea, Vicky, **Bill, zzBetsy, Stacy	75%

Analyze Strengths & Obstacles

Step 2

- Essential step - often skipped or done as item analysis
- Identify strengths and misconceptions of each performance level based on student work samples
- Make inferences about targeted need of students

Steps 2-5

Data Analysis

	Strengths	Errors & Misconceptions	Inferences
Proficient			
Close to Proficient			
Far to Go			
Intervention			

Pre Analysis

Assessment Name:	3.NBT.A.3		
Date of Discussion:	3/1//2016	Participants:	J. Lee, B. Boyd, B. Prickett, B. Genenbacher

	Data Analysis		
	Strengths	Errors/Misconceptions	Inferences
Proficient:	-mental strategies	minor mistakes and in computation, may not have full concept of p/p/w shown with bar model	mistakes were most likely careless or rushing
Close to proficient:	-build correct models for addition and subtraction, proper set up for problems	-missing steps in multi-step problem, incorrect operation chosen	thinking strategy has been turned into a procedure with little/no meaning
Far to go:	-some accuracy (mostly with +), numbers aligned in problem and big number on top	same as "close", errors regroups, unable to complete models, difficulty choosing correct function	-Same as close - lack of comprehension of the problem
Intervention:	-adding small numbers	-same as "far", trouble setting up problems, difficulty regrouping	same as far - lack basic facts, place value, and number sense

SG statement

Set SMART goal

Step 3

Increase **(<u>what</u>)** ***from*** **(<u>this</u>)** ***to*** **(<u>that</u>)** ***and by*** **(<u>when</u>).**

- SMART GOAL – assumes all students “proficient” and “close to proficient” and “far but likely to become proficient” reach proficiency
- “intervention” students will grow but will likely need more than one cycle to get to proficient

	Level 4	Level 3	Level 2	Level 1	SMART Goal Met?
Pre-Assessment Percentages	12%	19%	27%	42%	75%
Pre-Assessment Students	Jon, **Sam, **jamie	**Tera, Erin, yyBeth, zzqqEarl	zzStan, Todd, qqJon, Charlie, **qqzzCarl, Molly, Stacy	yyTed, **Sarah, **qqKathy, Thomas, zzStephanie, Julie, yyJenea, Vicky, **Bill, zzBetsy, Stacy	

SMART goal statement:

The percentage of Grade 3 students scoring proficient or higher in 3.NBT.A.3 will increase from 9% to 48% by the end of the learning cycle as measured by the CFA administered on 3/14/2016

SG statement

Instructional Strategies

Step 4

- Research-based instructional strategies
- Targeted to instructional needs determined for each performance level
- Teams must agree on:
  - ✧ strategy to be implemented for each group
  - ✧ time, frequency, and duration of implementation
  - ✧ what it should look like in the classroom

Effective Instructional Strategies	How It Looks in the Classroom
Identifying sim. & diff. (Yields a 45 percentile gain)	Thinking Maps. T-charts. Venn diagrams, classifying, analogies, cause and effect links, compare and contrast organizers, etc.
Summarizing and note taking (Yields a 34 percentile gain)	Teacher models summarization techniques, identify key concepts, bullets, outlines, clusters, narrative organizers, journal summaries, break down assignments, create simple reports, quick writes, graphic organizers, column notes etc.
Reinforcing effort and providing recognition (Yields a 29 percentile gain)	Hold high expectations, display finished products, praise students' effort, encourage students to share ideas and expresss their thoughs, honor individual learning styles, , conference individually with students, authentic portfolios, etc.
Homework and practice (Yields a 28 percentile gain)	Retell, recite and review learning for the day at home, reflective journals, parents are informed of the goals and objectives/learning targets, grade level teams plan together for homework distribution, Student Led Conferences, teacher emails, etc.
Nonlinguistic representations (Yields a 27 percentile gain)	Visual tools and manipulatives, problem-solution organizers, spider webs, diagrams, concept maps, drawings, charts, thinking maps, graphic organizers, sketch to stretch, storyboards, foldable, act out content, make physical models, etc.
Cooperative Learning (Yields a 23 percentile gain)	Integrate content and language through group engagement, reader's theatre, pass the pencil, shared reading and writing, science projects, debates, jigsaw, etc.
Setting obj. and providing feedback (Yields 23 percentile gain)	Articulating and displaying learning targets/goals, KWL, specific feedback, etc.
Generating and testing hypothesis (Yields 23 percentile gain)	Thinking processes, constructivist practices, investigate, explore, social construction of knowledge, use of inductive and deductive reasoning, multiple solutions, etc.
Questions, cues, & adv. organizers (Yield a 22 percentile gain)	Graphic organizers, guiding questions, think alouds, inferencing, predicting, drawing conclusions, skim chapters to identify key vocabulary, concepts and skills, annotating the text, etc.

