

After reviewing the CCT performance profile around assessment for learning with my mentor I realized that although assessments are being completed in the classroom I am not using them as effectively as I could be. Currently in the classroom assessments are completed at the end of a unit to measure student understanding, however because I have not consistently completed pre assessments and post assessments I have not been able to see the growth of the students understanding and development throughout the unit. Therefore, my teaching has not been as effective as it could be because I was not aware of where the students were developmentally and was not teaching to help the students move to the next level.

After attending several trainings over a period of months on the cycle of intentional teaching presented by Donna Rooney a curriculum specialist from CREC, I began to learn the role and importance of using formative and summative assessments in the classroom. I also began to research formative and summative assessment and found that the Association for Middle Level Education (AMLE) was a good resource for learning about the different types of assessment and how they can be used in the classroom to gain a more complete understanding of a child's development. Although this is a resource for middle school teachers I found the website to be very informative with information that I could apply to the early childhood level.

Based on information received at the trainings and from the Association for Middle Level Education I learned that summative assessment is data that is taken at a specific point in time in order to determine a student's understanding and performance, this type of assessment can include end of the unit tests, district benchmarks as well as state benchmarks. The AMLE website indicates that formative assessment is more of an informal type of assessment that is taken throughout the unit. This information then helps the teacher plan lessons and activities around where the students are developmentally to help them reach the next level. In the early childhood setting this type of assessment often includes observation and work samples.

I began to apply the idea of using formative and summative assessment with our math curriculum. One of the next units in our math, Growing with Mathematics, was a unit on numeracy that focused on rote counting to five and counting objects with one to one correspondence. I planned to incorporate formative assessment in this unit by taking a pre

assessment to determine students' needs and to learn which areas would need extra attention. Throughout the unit I planned to use observations to determine students' progress and inform my teaching practices. At the end of the unit, using the Preschool Assessment Framework, I would complete a post assessment activity and determine where the students were with the concepts and skills that they had been learning.

For this unit the standard that I chose to use came from the Connecticut Preschool Assessment Framework Performance Standard 6. This standard relates number to quantity to assess students' ability to rote count to ten and their ability to count objects to ten using one to one correspondence. In the initial assessment students had to count the number of star stickers on a plastic bag and then place the corresponding number of unifex cubes in the bag. During this assessment, I noticed that five students struggled to count the number of stars on the bag. Many of the students were unable to count past the number one or complete the one to one correspondence and put the correct number of cubes in the bag. Another group of students did correctly count the number of stars on the bag; however struggled corresponding the number of stars with cubes. A third much smaller group of students were able to count the stars and place the correct number of cubes in the bag.

Based on this information, I recognized that for the majority of my class the area I needed to focus on was counting with one to one correspondence. For a much smaller group of students I learned that knowing what number to start with when counting and rote counting to 5, was where our focus would need to be. With the results from the pre-assessment, I began planning lessons and activities to support growth in these areas.

For the group of students that struggled to count from one to five, I added additional opportunities to practice counting on a daily basis. Every morning upon arrival, students are expected to sign in by writing their name in a notebook. For this group of students I incorporated the additional task of counting the letters in their name. I used a model of "my turn, your turn" in which I modeled counting the letters in their name using one to one correspondence and then expected them to count the letters in their name. These students were also strategically chosen for classroom jobs that required them to count. A few examples

of classroom counting jobs, was counting the number of friends present, counting the number of days on the calendar, or counting the number of plates, cups, etc. during meal time as the table setter. For each of these jobs, students were given support as they practiced counting.

In addition the group that struggled with counting also had difficulty with academic skills across the board and met with a read tutor on a daily basis. Most of these students met individually with a read tutor in addition to practicing school readiness skills in group settings. During these small group settings students focused on writing and recognizing their names, identifying concepts and started becoming more familiar with stories. I met with the read tutor and added counting to the skills that the read tutor worked on with these students. The read tutor was also asked to include books and activities that dealt with numeracy and counting.

