Lisa Bays

Goal 1: Reflection

**Demonstration of understanding of content within Instructional Process and Strategies.**

Instructional Process and Strategies focuses on the theory and practice required to effectively transform students into active learners. It is an art, not a science, and requires constant awareness of students ever changing DOK as well as their interests. It is further concerned with finding ways to uncover a student's knowledge through various forms of assessment and using this information to uncover new ways to teach students.

One of the most important take always I have had from grad school is the importance of discovering my students’ interests and how to use these interests as a “hook” to engage them. I attempt to incorporate this lesson into most of my classroom activities and am constantly and pleasantly surprised at how deeply students will explore a topic that has meaning to them on a personal level. For example, I use Achieve3000 to teach improve my students Lexile Scores. When I assigned students topics to work on in Achieve3000 I had students doing the assigned work, but little more than the minimum required. When I changed my policy and allowed students to work on articles that interested them personally, they began to do more activities with higher scores. Students even choose to stay in class during recess to explore more Achieve3000 articles and created huge literacy gains.

The first indicator for Instructional Process and Strategies is Know your Subject Matter. It is imperative that today's teacher knows how what they are teaching is meeting Federal and State level mandates and which CCSS’s have been met and when others will be achieved. In order to navigate my way through the morass of requirements I have created a Curriculum Map for second grade Language Arts. This map shows what Common Core Standard is being addressed in each of the units we teach as well as the activities and depth of knowledge that I am trying to achieve.

Placing all of the CCSS into a single user friendly product allows me to instantly be able to tell anyone, including my students, what standards and objectives each activity addresses and when each standard is taught. For example, in unit 1 I can see that we will be addressing CCSS RL.2.1 ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text. I have also included hyperlinks to the source documents of these standards so that I can share the standard further with my students. I have found that when I explain the standards to my students they do better since they know what our objective is from the beginning.

The second indicator for Instructional Process and Strategies is Incorporating Different Views About Content. To meet this indicator I have chosen to showcase an astronomy lesson I have used on astronomy called The Night Sky: Making the Familiar Strange. This lesson incorporates the Synectics Model to allow students to examine their current viewpoints and then disassemble them and rebuild them into something new. By incorporating the wonder that mankind has always held for the night sky I attempt to engage them in the topic of astronomy and teach them new ways of viewing the universe and their place in it.

Students work in cooperative pairs to research celestial bodies that interest them and then compare those bodies to things they are familiar with. For example students may choose the moon and then research the things about the moon that interest them and then come up with analogies between aspects of the moon and more familiar terrestrial objects. They may make an analogy such as the moon at night is just as bright as the fireflies in my jar. Through creating these analogies students combine new knowledge with previous experience in a way that is meaningful to them and that may affect their world view.

The final indicator for Instructional Process and Strategies is Generating and Demonstrating Knowledge. For this indicator I used my Cause and Effect lesson on sundials to show how I have my students generate and demonstrate knowledge. In this lesson we discuss what we know about how the earth moves around the Sun and talk about how the sun's motion in the sky was once used to tell time. Students then build their own sundials and use them to track the shadows they cast every day for two months. This data is recorded in their science journals and is then compared to how they initially predicted the data would appear.

This lesson shows knowledge generation through the collection of the data as well as the analysis of the data they have collected. Also, discussing the data with other students combined with the hands on collection helps students take ownership of their discoveries and helps cement the lesson into their worldview. They demonstrate the knowledge they have gained through the sundial activity by presenting their findings to their classmates, through their science journals, and through a summative assessment at the end of the lesson. By using multiple means of assessment I am attempting to gain a better picture of the student’s actual understanding of the subject.