Work of John Hattie

Effective Strategies	How It Looks in the Classroom
Metacognition **.69 effect size**	Development of mental maps, awareness of one's own actions and their effects, monitoring plans throughout a process, self-evaluation of completed plan, etc.
Feedback **.73 effect size**	Providing information about what a student does or does not know, and what direction a student must take to improve-timely, corrective, specific, verified and focused on product.
Assessment Capable Learner **off the chart effect size**	Students self-assess, track and share progress, confidence grows, increased motivation and achievement
Reciprocal Teaching **.76 effect size**	Student directed practice where students work collaboratively to predict, clarify, question and summarize.
Direct Instruction **.59 effect size**	Incorporates 7 essential steps in a lesson; goal, measure, hook, presentation, guided practice, wrap up/closure, independent practice
Differentiated Instruction **.60 effect size**	Instructional process to help students follow their own path to maximize growth.
Classroom Discussion **.82 effect size**	The effect size increases when students talk more regarding critical response to text. Text focused responses, reader focused responses. The effect size decreases when there is more teacher talk and less student talk.
Engaging Student Learners **.48**	Incorporates four components of engagement; attentive, committed to learning, persistent, and learning is meaningful and valuable to student.
Spaced vs. Massed Practice **.63 effect size**	Information is repeated in a distributed fashion or spaced over time. Information is learned more slowly but retained for much longer.

Instructional Strategies

Instructional Practice:				
	Instructional Strategies	**Time, Frequency, Duration**	**Materials for Teachers & Students**	**Assignments & Assessments**
Proficient				
Close to Proficient				
Far to Go				
Intervention				

Instructional Practice	Differentiated Instruction			
	Instructional Strategies	Time, Frequency, Duration	Materials for Teachers & Students	Assignments & Assessments
Proficient:	Cooperative learning - think, pair, share	2 times a week during math workshop with partners and individually	Problems, manipulatives, whiteboards, direction cards for students	Various problems increasing in depth of knowledge to include critical thinking. EXIT ticket - proof sheet with problem, solution, model, and written explanation
Close to proficient:	Direct Instruction with non-linguistic representation	3 times a week during math workshop in small group with teacher and then independently	Various problems (including word problems) blank math bar models and manipulatives	Practice working backward with completed models and writing word problems to go with solved problems. For assessment student will show this process on an exit ticket independently.
Far to go:	Non-linguistic representation - break apart	3 times a week, small group rotation with teacher during math worksho and use word problems when setting up numbers for problems.	graphic ogranizer for place vulae, various problem +/-, whiteboards	Various problem +/-, word problems with small group. Exit ticket - students solve problmes using break apart strategy
Intervention:	Problem solving +/- with manipulatives	Daily small group work with teacher during math workshop and independent work time	Variety of manipulatives (cubes, rekenreks, etc.), various problems, whitebaords	Model numbers and solve various problems with use of manipulatives. Exit ticket - model and solve 2 digit +/-

Determine Results Indicators

Step 5

- What/how we monitor
- Describe adult (cause data) and student (effect data) behaviors
- Establish ‘look-fors’ in student work
- Done for each performance level

