# Ch. 6 Learning to Look STRUCTURING TEACHERS OBSERVATIONS TO

**IMPROVE INSTRUCTION** 

## Keeping teachers active during Modeling

- How do we keep modeling in the classroom from becoming an extra break time for the teacher?
- How do we create accountability so that the teacher gains from the lesson?
- How do we ensure that both teacher and coach focus on best practices for teaching and learning?
  - Lesson Observation Form (PAGE 68)

## Pre-modeling Conference

- 2-3 days prior to the modeled lesson
- During meeting:
  - Where lesson falls in the unit
  - What learning builds up to the lesson
  - Prior knowledge of the students
- Prior to the first lesson only, go over the blank lesson observation form and explain that teachers will complete while coach is modeling the lesson and that we will review afterwards.
- Discuss the 1<sup>st</sup> two sections: Focus on Teaching/Focus on Learning



### LESSON OBSERVATION FORM

Teacher

students to

Date

text of prev

addresses ti tent and pe

This P

practice The Burns

it"—T

teach

abou

ong

ing

or

SI

ensures th will be ap the impo lesson s

Observer.

#### Focus on Teaching

BRIDGE/PRE-ASSESS FOR READINESS Upon what prior knowledge will students build for the day's learning?

#### **GOAL-SETTING INTRODUCTION**

How will students learn what they must know and be able to do?

#### LESSON BODY

What performance tasks, experiences, discussions, and other activities will enable students to deeply understand the essential content?

CLOSURE/PREVIEW (HOW WILL WE USE WHAT WE LEARNED TODAY IN THE FUTURE?) What did students learn? How does it fit into the big picture? How will they build upon this knowledge in the future?

#### Focus on Learning

EVIDENCE OF STUDENT LEARNING

What did you observe about students' performance during an activity? Their discourse? Their written work?

#### EVIDENCE OF STUDENT ENGAGEMENT

How did students interact with the content? Did they work cooperatively in a group or partner setting? Did they respond to every pupil response question? Did they accept responsibility for their learning?

#### EVIDENCE OF DIFFERENTIATION

Were open-ended tasks, questions, experiences, performances, and/or problem formulation included in the lesson?

#### Next Steps

What would I like to try in my class based on the lesson?

## Pre-modeling Conference cont.

### Focus on Teaching

- Pre-assessment or warm-up
- Goal setting introduction (clarifying learning criteria)
- Lesson body (meat)
- Close/preview
- Essential to ensure that lesson connects to instructional unit and will be appropriate for students.
- Also shows the importance of having teachers ACTIVELY observe during the model lesson so they can incorporate new learning into their practice.

## Pre-modeling Conference

### Focus on Student Learning

- Focus in 3 places
  - First, specifically observe my techniques for ongoing informal assessment that gives evidence of student learning.
  - Purpose for teachers to recognize that as I observe and listen to students I am constantly assessing.
  - Second, teacher observes level of student engagement and evidence of student engagement
  - Students are typically more engaged when learning is challenging and not too hard or too easy.
  - Third, note that the lesson is differentiated (and not by everyone getting a different worksheet!)

### Modeling the Lesson

- Teachers have a blank copy of the lesson observation guide form that they complete while coach is modeling the lesson.
- Teachers are encouraged to address all areas of the Focus on Teaching and Focus on Learning sections.
- Coach intentionally plans for an easily identifiable example in each part of the form

## Post-modeling Conference

### Meet within 24 hours if possible

- Let teacher discuss any written comments that are listed on form, or places where there are no comments.
- Coach should call attention to final question "What would I like to try in my class based on what I saw?"

### Follow-up

- Consult with teacher on how to move forward (more modeling, co-teaching)
- If request is more modeling: 2-3 lessons before moving to team teaching approach
  - Plan lesson together, each person takes 2 parts of the form to complete
  - Ex. Coach may do opener/goal setting while teacher completes form and then switch
  - Both write observations for the "learning" section
- After team teaching, both share what was seen during each part and discuss observations of the students.

## Variations

### Could use as part of lesson study:

- Entire team/PLC would discuss
  - ► The lesson
  - Goals
  - Look fors
  - Evidence of student understanding
  - Follow up activities
- Entire grade level would observe coach teach the lesson while completing form
- After lesson, reconvene and critically review the lesson, using teacher comments on the forms. Teachers use that info to teach the lesson on the next day

### Robert Kaplinsky



## Open-ended vs. Open Middled

### What makes an open-ended problem?

- Multiple ways to solve
- More than one answer



Math problems vs. Ms. Pacman Both have a beginning middle and end Those B, M, and ends can be open or closed...

> Ms. Pacman always starts the same way (facing left toward the bottom): Closed It also ends the same way...eaten by a ghost, or eat all dots: Closed

> > That leaves the middle opened.

