

Data Analysis and Interpretation Paper  
Data Analysis and Interpretation with Technology  
Module: EDHD 435  
Part 3

Fall 2004  
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December 13, 2004

This year I am placed in a kindergarten class at New Hampshire Estates Elementary School in Langley Park, MD. I have fifteen students in my class, six of whom are girls and nine of whom are boys. Of these fifteen students, ten are Hispanic, two are Asian, two are African American, and one is Caucasian.

From analyzing the data I collected from language arts and mathematics assessments from my class, I was able to see which areas certain children need help in, and which areas children have mastered. I created two different spreadsheets for Part II of this assignment.

The first spreadsheet that I created included all of the language arts assessments that my children have done during their first quarter of kindergarten. For each assessment I coded the children's performance according to color. The scores that are marked blue are excellent scores. The scores marked in green are the students' scores that are in the upper mid range. The yellow scores are in the lower mid range and the red scores are extremely low scores. I color coded these assessment scores so that it would be easy to identify where one student fell in accordance to the other students. This information also separates the students into four groups according to ability level in each assessment area. This way of coding students can help a teacher to cater his/her teaching to the students and plan activities that would be most helpful each of them.

The first assessment shown on the spreadsheet is a record of oral language. For this assessment the child is told a series of seven questions and then has to repeat back each sentence accurately. There are three different parts of this assessment which increase in difficulty. This assessment tests children's ability to remember and accurately

process and repeat back oral language. I was surprised by the data I collected from my class. I found that only one child performed extremely high on this exam and six children scored extremely low. This, I determined, does have a lot to do with the large ESL population of students in my class. From analyzing this data, I have determined that my class definitely needs a lot of practice fine tuning oral language skills.

The next assessment on my language arts spreadsheet is Letter Identification. The assessment tests how many letters the students are able to identify. In the beginning section of the first quarter, when this assessment was taken, only three students knew all of their letters uppercase and lowercase. Knowing this information really helps the teacher now what areas to help each child focus on. Also, I can tell just from observing this data which is a few months old, that my children have made huge improvements from then until now. The next part of the spreadsheet contained data on the concepts about print assessment. This assessment quizzes children on their knowledge about print, such as the function of a book, how is it used etc. Again, in this section only one child had a perfect score. As a teacher, this tells me that most of my students have greatly lacked exposure to print. In order to help them progress I would make sure that I read them stories often, discussed the function of print and exposed them to many types of books and written word.

Phonemic awareness was the next assessment my children had on language arts. This assessment included tests on generating rhyme, beginning sounds, and oral blending. Gaining phonemic awareness is one of the first steps of becoming a good reader, so this assessment is an important one to analyze closely. The majority of my students were not up to par on this area of assessment. This does make sense

however, considering that most of them have not mastered their letters. I am hopeful that my students performed poorly on this assessment because they have had little or no previous exposure to letter sound instruction. I know, from looking at this data, that my students need to first master their letters and then begin instruction on phonemic awareness. Since the majority of my class scored extremely low, I know that I will need to start with the basics. The next assessment was on hearing and recording sounds. Very few of my children were able to do this assessment. However, I am not concerned because it is to be expected that the children who did poorly on the phonemic awareness assessment would not be able to complete this assessment.

The data that I have discussed thus far, is the most important data that I collected of my children that will help me determine their language arts skills. My main areas of concern after analyzing this data are my children's oral language skills and phonemic awareness which will follow their identification of letters. These are the areas that I will begin focusing my instruction. Oral language will be a theme that is worked on throughout the year. Letter identification will be the first stage that I focus on to help my students begin a path towards literacy.

The next area that I gathered information on is my students' word recognition. This assessed how many of the students twenty four sight words the children already knew. The students are not yet expected to know these words, but by gathering information on what they already know, I will be able to inform my instruction accordingly. The set of data listed was for the three children who were able to read a simple book. For each child, their teacher collected data through running records that expressed the child's accuracy rate and their reading behavior.

For project II, I also created a spreadsheet that indicated my students test scores on mathematics assessments. The assessments listed on my data sheet are ones given to each student to assess their understanding of each math concept outlined in the MCPS curriculum standards. On my spreadsheet, I marked the students who got a perfect score on each assessment. By doing this, I can easily see which children mastered these mathematic concepts and which need help. This will help me to cater my instruction to the areas in which my students need the most help. Also, this helps me to easily see which children's knowledge needs to be retested later in the quarter. This spreadsheet contains regular assessment scores and scores for the challenge items. Challenge items are only given to the children who answer the regular assessments correctly. This type of spreadsheet is a good one because it also helps the teacher to make sure his/her instruction is covering all of the county's curriculum standards.

I learned a lot from collecting data about my students and creating spreadsheets. When I have my own class, I will definitely use excel to create a clear representation of the data that I have collected. I learned that this technology helps to organize assessments, which ones have been done, which need to be done, and which children need to be retested. I also learned that by organizing assessment data in this fashion, it is easy to see which children are excelling in certain areas and which students are struggling. Data sheets, therefore, provide teachers with a clear basis for instruction. This information can help to determine which children need special assistance in certain areas and will also be helpful in the future when placing children into reading groups. Another wonderful use for spreadsheets is to provide data to administrators and parents to

keep them informed on the progress of the class as a whole as well as the progress of individual students.