## Part 1 – Purpose

On October 16, 2007, a second grade class at Hill Elementary\* took a summative assessment at the completion of their unit on <u>money</u>. This assessment consisted of 20 questions and took the students approximately 25 minutes to complete. The assessment consisted of two pages, Part A and Part B. The objectives of the assessment crossed over both parts, but Part B consisted of problems with a greater degree of difficulty than Part A. The objectives of the assessment were as follows. *Students will*...

- identify the value of coins (penny, nickel, dime, quarter, half dollar) and the dollar bill. (M.UN.01.04)
- 2. add coins and identify the cent/dollar value (addition).(M.PS.01.07, M.UN.02.07)
- 3. show different combinations of coins that equal the same value (addition). (M.UN.01.05)
- 4. identify a collection of coins that are <u>more than</u> or <u>less than</u> a stated cent/dollar value. (M.PS.01.08)
- 5. make change given a sales price of an object and the amount given (subtraction). (M.PS.01.07)

It should be noted that these objectives align with Michigan first grade "Grade Level Content Expectations" (GLCEs). There was one problem on the test that included recognizing money in decimal notation (i.e. \$3.75) which falls under the 2<sup>nd</sup> grade GLCEs. The teacher noted that they would do another money unit later in the year.

\* Name changed to reflect the privacy of the school.

### Part 2 – Administration of Assessment

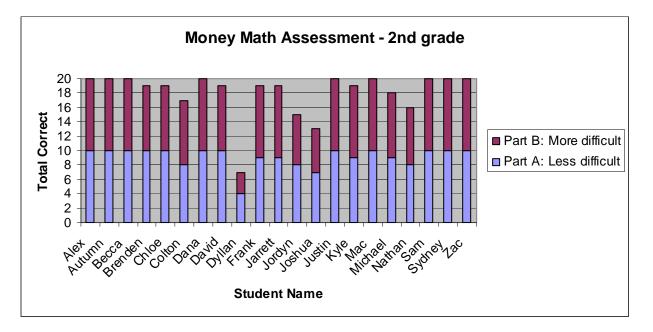
The assessment was given on October 16<sup>th</sup> to a class of 21 second grade students at Hill Elementary\*. The class consists of 22 students, with one being absent the afternoon of the assessment. The assessment was given the last hour of the day and was of a summative nature. It was an Evan-Moor published test on basic skills (number & operations) for 2<sup>nd</sup> grade.

My cooperating teacher allowed me to fully control the administration of this assessment. She gave me the test ahead of time and told me what she normally does. I announced that we would be taking a math assessment and asked the students to clear their desks and take out a sharp pencil and an eraser. The students were also allowed to take out folders to "*cover*" their work. The students were instructed that this assessment was to be done individually and without talking. If they had a question, they were instructed to raise their hands. I read each problem aloud at least once and sometimes twice. This was to ensure that the math assessment would not be impaired by reading ability. The students asked a number of questions before and during the test. I used a "*thumbs up*" signaling approach at certain sections within the assessment to indicate if students were ready to move on.

Overall, I thought the assessment went well and my cooperating teacher gave me really good feedback on my delivery of the assessment. I was nervous giving it; however, because I felt like it was important knowing that the students' grades were at stake and I

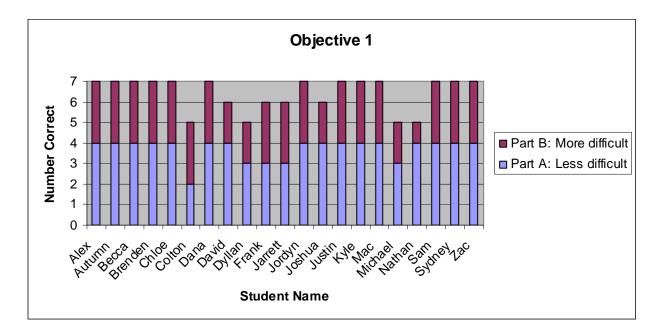
didn't want the assessment to be flawed because of a lack of clarity on my part for instructions. There were only a couple of minor items I noted that I felt could have gone smoother. First of all, the students had never taken an assessment before where they had to fill in the "bubble," so this was a point of confusion at the beginning. I felt that if they had done a practice worksheet before where they had to fill in the bubble, it would have helped. Secondly, the students were permitted to bring out folders to "*cover*" their work and ensure their privacy. However, some students felt the need to bring ALL their folders out and build little house blockades, which tended to fall down and be disruptive. I had to ask them to put some of them away. And lastly, it was already half way through the assessment when I thought to tell the students that they could only select ONE answer and corresponding fill in one "bubble" under the question. After receiving the tests back, I had one student who gave two answers on a question and we had to score this as incorrect. I don't know if he didn't listen to my instructions, of if this occurred before I gave the instructions midway through the assessment.

