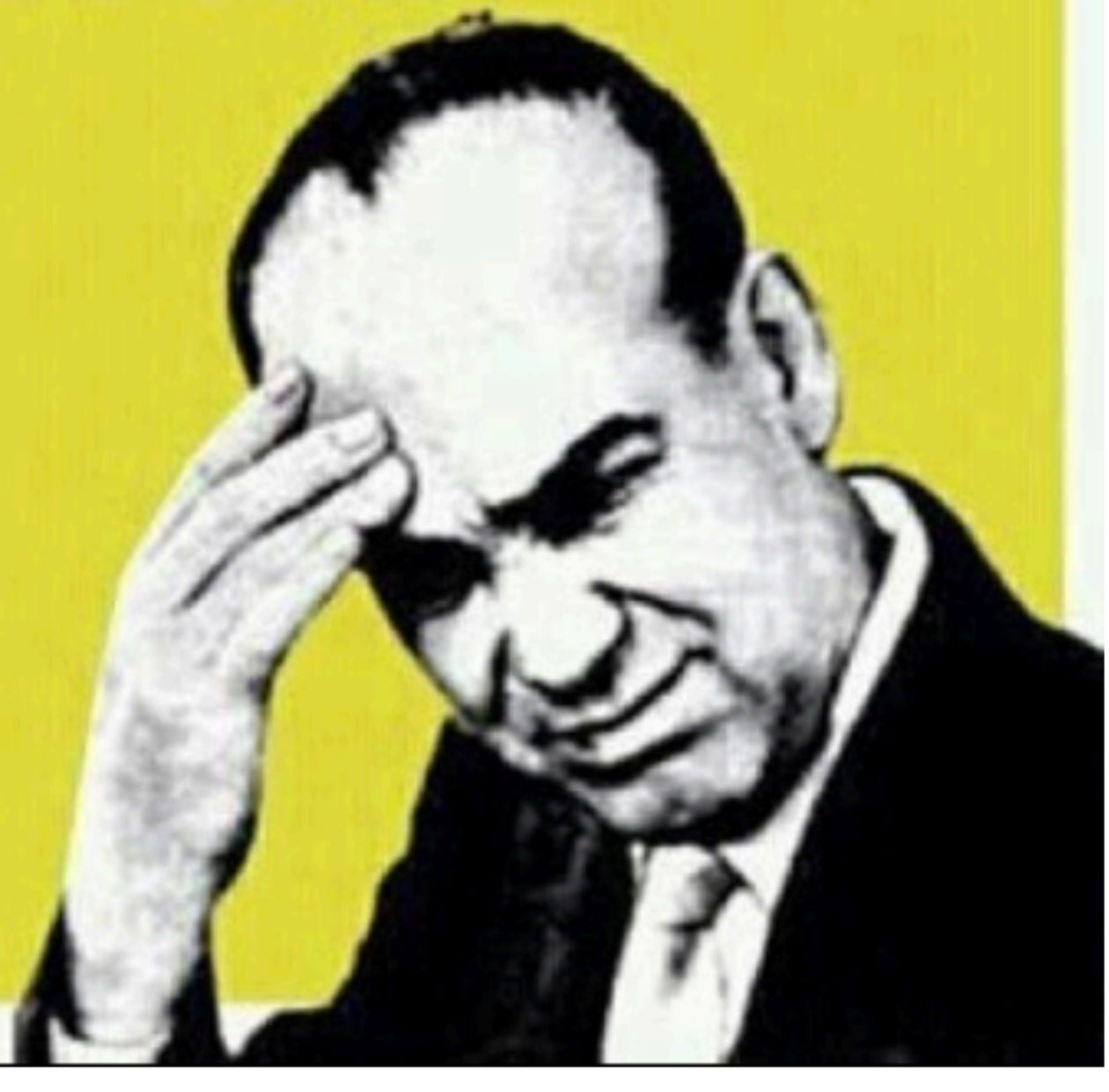
Everytime I see a math word problem it looks like this:
If I have 10 ice cubes and you have 11 apples.
How many pancakes will fit on the roof?
Answer:
Purple because aliens
don't wear hats.



arrg! ecards

Differentiate?

How do I teach students to recognize their thinking?

