

Rational for INTASC Standard #6 & #7

*Note: This lesson is also featured in the DVD component of my portfolio.

Science Lesson (3rd Grade)

This evidence is a lesson that I taught March 12, 2009 at Honey Creek Continuous Progress School to a third grade classroom. This particular classroom is unique in that it is made up of 32 students, twelve of whom have IEP's regarding significant special needs due to learning delays, cognitive disabilities and attentive issues. Originally, this lesson was planned for a group of 12 students who are in an enrichment math group. There was an unexpected visit by an art instructor who was to work with the students on an art lesson affiliated with a larger school-wide project. I had to quickly adapt the lesson to accommodate the larger group (*Integrative Interaction.*)

One adaptation I made adjusted the group size. Rather than having all the students work in pairs, there would be some groups of three students. After considering this decision with my classroom instructor who had observed the lesson, it would have been more efficient to have the students all work in groups of three. It was important for me to consider the teaching component of this lesson and how I could still tap into higher level thinking skills but support those students who needed more guidance (*Conceptualization.*) I also focused in on how I could create a positive learning community with students of such diverse abilities and needs (*Communication.*) In addition I had to determine how it was that I could utilize the resources available to me to make this lesson more efficient and successful (*Coordination.*)

In the video component of this portfolio this lesson is the second lesson shown. For this lesson I focused in on asking questions of the students and using their responses to guide my instruction. It is evident that I was very animated in my demonstrations in order to help the students determine the answers to the questions I was asking. This approach required me to think about what the students were saying, how it related to the lesson and whether or not the student had any misconceptions or misunderstandings about the content (Standard # 8 Assessment, *Diagnosis*.) Due to the fact that this lesson was one that I had videotaped, I was able to review the posters created after the lesson by the students in light of the lesson itself (Standards # 9.) I reflected on what about the lesson itself may have contributed to any of the students' misunderstandings or misconceptions (*Diagnosis*.) I believe that my communication skills are evident in this film and that I show a real regard and respect for all the students in the classroom.

In addition to the film evidence I have also provided a copy of the lesson plan, my self assessment, my reflection and pictures of students work as well as my instructor's observational notes. It is my hope that through the information provided, it is clear that I am reflective practitioner (Standard #9.) I also feel that this information shows that I understand how assessment of student learning and my teaching can be used to improve my practice (Standard #8.)

Created by: Carrie Elizabeth Reno
Additional Sources: Harcourt Science Textbook ISBN 0-15-322920-9

Date: 3/11/09
Developmental Level: 3rd grade

Title of Lesson: Predators & Prey in the Food Web (or Chain)

Goal(s)

MPS Learning Target: Grade 3 Science

Students will demonstrate how the parts of a system interact to produce change. Construct sketches to explain ideas and models.

Wisconsin Model Academic Standards for Science

The students will...

C.4.7 *Support their conclusions with logical arguments*

F.4.1 *Discover how each organism meets its basic needs for water, nutrients, protection, and energy in order to survive*

F.4.4 *Using the science theme, develop explanations for the connections among living and nonliving things in various environments*

Pre-assess:

The students have been learning about the ecosystems and various creatures that live in different habitats. Their instructor has stated that this is a topic that they are ready to investigate further. They have also indicated an interest in science specifically with regards to animals. I feel that this lesson will be an engaging lesson and help to further prepare them for an activity as well as a project based on similar concepts of animals within various ecosystems.

Objective

The students will use their background knowledge to indicate their understanding of the terms producers, consumers, and food chain. They will indicate what significance these concepts have in an ecosystem. They will then use the new information

regarding predators, prey and food chain to create a model of various animal relationships within an ecosystem that have been provided by me.

Assessment

Using observational notes and work samples of the pair food webs I will determine if the students were able to depict predator and prey relationships through their food webs.

Materials Needed

White board or newsprint to write on, 12x12 paper, crayons, glue sticks, printouts of different kinds of animals and instructional sheets.

Time Needed: About 30 minutes

Vocabulary to Cover

Review

Producers ~ get energy from sunlight and store it

Consumers ~ eat other living things to get their energy

Food Chain ~ shows who eats what

Introduce

Predator ~ an animal that hunts for food

Prey ~ an animal that is hunted as food

Food Web ~ shows the overlap of who eats what or who

Procedures

**Introduction*

I will have the students recall what they know about an ecosystem. I will ask them if they can define the review vocabulary words and what they mean. As the students tell me the correct answers I will write them on the board or on newsprint. I will insure that they have told me where producers get there energy from and that they can tell me an example of producers (plants) and consumers. Then we will begin the introduction of the new vocabulary terms.

I will first ask the students to tell me what they know about predators. What are they? Can you give me an example of a predator? What makes it a predator? As the students are talking I will write the information on the board or on news print.

I will then ask the students to tell me what they know about prey. What are they? Can you give me an example of a predator? What makes it a predator? As the students are talking I will write the information on the board or on news print.

I will make sure to explain that sometimes an animal can be both a predator and a prey. The book gives the example of a mole being eaten by a snake which is in turn eaten by a hawk. The snake is then both predator and prey. Are there any other situations where an animal can be both a predator and a prey?