\* Name changed to reflect the privacy of the school.



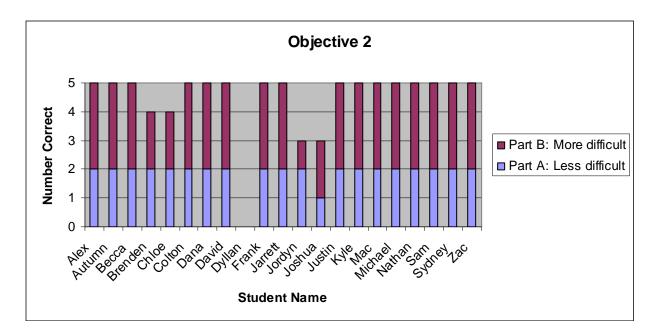
# **Part 3 – Display and Interpretation of Results**

Overall, the class performed very well on this summative math money assessment. There were nine students, 43% of the class, who correctly answered 100% of the total possible 20 questions/problems. The class <u>mode</u> was <u>20</u> correct answers. The class <u>mean</u> was <u>90%</u> or 18 correct and the <u>median</u> was <u>19</u> correct. Excluding the three lowest scores, the class average rises to 96%. There was only one student, Dyllan, whose score was significantly below the class mean with only 7 correct out of 20 or 35%. There were no significant observations made with regards to any differences between Part A, the <u>less</u> difficult part, as compared to Part B, the more difficult part.



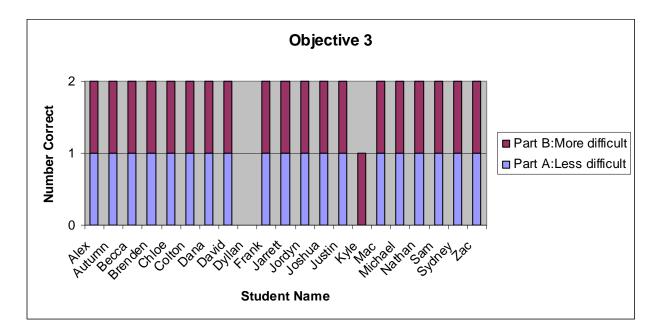
On objective 1, *students will identity and know the value of coins (penny, nickel, dime, quarter, half dollar) and the dollar bill*, the class average of 6.43 correct out of seven, or 92% is consistent with the overall results of students performing well. The student, Dyllan, who scored significantly below the rest of the class overall, did not significantly score lower on this objective. It is concerning to see four students score only 71% correct on this objective, since recognizing coins is the easiest objective targeted on the assessment. For these students, some additional practice at recognizing coins may be warranted.

(Source of Objective 1 Data - Part A: 1, 2, 3, 4 and Part B: 1, 2, 3)



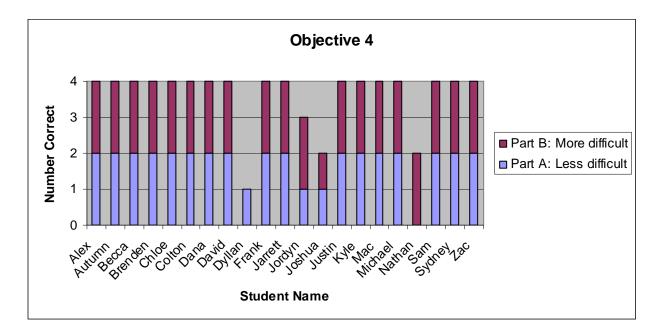
On objective 2, *students will add coins and identify the cent/dollar value (addition)*, the class average of 4.48 correct out of five, or 90% is consistent with the overall results of students performing well. The student, Dyllan, who scored significantly below the rest of the class overall, completely missed this objective. Additional work may be warranted for Dyllan, Jordyn and Joshua.