How can I show students that each lesson is connected? across disciplines?

"When my students analyze and write about the meaning of a chart or a graph, they're developing a skill they can transfer into other content areas."

Our kids have something to say and writing honors their voices and their thinking.

---NWP Annual Report

7	8

Table of Contents

I chose to send you the pictures to illustrate how the daybook was utilized in my classroom and how my students became more comfortable with their reflection and learning of the math taught during the unit.

Table of Contents - Help students have a point of reference to find their notes and topics within the unit to study and prepare for the end of chapter test.

03/10/2011 14:49:08

3/3/11

Math Notes / Classwork

Example: 30 items in all

breads, muffins, cakes

14 breads & muffins / want to make the cakes to 60% of the store

$\frac{16+c}{30+c} = \frac{60}{100}\ \frac{3}{5}$

$\frac{5(16+c)}{5(30+c)} - \frac{3(30+c)}{5(30+c)}$

$5(16+c) = 3(30+c)$

$-3c+80+5c = 90+3c+-3c$

$80+2c = 90$

$80+-80+2c = 90+-80$

$\frac{2c}{2} = \frac{10}{2}$

$c = 5$

$\frac{21}{30} = 60\%$ = need 21 cakes

Percent Proportion / $\frac{\text{IS (part)}}{\text{OF (whole)}} = \frac{\%}{100}$

65% of 84

$\frac{x}{84} = \frac{65}{100}$

$\frac{x}{84} = \frac{13}{20}$

65% (OF) 84

.65 • 84 = x

Class Notes - Detailed pages of notes that are included before the homework is attempted for easy access to review a concept covered in class that is easily in their grasp.

3/3/11

Math Notes / Classwork c

1) 50 is 40% of what?

$\frac{50}{x} = \frac{40}{100}\ \frac{2}{5}$

$x = 125$

OR

2) 50 is 40% of what?

$50 = 40\% \cdot x$

$\frac{50}{.4} = \frac{.4 \cdot x}{.4}$

$125 = x$

(IS) Part = percent • whole (OF)

What is 80% of 50

$.8 \cdot 50 = x$

$x = 40$

75% is 15 of what number

$\frac{15}{x} = \frac{75}{100}$

$\frac{15}{x} = \frac{3}{}$

03/10/2011 14:50:18

Sheridan
H6

math Homework 2/28/11

36. 75% of 12 — $\frac{3}{4} \times \frac{12}{1}$ — 9

37. 30% of 50 — $\frac{3}{10} \times \frac{50}{1}$ — 15

39. 50% of 94 — $\frac{1}{2} \times \frac{94}{1}$ — 47

41. 40% of 175 — $\frac{2}{5} \times \frac{175}{1}$ — 70

43. 20% of 3000 — $\frac{1}{5} \times \frac{3000}{1}$ — 600

45. because percent is a fraction with a similar numerator/denominator so it will simplify to 1

49. 20% of 90 — $\frac{1}{5} \times \frac{90}{1}$ — 18

47. 54%, $\frac{54}{100}$ (3) (2) (1)
.62, $\frac{62}{100}$, $\frac{10}{25}$

51. 60% of 30 — $\frac{3}{5} \times \frac{30}{1}$ — 18

53. 30% of 200 — $\frac{3}{10} \times \frac{200}{1}$ — 60

55a.

55c. 19

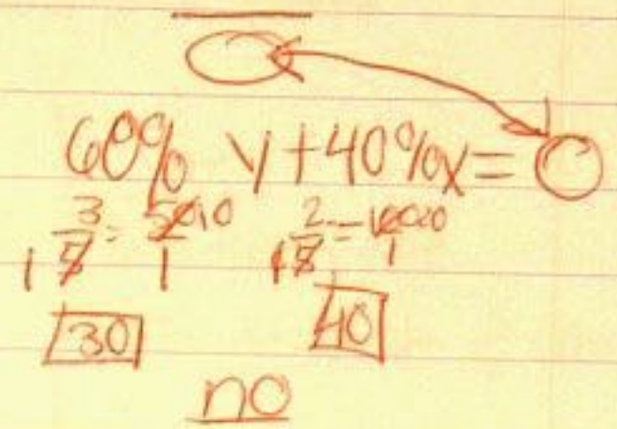
55b. 44%

57a. 80% of 800 — $\frac{4}{5} = \frac{800}{1}$ — about 640

57b. about 320

57c. about 90

59. $x = 100$
$y = 50$



59a. no because amount of x+y depends+vary

59b. no

Homework - Page is divided into two so that work can be done on one half leaving the other half for students to correct missed problems in class, at home, or record notes on the problem for future review and development of understanding.