Achievement Level	Prioritized Next Step	Adult Behaviors	Student Behaviors	What to Look for in Student Work
Proficient:	Ensure students move from knowing to understanding.	Teachers will teach cooperative learning strategy think, pair, share through modeling (if necessary). Teacher will also provide guided practice in proving mathematical problems beyond the model using words, written and verbal, to demonstrate implementation of concepts	Students will solve mathematical problems independently, pair to explain and share their solution. Partners will work toward a model and written explanation	Accurately solve problems using a model and be able to provide written explanation demonstrating implementation of the mathematical concept.
Close to proficient:	Build conceptual understanding to further develop understanding of standard algorithm	Teachers will directly instruct students that numbers within a problem have a direct relation to the funtion of the problem demonstrated through part-part-whole and can be shown using math bar model. Teacher will model checking work for accuracy using the bar model.	Students will work backward from a completed bar model to a mathematical problem to demonstrate an understanding of the relationship among the model, function, and problem. Students will also check accuracy of addition and subtraction problem solving using bar model.	Students will solve 3-digit addition and subtraction problems (inclding word problems) and prove accuracy of computation with a bar model
Far to go:	Use strategies to add and subtract within 1000	Teacher will directly instruct the process of break apart strategy to emphasize place value and model how to use break apart to check accuracy of addition and subtraction algortihm.	Students will break apart 2 and 3 digit numbers and practice adding and subtracting numbers with this strategy by completing one place value at a time, working toward solving entire problem.	Students will accurately break apart 3 digit numbers and use those models to accurately compute addition and subtraction probelms within 1000
Intervention:	Solve mathematical problems with manipulatives	Teacher will model the use of base ten blocks to practice the process of adding and subtracting numbers. Teacher will review making models to demonstrate addition and subtraction. Teacher will directly instruct (review) addition and subtraction algorithm.	Students will use base ten blocks and other manipulatives to solve mathematical problems and convert model into wirtten number form.	Students will accurately represent numbers using manipulatives and solve 2-digit mathematical problems using manipulatives.

Monitor and adjust

Step 6

- Use evidence (student work)
- Compare to results indicators (step 5)
- Discuss effectiveness of strategy – continue, modify, or stop use of strategy
- Monitoring happens throughout instruction

Complete Cycle Data

Pre/Post Comparison

	Teacher	# Students	# Level 4	% Level 4	Level 4 Students	# Level 3	% Level 3	Level 3 Students	# Level 2	% Level 2	Level 2 Students	# Level 1	% Level 1	Level 1 Students
Pre Test	Lee 1st	26	3	12%	Jon, **Sam, **Jamie	5	19%	**Tera, Erin, yyBeth, zzqqEarl	7	27%	zzStan, Todd, qqJon, Charlie, **qqzzCarl, Molly, Stacy	11	42%	yyTed, **Sarah, **qqKathy, Thomas, zzStephanie, Julie, yyJenea, Vicky, **Bill, zzBetsy, Stacy
Post Test	Lee 1st	26	10	38%	**Tera, yyTed, Jon, yyBeth, **Jamie, Charlie, **qqzzCarl, Julie, yyJenea, Stacy	9	35%	zzStan, Todd, Erin, **Sam, zzqqEarl, zzStephanie, **Bill, zzBetsy	6	23%	**Sarah, qqJon, Molly, Thomas, Vicky, Stacy	1	4%	**qqKathy
Pre Test	Lee 2nd	30	4	13%	William, Reba, Kim, Erin	4	13%	yyTed, **Steve, yyMike, Jennifer	10	33%	zzStephanie, Vicky, Don, Tony, qqHannah, **Regan, Brian, qqChris, Truman	12	40%	Thomas, Julie, yyJenea, **Bill, zzBetsy, Samantha, Sarzzah, zzVictoria, Gail, Ryan, Brad
Post Test	Lee 2nd	30	6	20%	Thomas, Sarzzah, zzVictoria, Tony, William, **Steve	5	17%	Samantha, Reba, qqHannah, Ryan	11	37%	Julie, yyJenea, Vicky, yyTed, **Regan, Gail, Brian, Brad, yyMike, Truman	8	27%	zzStephanie, **Bill, zzBetsy, Don, Kim, qqChris, Erin, Jennifer
Pre Test	Lee 3rd	30	1	3%	Taylor	2	7%	Kim, Amanda	7	23%	**Regan, Brian, **Steve, qqChris, yyMike, Truman, Maggie	20	67%	William, Reba, qqHannah, Gail, Ryan, Brad, Erin, Jennifer, zzStephanie, Theresa, Ann, qqSam, Maria, Mario, Abby, Adam **Alice, Allan, yyAlison, qqAmy
Post Test	Lee 3rd	30	19	63%	qqHannah, Kim, Brian, **Steve, Ryan, Brad, yyMike, Jennifer, Truman, Taylor, zzStephanie, Theresa, Ann, qqSam, Mario, Adam, **Alice, Amanda, qqAmy	7	23%	**Regan, Gail, qqChris, Erin, Maggie, Maria, yyAlison	2	7%	Abby, Allan	2	7%	William, Reba
Pre Test	Sperry	30	7	23%	Taylor, Maggie, zzStephanie, Ann, qqSam, Maria, Abby	3	10%	Theresa, Mario, Adam	5	17%	Allan, zzAndy, Angie, Anna, yyAustin	15	50%	**Alice, yyAlison, Amanda, qqAmy, qqAnn, qqAnthony, Ashley, Becky, **Ben, Beth, yyBrad, Bret, Brie, zzBrittnay, Caro
Post Test	Sperry	30	14	47%	Taylor, Maggie, Theresa, Maria, Mario, **Alice, yyAlison, qqAmy, qqAnthony, Ashley, yyAustin, Becky, **Ben, Carol	8	27%	zzStephanie, Ann, qqSam, Abby, Allan, Amanda, Anna, zzBrittnay	5	17%	Adam, zzAndy, qqAnn, Bret, Brie	3	10%	Angie, Beth, yyBrad

