## Math observations

Science, Mathematics

## ASSIGN BUSTER

Kindergarten Math Observations Mrs. Miller, Antelope Elementary, Kindergarten Observed: Wednesday (9: 00am-10: 30am) 3/27/13 Classroom rotation- children went from one room to the next for separate subjects, also each group of kids had been evaluated and put into advanced, moderate, and standard levels. This was also known as 3rd level, 2nd level, and 1st level kids. Advanced Group- 3rd level kids Classroom was set up into three separate group tables. Kids would move from work table to work table to complete different math activities.

Before starting their groups theteacherfirst went thru math skills they had learned the previous week (adding the dots on a two sided domino). Then the teacher went on to this week's concept (adding objects). She then read a story about a girl and a boy that wanted to see how many magnets they had together. The girl had 3 black magnets and the boy had 2 hand magnets. She then had the children add up (count) the total amount of magnets on the board. She then asked what they thought the math problem would be. They repeated $3+2=5$.

She then asked if all students had understood why it was that and all answered with either the sign language symbol for I understand or yes. Group \#1- Played a version of math bingo. Used math problems to find what number to put there chip on. The answer to that answer was where there chip was then placed. This game continued until all squares were filled. This group was assisted by Mrs. Joyce (a. k. a teacher's assistant). When kids began to struggle with problems for example like: $3+4$, the assistant slowed down the game and made sure each student recognized that $3+4$ was 7 and then to place their chip on seven.

Group \#2- This group was with the teacher. This group worked through a worksheet paper with their teacher. The first side of the worksheet was about counting coins. Mrs. Miller first asked them the name of the coin (ex. Nickel). The children answered nickel. She then asked what the value of the coin was (ex. Nickel=5cents). The children answered 5 . She then asked the children to count by fives for each coin. She then asked the children if the answer was 15 cents or $\$ 15$. They answered 15 cents.

Example problem : (three nickels) $5 \ldots 10 \ldots 15=15$ cents The second side of the work sheet was drawing what the story was saying as first a picture, or a visual, and then as an equation. Mrs. Miller first read the story. Then the students went thru drawing the picture with the teacher. Example problem: Tanya has 2 red balloons and 1 yellow balloon draw the picture. Mrs. Miller then asked the students what the problem would look like. The students answered $2+1=3$. She then made sure that each student understood and had the correct answer before proceeding to the next problem.

Example problem: Jamal has 3 blue squares and 2 green squares, draw the picture. Mrs. Miller then asked the students what the problem would look like. The students answered $3+2=5$. She then made sure once again that each student comprehended the problem and why it was $3+2=5$. After about 15-20 minutes the groups switched and rotated to the other table. At 10: 30 the children lined up at the door and went back to their homerooms for snack. (end of observations) Summary/ Reactions - Mrs. Miller, Antelope Elementary, Kindergarten I enjoyed observing this classroom over all.

I really liked the way her classroom had been set up with not just desks in a row but the students were assigned tables and then they also had an
assigned seat on the carpet. I was pleasantly surprised at the level of math the students were able to complete and comprehend. I considered in the back of my head what I had originally thought kindergarten was and remembered only learning my alphabet and finger painting. I really liked that the students had been assessed into different levels of comprehension and was glad to see that most of them succeeded more in the segregated math environments.

I also liked that their math time had been split into two subgroups. I noticed that this helped the students get a break from the monotony of doing the same math problems over and over by also allowing them to improve on some of their other math skills simultaneously. There were a few differences within each group level that I would like to consider also. First I would like to talk about my reactions to the level three students. My initial reaction to the students was that they were all very focused mildly behaved kids for kindergarteners.

The students had no problem and truly looked like they enjoyed playing the Math Bingo. I noticed Mrs. Joyce did not have to help them as much with adding the numbers together and seemed to compute the answers quite quickly. When the students were in the second group with Mrs. Miller they were asked more difficult questions such as the three factor problem (mentioned in observations). I was surprised to see that most of the students had no problem drawing and writing out the problem even though an additional factor had been added.

Then when they moved on to counting the coins I liked that majority of the students could recognize the coin, the value of the coin, and then by using
its amount counting up to find how muchmoneythey had. Over all, this group definitely showed they were advanced. Next I would like to talk about my reactions to the level two students. My initial reaction to the students was that they were a little less focused but comprehension wise were still fairly up there. I liked that the group activity had changed for group number one from math bingo to a more practice oriented group. I did notice that Mrs.

Joyce had to help a few students in setting up their number in rows and would have liked to see her maybe show the students first how to put the numbers in rows. In Mrs. Miller's group, or group number two, I noticed she didn't really focus on the writing of the problems to match the stories. I noticed that the kids didn't understand as much as the previous level why they got there answer as much as what their picture looked like. And then when the students went thru the coin side of the work sheet I thought that a few students answered more frequently first and then the other students would copy there answer.