03/10/2011 14:46:26

of 35 is 77

x
00
x
100
x

5
5
25
00
625

4.) 105 is 84% of what number?

"You would make your first fraction 84 over and then your second fraction would be 105 over x and you would equal the two fractions. Then you would simplify 84 over 100 to 21 over 25. then you would make a common denominators of 25x. then to your first fraction you would change the numerator to 21x because for the denominator you had to multiply 25 times x. Then you would times 105 by 25 since for the denominator you had to times x by 25, so your numerator would be 2,625. Then you would say 21x equals 2,625. Then you would divide 2,625 by 25 to get 105 as x. So x equals 105.

Written Response - Using words to help check their understanding, the students had to explain the process of solving the problem. This helped me to see where they were in understanding the concept and was an easy way the next day for a self-check as they read their responses to a partner.

03/10/2011 14:46:56

What is 52% of 200?
which method (equation vs proportion)
do you prefer for this problem & why?

I prefer using proportions because I feel more comftorable working out proportions since we have been using them for so long. Also they make me feel more comfortable since I know when I do that I can write the problem out because I am not very good with solving things in my head. I like how with proportions you can write out the whole problem step by step, by step.

What #7
2
15
x 4
60

Reflection - After being presented two ways to solve a problem, I gave them a new problem and asked for their preference in solving. One method was easier but it was interesting to see if they noticed or reverted to what they were more comfortable with in solving. Once again, using written word in math to deepen their understanding.

