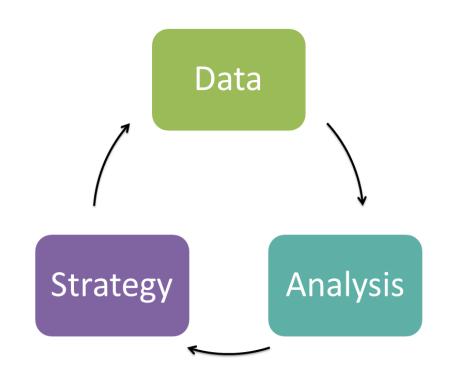
Designing Systems of Teacher Learning around Student Work

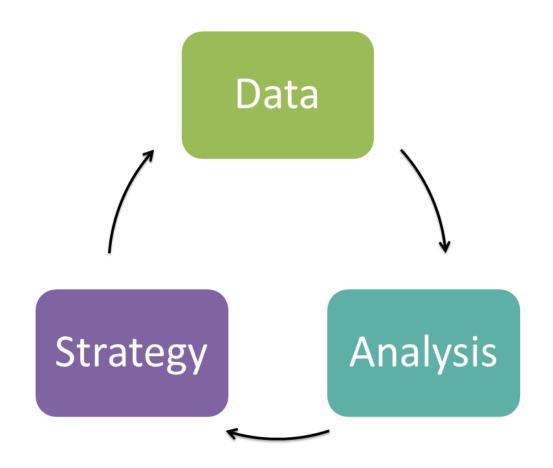


Global Math Department 12/15/15

Geoff Krall | @emergentmath

emergentmath.com

## Why Student Work Analysis



	Domain or		
Grade		Standard #	
	Theme	-	
7	RP	1	22.8%
7	RP	2	35.0%
7	RP	2a	23.2%
7 7 7 7	RP	2b	60.4%
	RP	2c	55.0%
7	RP	2d	9.1%
7	RP	3	48.5%
7	NS	1	95.9%
7	NS	1a	58.0%
	NS	1b	88.7%
7	NS	1c	97.0%
7	NS	1d	13.9%
7	NS	2	69.0%
7	NS	2a	54.5%
7	NS	2b	86.8%
7 7 7 7 7 7 7 7	NS	2c	36.6%
7	NS	2d	90.2%
7	NS	3	91.0%
7	EE	1	47.0%
7	EE	2	14.5%
7	EE	3	0.5%
7	EE	4	69.4%
	EE	4a	53.4%
7 7 7 7	EE	4b	74.6%
7	G	1	100.0%
7	G	2	42.8%
7	G	3	39.2%
7	G	4	51.7%
7 7 7 7	G	5	50.7%
7	G	6	74.6%
7	SP	1	65.8%
7	SP	2	48.3%
7	SP	3	31.7%

#### **Data > Test scores**

Data analysis of standardized scores tend to simply identify what standards need extra "coverage" or remediation rather than point to pedagogical choices.

#### **Benefits & Side Benefits of LASW**

- Closes the cycle of inquiry to improve practice
- "No surprises" PD
- Builds cohesion among the staff
- Builds alignment in practice and standards
- Builds teacher leadership capacity
  - All teachers can participate & facilitate

# Belleville New Tech High School



### Our protocol

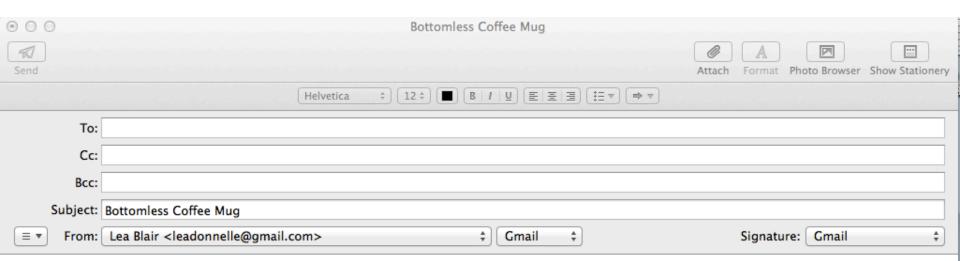
What do you see? (10 minutes)

What does this student know how to do? (10 minutes)

What is the next thing this student needs to learn? (10 minutes)

What will the teacher do to move the student along? (15 minutes)



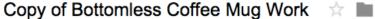


Hello!

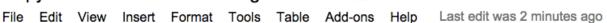
I recently read your advertisement for a bottomless coffee mug that could save me "hundreds of dollars". I find this really interesting as I buy your coffee frequently, but as a math teacher I need some more specifics. Could you send me a model for exactly how much I'll save?

Thanks so much for your time!

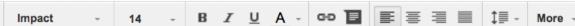
Lea Blair 937.215.0254













Hello.

In our bottomiess coffee mug we have requested that you could save \$100.00 this is so true. As you know the mug already costs \$139.00 in cash when you buy it, this is free for a whole year which is 365 days or 52 weeks, and you can save more money doing this. The cost of the medium cup of coffee is \$1.89. On the prices you will find that you are saving money each year.

**3 days a week:** 

## Our (modified) protocol

What do you see? (10 5 minutes)

What does this student know how to do? (10 5 minutes)

What is the next thing this student needs to learn? (10 5minutes)

What will the teacher do to move the student along? (15 5 0minutes)

### Essential Elements for LASW/LFSW

- Need a task worthy of analysis
  - More than just "explain". Potentially a long(ish) form written piece. No less than 4 sentences of written work accompanied by diagrams, graphs, tables, etc.
- Need work worthy of analysis
  - One "medium", one "high"
- Need a protocol
  - NSRF ATLAS protocol

#### Essential Elements for the Practice

- Need significant buy-in & department culture
  - Time wise, it feels "inefficient"
  - Commitment to one another as professionals
- Requires consistent, iterative rounds
  - Remember, it's a cycle

2016								
JANUARY								
S M T W TH F S								
				1	2			
нм	5	6	7	8	9			
11	(12)	13	14	15	16			
H	19	20	21	22	23			
25	(26)	27	28	29	30			
	<u>нм</u> 11 Н	M T  HM 5  11 (12)  H 19	M T W HM 5 6 11 (12) 13 H 19 20	M T W TH  HM 5 6 7  11 (12) 13 14  H 19 20 21	M T W TH F HM 5 6 7 8 11 (12) 13 14 15 H 19 20 21 22			

FEBRUARY							
М	M T W TH F S						
1	2	3	4	5	6		
8	(9)	10	11	12	13		
EM	16	17	18	19	20		
22	23	24	25	Е	27		
29							
	1 8 EM 22	M T 1 2 8 9 EM 16 22 23	M T W 1 2 3 8 9 10 EM 16 17 22 23 24	M T W TH 1 2 3 4 8 9 10 11 EM 16 17 18 22 23 24 25	M T W TH F 1 2 3 4 5 8 9 10 11 12 EM 16 17 18 19 22 23 24 25 E		

MARCH							
S	М	T	W	TH	F	s	
		1	2	3	4	5	
6	7	(8)	9	10	11	12	
13	Η	H	Н	Н	H	19	
20	21	(22)	23	24	25	26	
27	28	29	30	31			

APRIL								
S	М	M T W TH F						
					1	2		
3	4	5	6	7	K12*	9		
10	11	(12)	13	14	15	16		
17	18	19	20	21	22	23		
24	25	(26)	27	28	29	30		

	MAY							
S	M	T	W	TH	F	S		
1	2	3	4	5	6	7		
8	9	(10)	11	12	13	14		
15	16	17	18	19	20	21		
22	23	24	25	26	27	28		
29	30	31						