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Totals

Core Standard Addressed	3.NBT.A.3	Date Submitted to RPDC	5/15/2016

After Pre-Test	Strengths	Errors & Misconceptions	Instructional Strategies/Practices
Proficient:	-mental strategies	minor mistakes and in computation, may not have full concept of p/p/w shown with bar model	Cooperative learning - think, pair, share
Close to proficient:	-build correct models for addition and subtraction, proper set up for problems	-missing steps in multi-step problem, incorrect operation chosen	Direct instruction with non-linguistic representation
Far to go:	-some accuracy (mostly with +), numbers aligned in problem and big number on top	same as "close", errors regroups, unable to complete models, difficulty choosing correct function	Non-linguistic representation - break apart
Intervention:	-adding small numbers	-same as "far", trouble setting up problems, difficulty regrouping	Problem solving +/- with manipulatives

Pre-Assessment

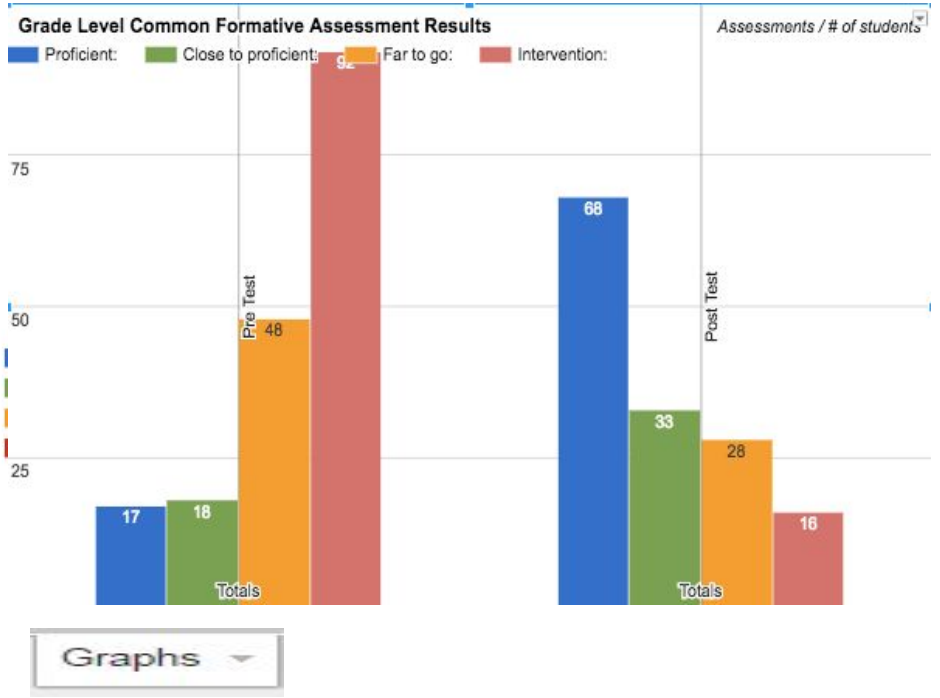
Total Possible Score for Pretest	10	Date of Assessment:						2/24/2016				
Groups	Total Possible Score	# All Students	IEP	AA	ELL	boys	Other	% All Students	IEP	AA	ELL	boys	Other
Proficient:	8	17	2	2	1	0	0	9.7%	8.3%	10.0%	4.8%	0.0%	0.0%
Close to proficient:	6	18	4	3	1	4	0	10.3%	16.7%	15.0%	4.8%	23.5%	0.0%
Far to go:	4	48	7	4	6	4	1	27.4%	29.2%	20.0%	28.6%	23.5%	50.0%
Intervention:	0	92	11	11	13	9	1	52.6%	45.8%	55.0%	61.9%	52.9%	50.0%
TOTALS		175	24	20	21	17	2						