03/10/2011 14:44:35

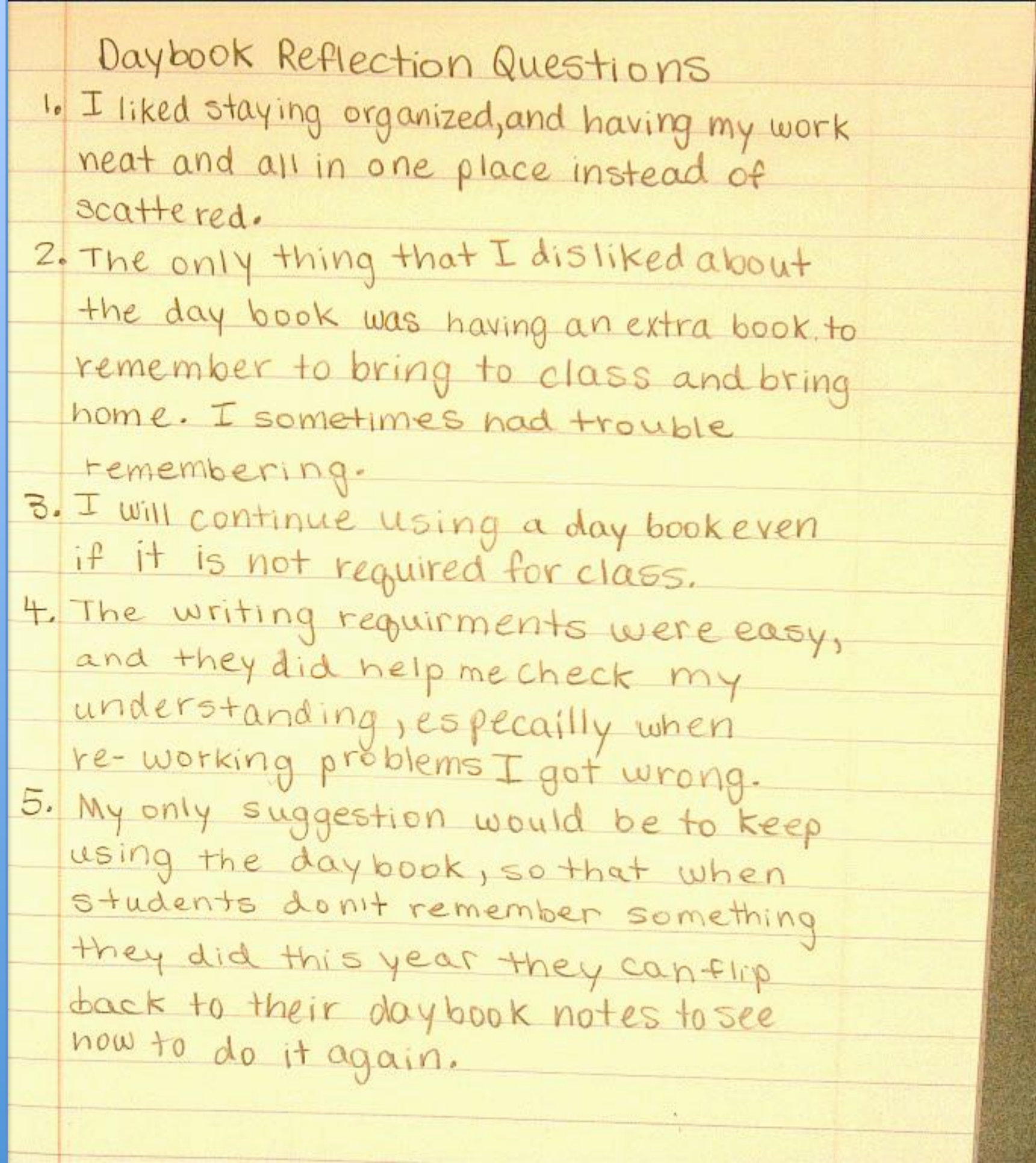
Day Book Reflection 3/9/11

1. I liked how every thing (hw, notes, etc.) was together so you could just flip back a page + there was what you needed.
2. I disliked how if you forgot it by any chance, you wouldn't have any thing to look back at.
3. Yes I will because it's easier + I like it better
4. The writing assignments were sometimes a stretch but not hard. They helped me check my understanding a lot
5. I can't think of any, so I don't think so.

Daybook Reflection Questions (Answer in your daybook):

1. What did you like about keeping a daybook for this chapter?
2. What did you dislike about the daybook?
3. Will you continue using a daybook even if it is not required for class?
4. Were the writing requirements hard/easy? Did they help you check your understanding?
5. Do you have any suggestions for future use of the daybook?

Survey - Copies of the survey questions at the end of the daybook unit to help my get a glimpse to my students perspective of the daybook and its success. I did not have a chance to include assessment pieces, but on a whole my students did very well and significantly better than the previous unit test. My students were hesitant to give me their daybooks on the day of the test because they wanted to know if I would give them back. I think that would constitute as a success!



Daybook Reflection Questions

1. I liked staying organized, and having my work neat and all in one place instead of scattered.
2. The only thing that I disliked about the day book was having an extra book to remember to bring to class and bring home. I sometimes had trouble remembering.
3. I will continue using a day book even if it is not required for class.
4. The writing requirments were easy, and they did help me check my understanding, especailly when re-working problems I got wrong.
5. My only suggestion would be to keep using the daybook, so that when students don't remember something they did this year they can flip back to their daybook notes to see how to do it again.

Solve the Problem (Left Side)

7days a week it would be Thurday! because if you 4+3=7 then you now hwo many day are in a weekand then you can figer the pradlems out I think it is I think it is Thurday.

Conversation ☺ Conversation ☺ Conversation ☺

Right Side
(1) Rework the problem OR
(2) Write what you learned.

I think it is Thurday or wenday cause if u draw a pictur and you estmat I think you mate ~~either~~ figer out the aswer but I think I am going for the saterday

Reflection: On the back of this paper, write (1) what you learned about working with

PARTNER JOURNALS

T-title
P-paraphrase
C-connotation
A-attitude
S-shifts
T-title
T-theme

(I think the title is about our generation and how it is today)

"Our Generation"
Jordan Nichols (Grade 8)

Our generation will be known for nothing.
Never will anybody say,
We were the peak of mankind.
That is wrong, the truth is
Our generation was a failure.
Thinking that
We actually succeeded
Is a waste. And we know
Living only for money and power
Is the way to go.
Being loving, respectful, and kind
Is a dumb thing to do.
Forgetting about that time,
Will not be easy, but we will try.
Changing our world for the better
Is something we never did.
Giving up
Was how we handled our problems.