### Open Ended vs. Closed Ended

- Do Hybrid Cars pay for themselves?
  - http://robertkaplinsky.com/work/hybrid-cars/
- How much does a 100x100 In-N-Out cheeseburger cost?
  - http://robertkaplinsky.com/work/in-n-out-100-x-100/





How Can You Win Every Prize At Chuck E. Cheese's?



How Many Hot Dogs And Buns Should He Buy?



How Much Money Are The Coins Worth?



How Many Soda Combos Are There On A Coke Freestyle?



How Many Hot Dogs Did They Eat?!



How Can We #SaveNelly?

### OpenMiddle.com

- Based on the intro from Dan Meyer about problems having an Open middle
- Arranged by Grade level and by standard, or you can browse by DOK level (2/3)
- Open middle problems often require a higher DOK level than procedural/conceptual thinking

### **Open Middle**

Challenging math problems worth solving

ne Kinder 👻 Grade 1 👻 Grade 2 👻 Grade 3 👻 Grade 4 👻 Grade 5 👻 Grade 6 👻 Grade 7 👻 Grade 8 👻 High School 👻 About Submit

#### THE TOP 10 MOST VIEWED PROBLEMS OF 2015 1. Two-Step Equations by Audrey Mendivil, Daniel Luevanos, and Robert Kaplinsky OPEN MIDDLE WORKSHEET 2. Rational and Irrational Numbers by Bryan Anderson Download the Open Middle Worksheet (Regular): Version 1.2 3. Order of Operations by Robert Kaplinsky with answer from Michael Fenton and his students Download the Open Middle Worksheet (Large): 4. Interpretting Percentages by Robert Kaplinsky Version 1.1 5. Adding Two-Digit Numbers Given One by Robert Kaplinsky 6. One Solution, No Solutions, Infinite Solutions by Bryan Anderson SUBSCRIBE 7. Multiplying a Two-Digit Number by a Single-Digit Number by Robert Kaplinsky Receive emails every time a new problem is published. 8. Dot Card Counting by Dan Meyer Enter your e-mail address 9. Exponents and Order of Operations by Zack Miller 10. Converting Between Fractions and Decimals by Robert Kaplinsky

## OpenMiddle.com

### **SOLVING ONE-STEP EQUATIONS 2**

Directions: Use the numbers 1 through 9, at most one time each, to make a true equation where x has the largest possible value.



Name:	Period: Date:
First attempt:	Points:/2 attempt/2 explanation
What did you learn from this attempt? How will your strategy change on your next attempt?	
Second attempt:	Points:/2 attempt/2 explanation
What did you learn from this attempt? How will your strategy change on your next attempt?	
Third attempt:	Points:/2 attempt/2 explanation



### SOLVING ONE-STEP EQUATIONS 2

Directions: Use the numbers 1 through 9, at most one time each, to make a true equation where x has the largest possible value.



How do the constants' values affect the variable's value? What number has to have the highest value? What number has to have the lowest value?

 $\sim$ 

Answer

The largest value of x is 85 when 12 + x = 97

### How I Can Help You



#### Real World Problems

My workshops help teachers implement problem-based lessons by helping them experience them from both student and teacher perspective, leading to increase students' success with performance tasks and the <u>Common Core State</u> <u>Standards</u>.



#### Depth of Knowledge

Problems at higher depth of knowledge levels have the potential to challenge the most gifted students yet remain accessible to struggling students. I can help teachers develop best practices for implementing them so that students persevere longer towards finding the solution.

#### Teacher Questioning

I have trained thousands of educators on how to quickly and effectively modify their questioning by using a role-playing activity which simulates classroom pressures. This activity results in teachers finding it easier to formatively assess students in real time and foster richer classroom conversations.

### What People Are Saying

Robert successfully convinced the room of teachers and leaders that problem-based learning was not only engaging for students, but an essential piece of math learning. He changed the mindset of many from focusing all classroom time on procedural fluency, to providing a balance of procedural fluency, conceptual understand, and critical thinking in mathematics.

During our training three teachers in separate conversations shared, "This is the best professional development I have ever attended." And many more shared similar sentiments after the training day.



### Webster Groves School District Webster Groves, MO

#### . . . . .

Want to read more? Check out my letters of reference.



#### <u>Lesson Study</u>

Lesson study allows teachers to reflect on student learning by working together to identify a student learning goal, creating a lesson that addresses that learning goal, implementing the lesson, debriefing and modifying the lesson, and repeating the lesson to see the modifications' effects.



- http://robertkaplinsky.com/
- Social Media
  - Facebook: Robert Kaplinsky
  - ► Twitter: @robertkaplinsky @openmiddle
  - #observeme
  - Other cool people that Rob endorses ©
    - <u>https://gfletchy.com/</u> (Largely elementary based, great progression videos!)
    - http://www.estimation180.com/clothesline.html Grades 4-8 mainly