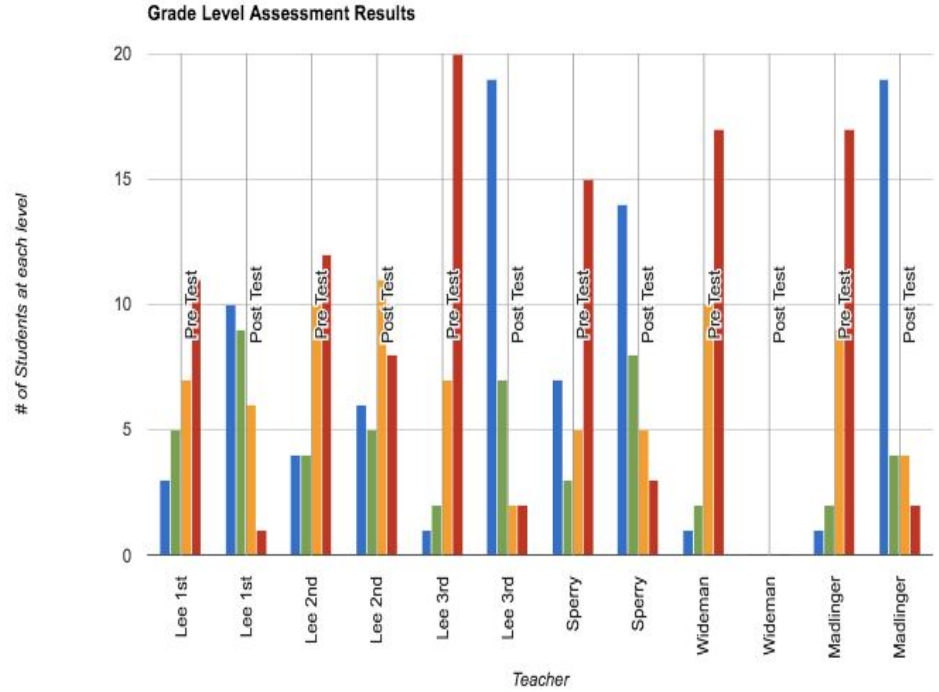
Post-Assessment

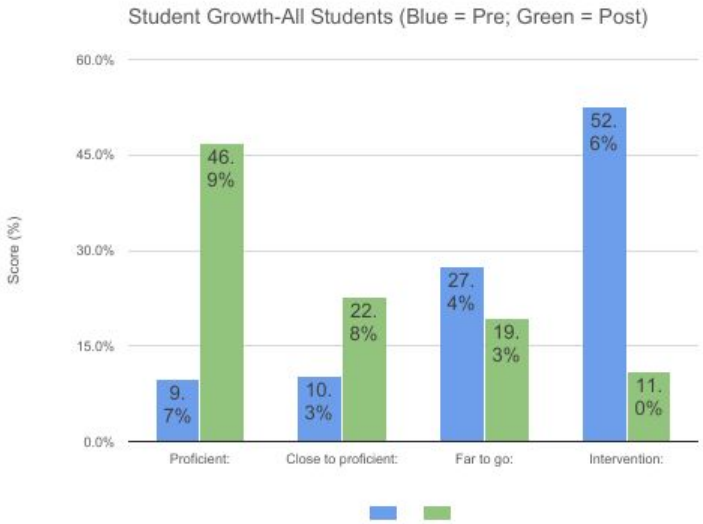
Total Possible Score for Posstest	10	Date of Assessment:						3/14/2016				
Groups	Total Possible Score for Levels	# All Students	IEP	AA	ELL	boys	Other	% All Students	IEP	AA	ELL	boys	Other
Proficient:	8	68	11	6	10	8	0	46.9%	50.0%	37.5%	55.6%	57.1%	0.0%
Close to proficient:	6	33	6	7	4	1	0	22.8%	27.3%	43.8%	22.2%	7.1%	0.0%
Far to go:	4	28	3	1	2	4	0	19.3%	13.6%	6.3%	11.1%	28.6%	0.0%
Intervention:	0	16	2	2	2	1	0	11.0%	9.1%	12.5%	11.1%	7.1%	0.0%
TOTALS		145	22	16	18	14	0						

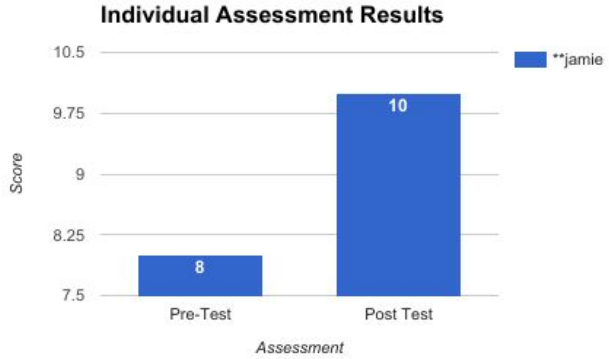