• connotation (-)
• connotation (+)

can read backwards

Theme-
Our generation is a change that's going to come.

Title=
The title is saying how many people may judge our generation but were not bad as long as we make a change to some things.

Mood:
• Determined
• motivated
• Inspired

can read normal

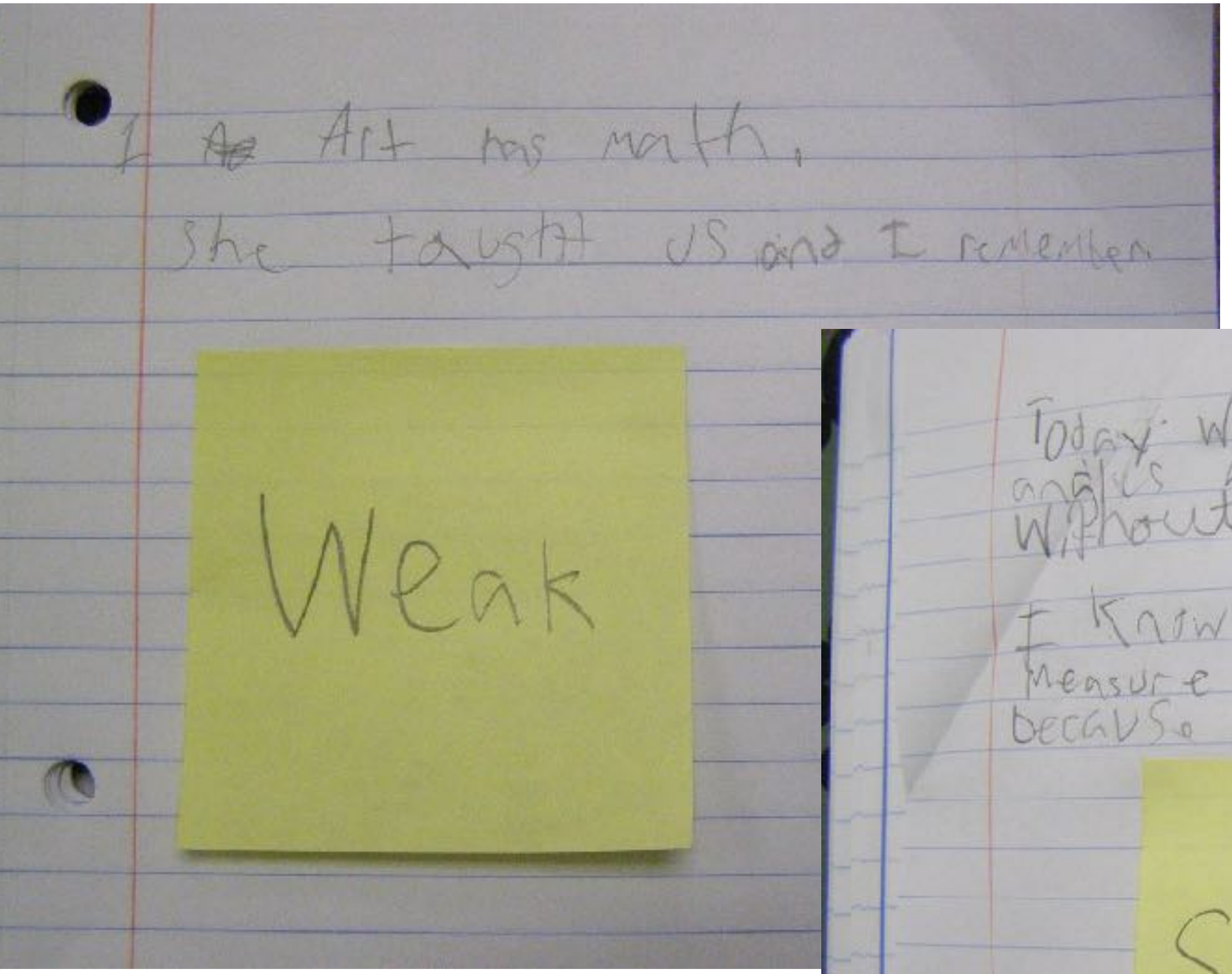
Tone: He's speaking on how he feels about the generation. He's outspoken about what he feels.