Over all, this group was slightly less advanced but also above the average kindergartener. Finally I would like to talk about my reactions to the level one students. My initial reaction to the students was that they were definitely a lot more easily distracted by the set up of the room and each other. I did like that Mrs. Miller went through the numbers 1-30 on flashcards with this group and that when they began to struggle she slowed down and went thru them again before starting the groups. I will definitely consider this strategy in my classroom. I appreciated when Mrs.

Joyce took the time to show the students what their numbers should look like when in order by writing them on the board. This was a great reference and I
noticed majority of the students used it as such. I noticed though with this group, more than the last group, Mrs. Joyce helped he students find each number instead of letting them find them on their own. I assumed that maybe she was just trying to save time. In group number one with Mrs. Miller I noticed the students would lose focus much easier and found coming up the answer much more difficult.

I especially noticed that at one point on the front of the work sheet students were mostly blurting out guesses not actual thoughts. I would have liked to have scene maybe a break at this time to go back and explain why the answers were what they were, but I understand at the same time that the groups were on a time schedule. On the back of the work sheet I noticed majority of the students struggled when asked what the coins were even though examples of the same coins had been placed on the board. I would have probably reminded them of the pictures on the board.

Over all, this group was definitely willing to learn, but lost focus the most often. In conclusion, observing this kindergarten class has really changed my outlook on what I used to think kindergarten was. I am now more willing to consider this grade level as a possiblecareer. I saw a few things I would have maybe done differently, but over all my observations of Mrs. Miller's kindergarten class were mostly positive and rewarding experience wise as well. Third Grade Math Observations Mrs. Shaffer, Metteer Elementary, Third Grade Observed: Thursday (10: 00am- 11: 00am) 3/28/13 Classroom setup:

The desks were set up in groups of two. Each group had been strategically placed there because of their willingness to volunteer or the lack there of. For instance a student that answered questions a lot would be placed with
another student that didn't volunteer so much so as to make that student more willing to raise their hand and participate in discussion. The classroom was covered in inspiring posters and excellent art work made from each student. There was also a wall dedicated to the highest scored English tests. There were a set of classroom Do's and Don'ts on the wall.

Examples: Make good choices, Make the teacher happy, and Fallow direction quickly. Each rule had a hand signal. For example make good choices is taking your pointer finger and pointing to the side of your head. After the teacher went through each rule she then had each student teach it to their neighbor. There was a wall with small pouches on it with each students desk number on each and in each pouch was a green, yellow, and red card. When a student talked out of turn or was not fallowing directions the student was then instructed by the teacher to go " turn their card" or switch their card from green to yellow or from yellow to red.

On the board there was a tally system set for when the class as a group were not on task or not fallowing directions. If the students were too loud they got a tally mark on the frowny face side, and if they quieted down and got focused again they received a tally mark on the smiley side. At the end of the day the tally marks were added up and if they had more smileys then frownys they got extra recess that week. Math: The teacher began by going back over 8ths. She drew a square on the board and asked the class how many individual squares made a whole square.

The students replied by saying " 16 squares". She then cut the whole square in half and asked the students how many squares made up one half of the whole square. The students answered by saying " 8 squares". The teacher
then cut one half the whole square in half and asked the students how many squares equaled one fourth of a whole square. The students answered by saying " 4 squares". The teacher then cut one fourth of the whole square in half and asked the students how many squares make up one eighth of the whole square. The students answered by saying " 2 squares".

Then the teacher asked how many eighths would fit in the whole square. The students replied by saying " 8". The students were then told to get out there small square eighth work sheets. The work sheets were about eight square grids on a piece of paper. On each grid the students were instructed to creatively shop up the grid into sections so that it had eight equal parts, or eight eighths. Then after they had finished their mini squares they were instructed to trade them with their neighbor and grade each other on if they completed the assignment correct as it had been assigned.

Then when their squares had been approved, they were then supposed to choose one square they thought looked the best and make draw that mini square pattern onto a bigger square grid. The teacher then made sure that each student understood that the squares needed to all be colored a different color so they would over lap and that they wrote one eighth on their pages as well. Summaries/Reactions - Mrs. Shaffer, Metteer Elementary, third grade. When I first arrived at the classroom, the students were already starting the day out to a rough start. Mrs.

Shaffer was apparently not content in the way they had walked to the classroom after recess and had the students walk all the way back to the line up on the play ground and walk back to the classroom again. Although the students slipped up a bit the first time when they had to actually go back
and walk it again, I noticed a significant change in their attitudes and their level of focus. Once in the classroom, the students level of attentiveness went down again but it was mostly because they had a new distraction in the room, me. The teacher started going through the class rules and the hand signals with the students.

I noticed that they really enjoyed sharing with their neighbors what they knew and I feel like this simple activity helped them to better know their class mates and grow as group partners. Then the teacher began asking the students their fractions for eighths and writing the answers on the board. I noticed that not every student was completely paying attention or answering the questions as much as other students. I would have liked to have seen the teacher maybe redirect the focus of the whole class as she had done previously in the day, just to continue with consistency.