(Source of Objective 2 Data - Part A: 5, 10 and Part B: 4, 5, 10)



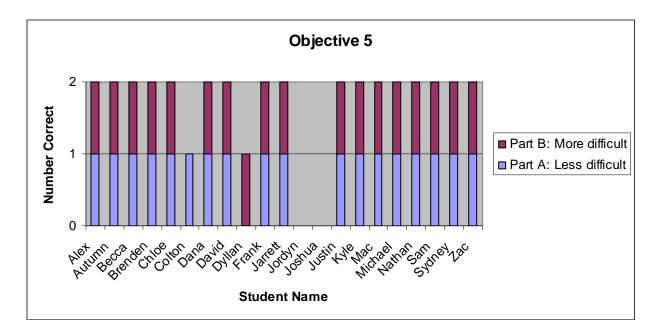
On objective 3, *show different combinations of coins that equal the same value* (*addition*), the class average of 1.86 correct out of two, or 93% is consistent with the overall results of students performing well. The student, Dyllan, who scored significantly below the rest of the class overall, completely missed this objective as well. In addition, the student, Kyle, missed the easier question and got the harder question correct. The rest of the students scored both questions correct. Because of the way these questions were worded, a number of the students raised their hands to clarify meaning. With regards to the student Dyllan, she receives speech and language support; and the teacher has often commented she thinks she has difficulty in comprehending written AND oral directions. Additional work with Dyllan in the area of listening and following instructions, as well as the math content may be warranted.

(Source of Objective 3 Data - Part A: 7 and Part B:6)



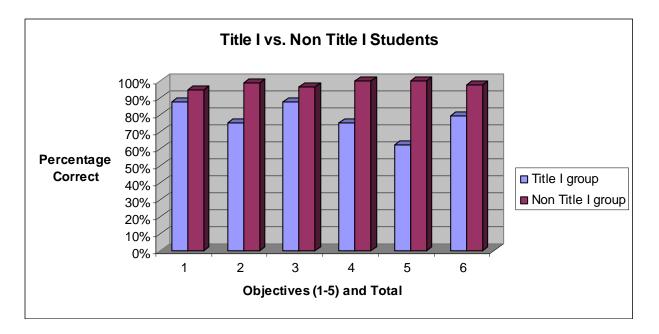
On objective 4, *identify a collection of coins that are <u>more than</u> or <u>less than</u> a stated <i>cent/dollar value*, the class average of 3.62 correct out of four, or 91% is consistent with the overall results of students performing well. The student, Dyllan, who scored significantly below the rest of the class overall, also scored low on this objective as well. Two of the students, Jordyn and Nathan, actually scored better on Part B, the more difficult portion of the assessment, than they did on the Part A. Additional work on this objective may be warranted for Dyllan, Joshua and Nathan.

(Source of Objective 4 Data - Part A:8, 9 and Part B:7, 8)

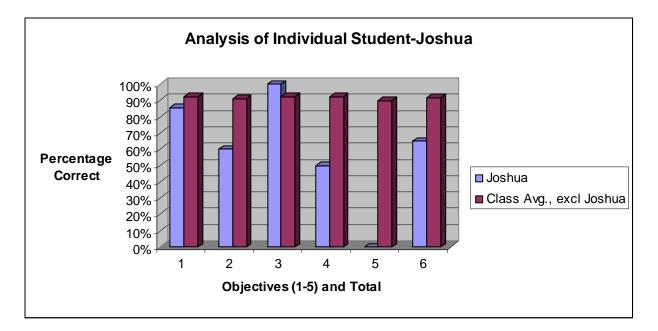


On objective 5, *make change given a sales price of an object and the amount given* (*subtraction*), the class average of 1.71 correct out of two, or 86% is a little lower than the overall results of students. This is in line with the fact that objective 5, "*making change*," is the most difficult objective assessed. However, it was not significantly lower to warrant a re-teaching the whole class on this objective. Several students, Jordyn and Joshua, completely missed this objective and would appear to need extra practice in this skill.

