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Student Teaching

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Impact on Student Learning

While student teaching at Syracuse Elementary I administered a pre-test and a post-test during my solar system mini unit. This unit lasted two weeks, covering an array of content from learning about asteroids all the way to the specifics of each planet in our solar system. During the first day of the lesson I explained to the students that we would be traveling into space to learn about what makes up our solar system. I discussed a few of the items we would be discovering but I did not go into detail. After I gave them an introduction to the unit and stated the objectives I had for them, I administered the pre-test to my students to check how much they knew. When I first mentioned that we were going to be talking about the solar system I knew my students were going to like it because they all seemed eager to get started with it.

As I began to prepare for this unit my teacher provided me with the instructor's book to find all the standards that I need to make sure are covered. I did not use the book directly in my lessons but I took the main ideas out of each of the lessons and incorporated them into the way I wanted to teach the lesson. When I got all of the main ideas and standards set up the way I wanted them, I did a little investigating in the classroom and found small group books that would correlate with each standard just how I wanted to. I began to make groups and put the higher

ability students with the more challenging book and then the lower ability students with the lower reading level book. The two books contained the exact same content, but the high level group's book was more in depth with what was being discussed. I knew the higher-level book would challenge my students more and create a more beneficial learning environment for them. Once I had the groups created, I took the results from the pre-test to decide on what I needed to go more in depth with for my students to master the content. The graph below shows the results from the pre and post-test.

During each lesson I would allow a set amount of time for them to read in their small reading groups and then a set amount of time for a class discussion. The students loved working with their groups because they have not had the chance to do this in science. There were a few groups that I had to keep a close eye on because they were my troublemakers. During the class discussion I would have the students use their book and then I would also have an interactive activity on the smart board. We would look up all of the planets on the internet and I would read them different facts about each planet. As I was reading the information on the planets, I would highlight different facts that I wanted them to put down in their notes. At the end of each lesson I had a worksheet for the students to work on by themselves. The worksheets consisted of five questions of either fill in the blank, multiple choice, or true or false. If the student missed a question on the worksheet, I would have them go back to their book and look up the correct answer. When I would hand back the worksheets I would take about five minutes at the beginning of the class to review

what we had learned the day before. This was one way that I assessed the students to make sure they actually comprehended what they were reading.

Toward the end of the unit the students were also required to complete a project. The project was set up for them to practice researching and also documenting what they discovered. I allowed each student to draw a card and on that card it had a planet. The planet they drew was the planet they had to research. I had reserved a time in the lab for my students to research a few things about their planets. They needed to find out how long it took for the planet to orbit, complete a rotation, number of moons, distance from the sun, and size. Along with that, they also had to tell me three interesting facts about the planet. Little did they know, the reason why I had them tell me three facts was because on their test they were going to have to list facts about their planet. Once they had all of their information filled in we began to draw our planets on construction paper. The students were able to draw their planets to complete their projects. As they were drawing I threw in a little twist to reward the students and have their imaginations work a little bit. Once they had finished their original planet drawing, I allowed them to create their own planet. I provided them with my example, which was called the “Grand Slam” planet. They all loved sharing their planets and the information they had found the next day.

The day before the test was solely devoted to review and to answer any questions the students may have. The first part of the review session was taking notes on the smart board. I felt that this was an effective way to remember information by reading it and then writing it down. The second part of the review

day was devoted an actual game. The class was already divided into groups, so I began to ask them questions. If they got it right they would give their team a point. At the end, the winner would get a piece of candy, which they all loved! By the time the review game was over I was extremely confident that they would do well on the test.

Student	Pre-Test	Post-Test
1	68%	92%
2	60%	88%
3	95%	100%
4	70%	92%
5	35%	100%
6	70%	96%
7	60%	88%
8	70%	100%
9	85%	83%
10	80%	94%
11	45%	92%
12	35%	88%
13	45%	92%
14	95%	92%
15	85%	88%
16	55%	67%
17	95%	100%
18	90%	96%
19	95%	100%
20	90%	96%
21	100%	96%
22	95%	96%

From the chart I provided, you can see that the method I used to teach this content worked effectively. On average the scores went from a seventy-three percent to ninety-three percent. As you can see from the chart, there are a few students who scored higher on the pre-test then the post-test. The reason why that happened is because there was a problem on the test they did not read carefully. We

discussed this after the grades were recorded and many of them were mad at themselves for such a silly mistake. I truly believe that one of the big factors of why my students did so well was because I presented the information to them in a variety of ways. Each day I had their attention because the way they would be learning was different from the day before. Also the use of small groups was effective, but I was aware that I had to monitor a group very closely in order for this to work.

Overall I was pleased to see the growth my students portrayed. Not only was it rectifying to see their improvement between the tests, but it gave me such a sense of satisfaction as well. My class came well prepared for science class every day because they were all eager to learn about the solar system. This unit was very exciting for me to teach because not only did the students have an interest in the solar system, but I have loved learning about it as well. It was an enjoyable subject to teach and it was fun to have shared the passion with them throughout the unit.