Another group of students that comprised the majority of students in my classroom needed support using one to one correspondence when counting objects to 10. I planned opportunities for the whole class to practice counting using one to one correspondence. In one whole group activity, students were given a magnet with dots or objects. The students were then expected to count the dots or objects and then match the magnet to the corresponding written numeral. Another whole group activity centered around the book Mouse Count by Ellen Stoll Wash. In the book, a snake collects mice to eat and counts the mice it collects one by one up to ten mice. This book was read multiple times and each time students were expected to join in and count the mice together as the story progressed. Students were also able to act out the story using the book and props. I also began to use more finger plays that included number rhymes and stories as well as songs that incorporated counting.

For the last group of students that could already rote count, count using one to one correspondence and recognize the written numerals up to ten I began to plan enrichment activities. Many of these students were able to rote count to twenty or higher, but needed support when counting past fifteen, as well as recognizing written numerals higher than ten. For these students, I used games like Go Fish and Memory to provide opportunities to practice counting and recognizing numbers between ten and twenty.

During each of these activities, student progress and understanding was assessed informally through observation. This information was used to adjust the teaching techniques as students made progress counting, or in some cases failed to make significant progress. For example with the group of students who struggled to count, I observed that for one student it was very difficult for him to remember to start counting at one. For that particular student we focused our attention on starting to count at one. We also began to assess this student in a different manner by asking him to give us a specific number of an object rather than just focusing on counting.

At the end of the unit student learning and progress was assessed through two different activities. Based on their individual abilities students were asked to create a book of numbers in which on one page there was a written numeral and on the opposite page students were expected to make the corresponding number of dots using dot markers. Using observation, students abilities to recognize the written numeral and make the accurate number of dots were assessed. In another post assessment students were asked to count a line of bear manipulatives using one to one correspondence, and in some cases as previously mentioned students were asked to give me a specific number of bears. The post assessment data was then compared to the pre assessment data and student learning and progress was measured.

Based on the assessment data I found that of my group of students that were struggling with counting to five and counting with one to one correspondence one student began to consistently count to 5, with this information I now know that I need to shift the focus for her from counting from one to five to counting from five to ten. For another student, progress was inconsistent and difficult to measure. This student was absent just under fifty percent of the time. When he was attending school consistently he was able to count from one to four, however after several days away from school his ability to count would regress. For a third student it was difficult to determine his ability to count because of behavioral issues. This student would not always comply with academic activities and when he did complete the activity it often did not represent his true ability because he would rush through it or become distracted by other things in the classroom. The fourth student in this group of students has an

individualized education plan with multiple academic goals one of which involves counting with one to one correspondence. Based on the data she made limited, inconsistent progress with counting using one to one correspondence.

The data from the second group, the group that comprised the majority of the class and needed support counting using one to one correspondence to ten made progress. After a two week focus on counting to ten with one to one correspondence, I found that the majority of these students were reaching that goal by accurately counting ten objects, some even counting up to eleven or twelve.

The third group that needed support counting from ten to twenty using one to one correspondence also made progress. After the two week unit these students were more consistently counting objects to twenty or almost twenty – several lost the one to one correspondence around seventeen.

By analyzing the pre and post data I was able to determine which students made adequate progress counting with one to one correspondence and which students did not make adequate progress. Based on this information I found that the group of students that struggled with counting to five needed continued practice counting with one to one correspondence, the other students had mastered counting to ten or in some cases twenty with one to one correspondence. The students that had mastered this skill were ready to move on to counting to higher numbers and recognizing written numerals. Therefore, I met with the read tutor and planned activities to help the students that were continuing to struggle. I also planned small group activities for this group that could take place during center time.

By incorporating the use of formative and summative assessment into the unit on counting using one to one correspondence I felt that I was a more effective teacher. I learned before even beginning the unit what my students needs were around this topic. Therefore, I was able to plan lessons and activities that met their needs and pushed them on to the next level in their development, rather than wasting their time with lessons that were either too difficult or not challenging enough.

As the school year comes to a close and I reflect on my practice this year and think ahead to next year I recognize that overall I did not use a balance of formative and summative assessment as effectively as I would have liked to. Next year I am striving to use pre and post data as a way of determining student growth and understanding so that I am intentionally planning and teaching each student in my classroom.