(Source of Objective 5 Data - Part A:6 and Part B:9)



When I discussed the idea of analyzing a group within the class on this assessment with the cooperating teacher, we decided to focus on students receiving Title I services versus students who are not. When we discussed gender as a possible comparison, the teacher said she was already aware of a gap between the girls and the boys with the boys scoring higher. Since students are first identified for Title I services based upon their reading scores, we thought it would be helpful to see if their math scores followed along with the reading/writing. Based upon the above comparison between Title I students and non Title I students on all five objectives and in total, it is clear that these Title I students are also scoring lower as a group on math concepts. The Title I group scored an overall average of 79% correct compared to 97% correct for the non Title I group. It appears these students could use extra practice, either individually or in small groups, on the math concepts and would benefit from possibly parent volunteers coming in to work with them in small groups, or extra time devoted to them by the teacher during independent math work.



In selecting a student for analysis, I chose Joshua who was the student who scored the 2<sup>nd</sup> lowest on the assessment at 65% correct. Dyllan, who scored the lowest at 35% correct, clearly needs additional work on all objectives. Joshua scored 65% correct in comparison to the class average of 92% (excluding his score). In analyzing his score on an objective by objective basis, it is apparent that Joshua needs extra practice on the content and skill set covered by Objective 5, *make change given a sales price of an object and the amount given (subtraction)*. If Joshua had scored on par with the rest of the class (90%) on Objective 5, his overall score would have been elevated almost 10 percentage points to 74%. In addition, if his score on Objective 4, *identify a collection of coins that are more than or less than a stated cent/dollar value*, was also on par with the rest of the class, his overall score would be raised another 9 percentage points to 83%. Accordingly, it would appear that Joshua would benefit from additional practice in problems using the words, "*more than*" and "*less than*" and in the concept of "*making change*."

On Thursday, October 25<sup>th</sup>, I discussed these results with my cooperating teacher. She felt my analysis was right on par and was as she expected. Based upon all her formative assessment and observations, she was aware of the students who did not do well on the assessment. She also commented that the group analysis comparing students receiving Title I services for reading compared to the group who are not receiving such services was as expected. I left her a copy of the results and she was appreciative.

## **Part 4 – Recommendations for Use of Results**

Overall, the students in this class did well on this assessment. Since it was a review unit on money that covered Michigan 1<sup>st</sup> grade GLCEs, it is as expected that they should do well. The next unit they do on money will come later in the year and will delve into the content a little deeper. However, at the small group or individual level, it is my opinion, that some of these students could really benefit from some additional instruction. Dyllan, who scored only 35%, is in <u>much</u> need of additional help. Her teacher expressed the fact that she has scheduled an upcoming team meeting with staff and parents to determine if she should qualify for additional services. The Title I students could also benefit from some additional work on all objectives. Even though they receive reading assistance, it would be good to see if they could get some additional one-on-one assistance either through tutoring or parent volunteers.

### Part 5 – Assessment

See attached copy of the 2<sup>nd</sup> grade Math Money Assessment given on October 16, 2007, as well as the answer key.

## Part 6 – Reflection

This activity was very educational for me, as I learned how important administering an assessment is. I think that the directions that the teacher gives orally, as well as on the assessment itself, must be clear in order to accurately assess what the students know. The problems I encountered, as previous discussed above under "administration of assessment," were difficulties with understanding how to take an assessment that requires students to fill in the "bubble," as well as disruption occurring when the student brought out folders to "*cover*" their work and ensure their privacy. In addition, the lack of clarity in the beginning in my oral directions as to how students should only select ONE answer and corresponding fill in one "bubble" under the question could have possibly impacted the outcome of one student's assessment. If I had to do it again or in my future role as a classroom teacher, I would make sure that I put some procedures in place to ensure against these trouble spots. In addition, I would use this analysis in shaping and directing my future instruction to help and guide those students who didn't do as well as the rest of the class.