Shifts=
The ~~story~~ shift poem from be[illegible] negative to positive

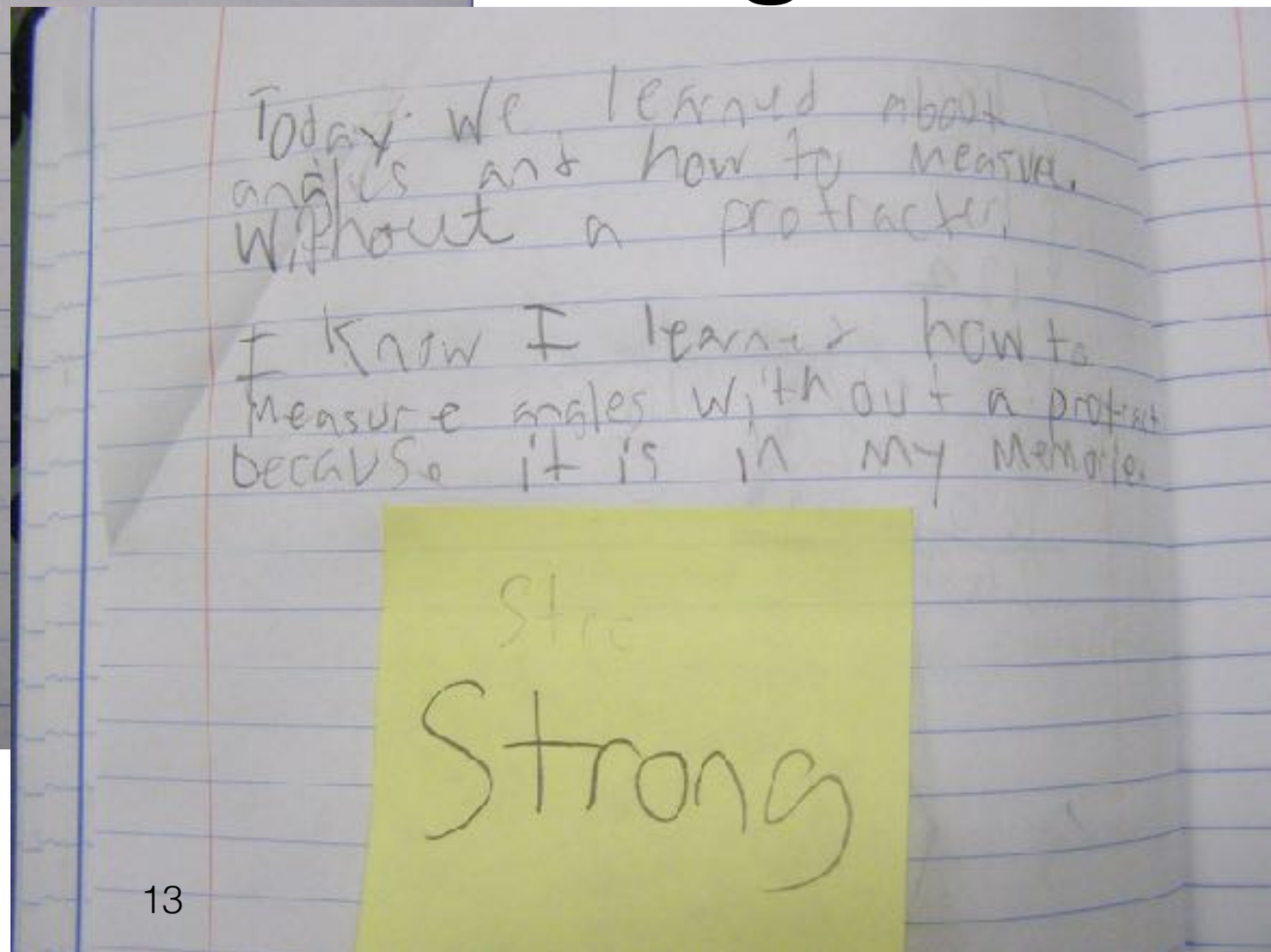
The attitude of the poem is of the poem [illegible] because

Color coding

Students evaluate their work



Students select weak work and strong work



Students write & perform math raps

Cubing

1. Choose a math concept word.
2. Students write about 3 minutes following the directions: (1) Describe; (2) Compare; (3) Associate; (4) Analyze; (5) Apply, (6) Argue *(Not all examples are pictured.)*
3. Between each step, partners read or paraphrase what they wrote.
4. By the end, the students have a good understanding of the concept word having explored it from all these angles.
5. In the next example, I also found an example of writing where the author argued against using fractions. Students read that as well and debated whether they agreed or disagreed.

