

Problem of Practice:

What do you want your students to be able to do better?

This must be concrete and measurable.

Try brainstorming 3-5 possibilities and then choose one.

Example: Increase student use of Notices and Wonders in Math Cornell Notes.

Hypothesis

Where you want students and/or teacher to be at the end of the 6-8 week coaching cycle.

Example: Every student in 5th grade will write at least one notice or wonder every day in the left column of their Cornell Notes. The teachers hypothesize that the Tier 2 group will be more inclined to write questions and notices and wonders in the left column of the Cornell Notes.

Plan:

The plan focuses on a plan for change for students and/or the teacher based on the problem of practice. The coach is there as support, as needed. Notice that there are specific actions, a specific time range, and specific ways to collect data. The coach is not saying, here, let me show you how to do it my way. They are leading the teacher through an intervention designed by the coach and the teacher with the students in mind.

Example:

1. *The teachers and coach will collect pre-intervention data from the students' math notebooks.*
2. *Beginning Monday, November 6, the teachers will begin **modeling** the use of the Notices and Wonders side of Cornell Notes as they scribe class Cornell Notes during the math lessons. Teachers will preplan some notices and questions ahead of lessons. Both teachers will draw attention to Notices and Wonders during the lesson. This will raise Awareness of a learning and thinking tool and show Accessibility which is the self-efficacy for completing a task. (If the teacher can do it easily, students can, too.)*
3. *Beginning Monday, November 6, students will be **redirected to write** thoughts and questions in the Notices and Wonders column when they are not chosen to answer a question, when they want to comment in the middle of a lesson, or when they are working on independent work and have a question. This will show Association by connecting the Notices and Wonders column with a purpose.*
4. *Beginning Monday, November 6, students will be asked if anyone wrote in the Notices and Wonders Column and **questions will be celebrated and discussed**. If time runs out, questions from previous days will be used as warm-up discussions before lessons. This will encourage Action, or intentional new behavior. Students will have an opportunity to share what they wrote. This will show Association with a positive action because the students like to share.
(NOTE: Intentional Action involves use of cognitive resources. Mental energy will be shared between tracking new content as it is explained and thinking up questions to record.)*
5. *The teacher will follow this protocol every day. A mid-cycle check in will occur to see if the plan needs to be modified.*
6. *The teachers and coaches will compare the tallied pre- and post-data for quantity and type of notices and wonders.*

Data:

Data, by its nature, must be measurable. Data can be pre- and post-assessment, observations by the coach, a quantity of behaviors which happen over a given time, or any other quantifiable measure. What you will collect as data, how you will quantify it, and how you will compare beginning data with end data should be decided before you do anything in the classroom. When in doubt, keep it simple.

Example

- *Pre-intervention data:*
Teachers and coach will check student math notebooks for comments or questions in the Notices and Wonders side of their notes for the week before the intervention begins. Questions and notices should be different from those modeled by teachers.
- *Throughout the cycle – Teachers will create a tally sheet for all students and will do a daily check of student notebooks. Teachers will write the number of Notices and Wonders for each student each day. If this becomes too burdensome, the coach will help go through notebooks and note student work. This data will serve as immediate feedback about the effectiveness of the modeling.*
- *Post-Intervention – Student notebooks from the week of December 4-8 will be examined for creative and content questions, Notices and Wonders.*

Data analyses:

Data can be collected and compared in many ways. You do not have to be an excel guru or math wizard to see change.

Example:

- *Teachers and coach will look for trends across the data by student and class.*
- *Teachers and coach will assess when and if the goal of one entry for every student, every day was met.*
- *Teachers and coach will look at the types of entries made by students, comparing beginning and end of the cycle entries to see if there was a change in type of entry.*

Conclusion:

What did you see, learn, and think about what happened? This is where the rubber hits the road. Sometimes the conclusion does not meet the hypothesis. That can be powerful in many ways.

Example:

Based on the data and classroom observations by teachers, the teachers and coach determined that modeling and leaving intentional time to write and discuss notices and wonders encouraged the use of the notices and wonders portions of the Cornell notes as evidenced by the quantity and quality of comments written by students. The written notes and the dedicated time listening to what students wrote, informed the teachers of misconceptions and great ideas of students. The more students were celebrated for writing their thoughts down, the more they did so.

The teachers were correct in their hypothesis that the students who struggled the most, wrote more Notices and Wonders than students who easily learned the content.

Going forward:

Do not let the learning and successes end with the coaching cycle. What will teachers do with their new knowledge about themselves and their students?

Example:

The teachers found the use of Notices and Wonders engaging for students and a source of student misconceptions for the teachers. Even more importantly, they found creating time for students to write and discuss their ideas was powerful for encouraging student voice. The teachers intend to continue to encourage students to write and share their thoughts and questions both in writing in their Cornell Notes and in class discussions.