% Change from Pre-Test to Post-Test

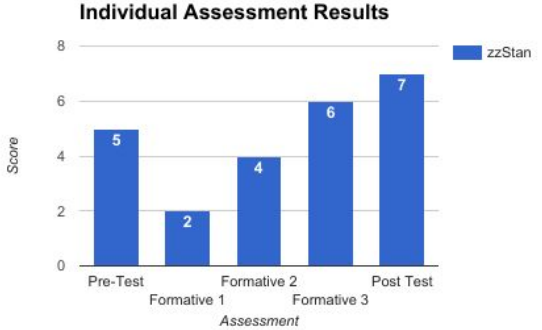
%All Students	IEP	AA	ELL	boys	Other
37.2%	41.7%	27.5%	50.8%	57.1%	0.0%
12.5%	10.6%	28.8%	17.5%	-16.4%	0.0%
-8.1%	-15.5%	-13.8%	-17.5%	5.0%	-50.0%
-41.5%	-36.7%	-42.5%	-50.8%	-45.8%	-50.0%


Grade Level Common Formative Assessment Results
Assessments / # of students
Proficient:
Close to proficient:
Far to go:
Intervention:
75
50
25
Pre Test
48
Post Test
68
17
18
33
28
16
Totals
Totals
Graphs


Grade Level Assessment Results
# of Students at each level
20
15
10
5
0
Pre Test
Post Test
Lee 1st
Lee 2nd
Lee 3rd
Sperry
Wideman
Madlinger
Teacher