Then the teacher had the students break off into their groups and finish their mini grid papers. I noticed with some of the groups the students were really excited to show their neighbors their squares and had excellent creativity in their designs. The only thing that I noticed did happen with a few of the groups was that they started to act as though the appraisal of whose square was the best was more important than actually completing the assignment. But when the students reached too loud of a level of noise, the teacher put a tally on the board on the frowny side and the students refocused.

Then the students that were finished with the mini squares were then instructed to redraw their favorite design on the larger grid square that would be shown at their open house. I really liked that the students made it a point to make their fractions very personal and neat. I then made it a point
for myself to ask each student why they chose the colors they did. Most students replied that the colors they chose were their favorite colors. One boy said that he chose the colors brown, green, grey, and black because it made his fraction look like camo print. All in all I had a really great experience while observing in Mrs.

Shaffer's classroom. Her techniques and her instruction were very unique and different. I hope to visit and or observe her class again someday. Sixth Grade Math Observations Mr. Smith, Metteer Elementary, Sixth Grade. Observed: Tuesday (9: 30am-10: 30am) 3/26/13 Classroom setup: The classroom had its own computers, two wipe boards, and a job board. The Job Board included little pouches with each child's name on them and included job such as Lunch Helpers, Paper Gatherer, Desk Straitener, Mad Minute Man, Computer Monitor, Clean up Foreman, and Phone Person. On the walls there were several posters.

The first one was a poster titled " How to write a good paper. " It had four colored circles on it. There was one green forgo write your topic, one yellow for slow down and give reason, one red for stop and explain, and finally another green for go back and restate your topic. The next poster was a transition poster that had lots of helpful transitions sentences for the students to use as a reference. The next poster was an Editors Marks Poster. It had signs such as the paragraph sign, I. The student's desks were all together in a hollow box shape with two desk partners in the center.

Math: That day Mr. Gappa was having the students build a mummy tomb out of Banana and Apple boxes. He first asked the students' how they should start. They started by finding the area of the Banana Boxes (Banana: 10" ?
$20^{\prime \prime}=200$ inches squared). Then he asked them what they should do next. They replied that they should find out how many boxes and fit in their tomb space. Mr. Gappa then measured each dimension of the corner of the room where the tomb would be placed. Wall one was 100 in long and 110in tall. Wall two was 160 in long and 110in tall.

He then asked the students what they noticed about the dimensions of the banana and apple boxes compared to the dimensions of the walls. They replied that the banana boxes and the apple boxes dimensions were factors of the wall dimensions. Then he asked what they should consider next. They replied that they didn't know how many columns they still needed. Mr. Gappa told them that they would need two columns, but then asked how many boxes it would take to make the columns using the apple boxes (Apple: $20^{\prime \prime}$ tall). The students then started to write down all the data on the board. Then Mr.

Gappa went around the room making sure each student understood their data for the tomb building. For their final blue prints they were to use graph paper, making sure that there boxes were equal to at least two squares on the graph paper. Mr. Gappa then made it clear that he wants all the blue prints to be neat and colorful because they were going to be submitted to the Pharaoh contractor. For each wall the students then went about figuring out how many boxes they would need using the formula, area= length? width. When they had finished with their walls, they all gathered at the front of the classroom and went back over the data with Mr.

Gappa. Mr. Gappa then went around the room making sure that each student was using lots of color on their blue prints and were making sure they were
very neat. He then mentioned a real life situational fact to the kids that they were going to be like little construction workers when they begin building the tomb. Summaries/Reactions First of all I would like to begin by saying how much I really liked the set up of the room. The kids were close enough together for quiet discussion during tasks but also when out of their seats had plenty of room to move throughout the classroom.

This class was also the quietest sixth grade class I've ever seen. Even Mr. Gappa spoke quietly when giving direction to make sure that each student had to listen very closely just to hear what he said, I almost didn't even hear what he said. Next I would like to discuss the math. I really liked that Mr. Gappa had taken the time to create a math project for all the kids that used all the math skills they had learned during the year to help in the making of a mummy tomb which was also a part of their history lesson that week.

I liked that when going over the data Mr. Gappa didn't just give the students the answers but made them figure them out on their own. This to me showed the true attentiveness and memorization skills that the students had obtained that year. The last thing I liked was the student teacher relationship that Mr. Gappa had with all his students. He was serious when he needed to and the students switched modes as well and truly respected him as an authority. Yet at other times he could laugh and joke with the students about how themusicthat he played was really old.

He also reminded me of the High School teacher Mr. Null in the sense that he called all the pretty girls fat and ugly, as to not let them get an ego in his class. All in all, I truly enjoyed observing this class. Their attentiveness to direction and the bond that they had with their teacher was to me very
insightful. I will definitely consider using some of his teacher technics in my own classroom someday and hope to go back and observe his classroom someday as well.