CUBING
1.Describe
2.Compare
3.Associate
4.Analyze
5.Apply
6.Argue

Fraction

Cubing
Describe

A fraction is often made up of 2 numbers, one number on the top, one number on the bottom. If the number on the top is smaller than the number on the bottom, the fraction is smaller than a whole. If it is greater, it is bigger than a whole. Sometimes you have 2 numbers. A whole and a fraction, then you have ar

then you have ar

CUBING
1.Describe
2.Compare
3.Associate
4.Analyze
5.Apply
6.Argue

Compose

A fraction is like a ~~shell~~ snowflake. Each one is different. Fractions and snowflakes are very mathematical if you think about. They both are very pattern like Snowflakes are beautiful

CUBING
1.Describe
2.Compare
3.Associate
4.Analyze
5.Apply
6.Argue

Analyze it

A fraction is made up of 2 parts

Fraction, 2 parts.
Numerator.
Denominator

Propir fraction.

Mixed fraction, 3 parts.
Whole number.
Numerator.
Denominator
Mixed together

USA TODAY > JANUARY 24, 2008 > LIFE

Should fractions be consigned to dustbin of math history?

A revolutionary idea has teachers divided

By Maureen Milford | Jan 24, 2008 | 469 words

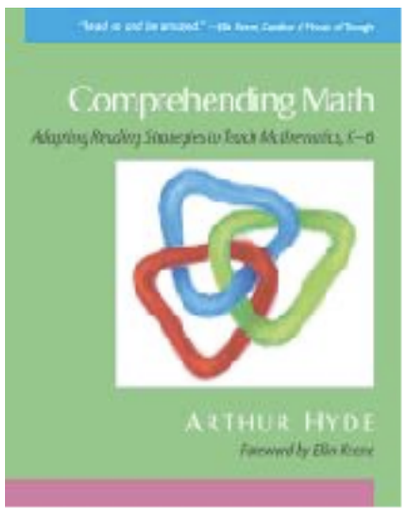
PHILADELPHIA -- A few years ago, Dennis DeTurck, an award-winning professor of mathematics at the University of Pennsylvania, stood at an outdoor podium on campus and proclaimed, "Down with fractions!"

"Fractions have had their day, being useful for by-hand calculation," DeTurck said as part of a 60-second lecture series. "But in this digital age, they're as obsolete as Roman numerals are."

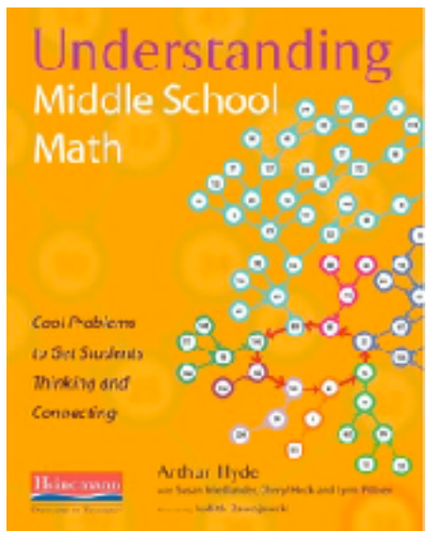
The speech started a firestorm, particularly after the university posted it online.

"There were blogs and rants, and there were some critical e-mails," said DeTurck, who is now dean of the college of arts and sciences at Penn. "They'd always boil down to: 'What would we do in cooking and carpentry?'"

…why is everything so difficult, so different from class to class?