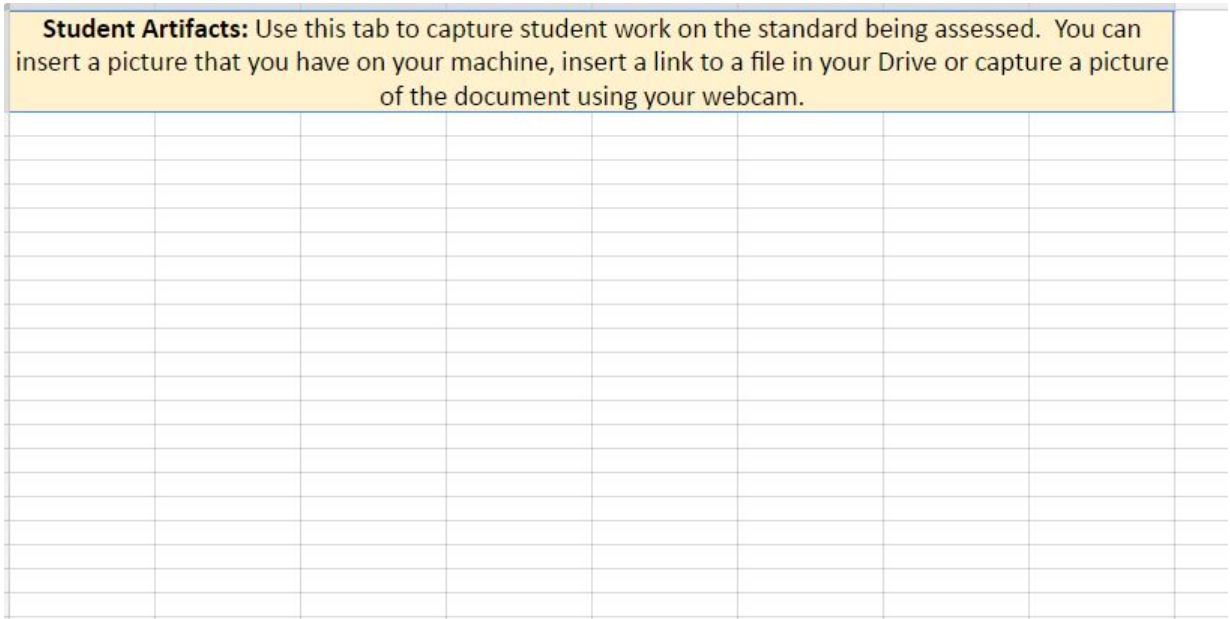

Student Growth-All Students (Blue = Pre; Green = Post)
60.0%
45.0%
30.0%
15.0%
0.0%
Score (%)
9. 7%
46. 9%
10. 3%
22. 8%
27. 4%
19. 3%
52. 6%
11. 0%
Proficient:
Close to proficient:
Far to go:
Intervention:


Individual Assessment Results
10.5
9.75
9
8.25
7.5
Score
8
10
Pre-Test
Post Test
Assessment
**jamie


Individual Assessment Results
8
6
4
2
0
Score
5
2
4
6
7
Pre-Test
Formative 1
Formative 2
Formative 3
Post Test
Assessment
zzStan

Graphs

Artifacts



Artifacts - link assessment or provide picture of assessment, scoring guide, anchor papers

Troubleshoot

Data Workbook Support - Intro Video

Different Templates Available

This document is complex! Everyone who accesses this workbook needs to be careful on which areas they enter in information. There are formulas everywhere! Use this tab to locate issues that arise and information on how to fix the problems.

Help Ticket Form

Topic Subgroups

How to:	Link to Video:	Errors:	Link to Video:
Add/Remove Students	https://youtu.be/u-dm51VofpE	Duplicate Names on Teacher tabs	https://youtu.be/_AAx_Gq9V5k
Add/Remove Students Mid Cycle	https://youtu.be/-bz1cTRRdM4	Names don't match Data Tab	Should be within the above video
Locking/Unlocking Cells	https://youtu.be/tfHnCY3XOAE	#ref error message	https://youtu.be/0G6Ft4cjfs0
Using Revision History	https://youtu.be/8DcRCsOlfoI	Names not showing on Summary Pages	https://youtu.be/qb55h2F-rz0
SMART Goals	https://youtu.be/ojDbiRw514s	Data not computing correctly	https://youtu.be/x69s5LIHyKQ
Using Subgroups	https://youtu.be/1dwZ3OGxbUs	Fix/Correct Formulas	https://youtu.be/xsCJHKJdkBc
Reading Formulas	https://youtu.be/jLjrnhBLeJg		
Hiding Cells/Tabs	https://youtu.be/X7ozHrr_qJQ		
Set Proficiency Levels	https://youtu.be/Qs94Db9t9Lw		

Troubleshoot - having problems, click on the link to watch a 2 to 3 minute video to answer questions or solve a problem, or fill out and send a HELP ticket