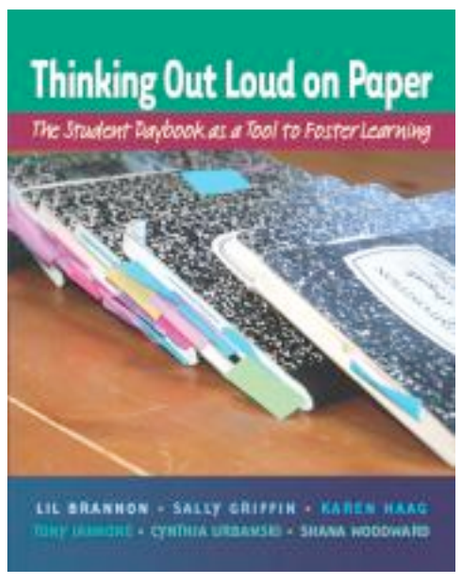


Comprehending Math

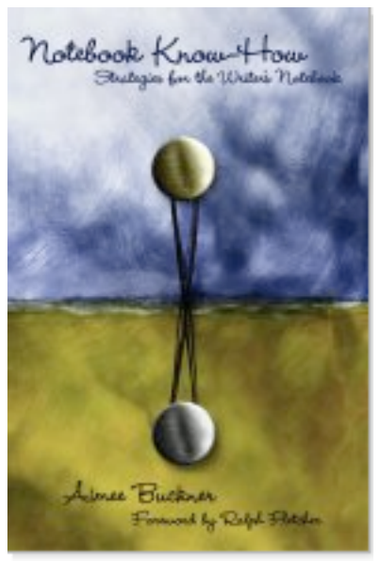


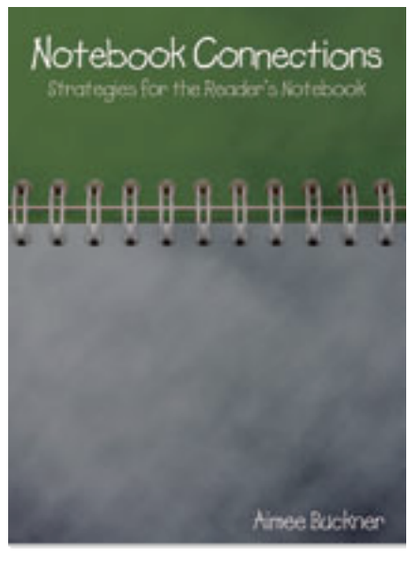
Understanding Middle School Math

Arthur Hyde

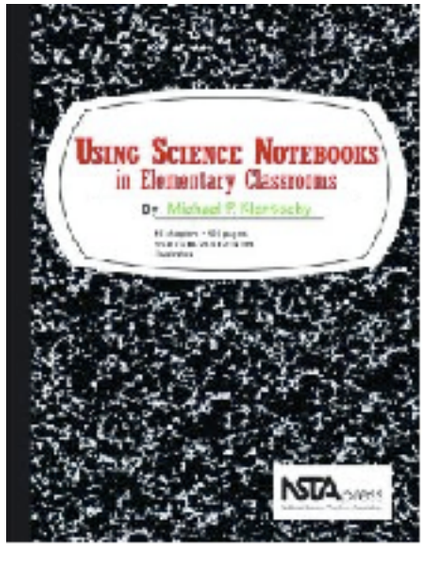


Thinking Out Loud on Paper

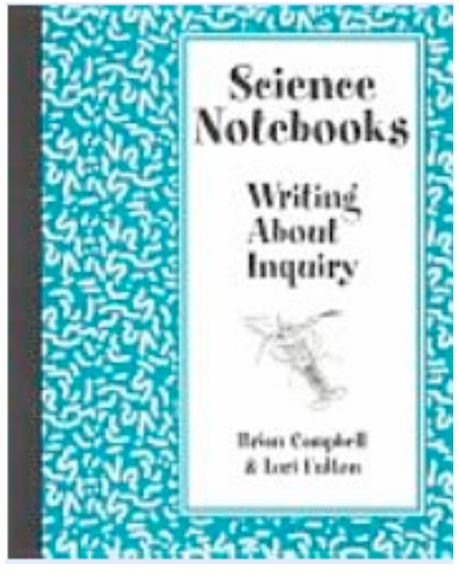




Notebook Know How and Notebook Connections Aimee Buckner



Using Science Notebooks Michael Klentschy



Science Notebooks Brian Campbell