**Developing the Lesson*

I will then go over an example of a food chain using some of the animals that they have mentioned as predator and prey including producers that would be used for energy by the prey and/or predator. I will see if they can tell me what this

type of model is (a food chain) then explain to them that often times things become more complex than that and what we end up with is a model of food chains that overlaps. This is known as a food web. I will then begin to add to the food chain showing them the relationships between different animals, plants and insects. At this point I will pass out the supplies for the partner pairs to create their own example of a food web. (If the students have not been introduced to a food chain then the supplies will be given out for them to construct their own food chain.) The groups will then have to place the animal cards on the paper and then show the relationship of whom or what is eaten by whom. They will also need to identify if the animals portrayed are predators or prey.

** Closure*

Once the students have completed their food webs (or chains) I will have the students share with the group the models that they have constructed and why they feel each creature represented is a predator or a prey. (Sharing with the class their work is a common practice in this classroom so I am certain the students will be comfortable sharing with each other what they have learned.)

Pre-Reflection & Adaptions

I am predicting that two students in particular will try my patience and try to distract me from the lesson at hand. I will also need to keep two of the young ladies separated from one another as they tend to get less work done when they are together. I am also concerned about how to best handle the fact that the other students will be walking in

Lesson 2 Self Assessment
3/14/09

Lesson Plan #2: Predator & Prey in the Food Chain

1. Did the students meet the stated objective? On what are you basing your judgment?

I feel the students met the objectives. While the students were putting together their food chain examples I walked around the room and asked multiple questions about what animal played what role in the food chain and why. The majority of the students were able to tell me the answers. They stated that the prey was the animal that was eaten by a predator and the predator was an animal that ate prey. They also were able to tell me that the producers were the plants that stored energy from the sun and that the consumers ate the plants or other plant eaters. I also have their completed posters they created which are labeled with the terms, predator, prey, consumer and producer as well as arrows indicating who gets eaten by whom or who would eat what.

2. What worked best in your lesson? Explain. (Consider the five education abilities, *WI Teacher Standards*, which are also the INTASC Standards and social interaction skills.)

Overall I think I was able to quickly adapt the lesson to fit the needs of the new group. I think that this ability will get stronger as I gain more experience and have a longer relationship with the students. This relates to the INTASC standard #3.

Because this lesson was originally planned as an enrichment lesson for a smaller group, there were changes that I needed to make. Rather than doing a food web, as originally planned, I taught the term concepts as a food chain. This simplified the lesson to include those learners who struggle with large abstract concepts.

I think I was also able to quickly diagnosis the problem with regards to the term producer and then determine how to guide the students to the correct term through questioning and inquiry based methods. In addition I did not give the students the correct answers right away but asked them to think about the questions I was asking guiding them to a deeper understanding of the predator/prey relationship. In this way I feel that I showed an ability to meet the INTASC standard # 4 which states that “The teacher understands and uses a variety of instructional strategies to encourage students’ development of critical thinking, problem solving, and performance skills.”

With regards to the social interaction skills I feel that I was able to effectively engage the students in the initial phase of the lesson. As the lesson progressed though I started to lose the audience, I had to continually try new ways to catch and keep their attention long enough to complete the task at hand. I think that holding the students attention is something I need to continue to work on as I progress in my practice.

3. What was student response/reaction? Based on that, did you modify your original plan? If so how did you adapt the plan and why?

I was surprised at how the students had defined a producer as someone who worked in the film industry. I had not considered this definition and had to take a couple of steps back to help the students activate their prior knowledge with regards to what a producer in terms of an ecosystem was. This helped to guide the students towards defining the term producer in nature accurately. They were then able to continue on and complete the lesson.

There were also a number of students who wanted to share ideas of animals that they thought were predators and prey. Due to the lack of time, instead of moving on to the next term I decided to give the students a few moments to pair share with a student near-by what their ideas were. This allowed me to validate the students' ideas and prepare them to consider the next term.

I also had to take a little longer with the lesson than I would have with the original group it was planned for. Given this new group, the time it took to complete the lesson was 50 minutes rather than 30 min. I think the time it took for the lesson could have been improved with more classroom management procedures. Classroom management was a difficult thing for me because I have only been in the classroom for three full days. I do not yet have a full understanding of the classroom procedures regarding behavioral management. It is my belief that classroom management would become more natural to me with greater classroom experience and a better understanding of the students behavior.

4. What did you find most difficult about teaching this lesson? Explain. If you were to teach this lesson over, what would you do differently?

For me the most difficult part of this lesson was the fact that I had to make so many last minute changes. My Co-operating teacher forgot that there was an art teacher coming in that day to guide the students through a project that would prepare them for a future activity. I was then in a situation where the lesson that was originally meant for an enrichment group of 10-12 students became a lesson needed for a classroom of 30 students. There are 12 students in the classroom who have IEP's and special needs that would require adaptations to any lesson. I spent my break planning how I would stretch the supplies that I brought for at most six pairs of students for a class of 30 students and considered who in the group may need additional supports.

The lesson was also originally meant to teach listening skills for the original group because they seemed to have difficulty following instructions given orally. I did not consider how to adapt the lesson to include written instruction for the class of 30. If I were to do this lesson again I would insure that I also had written out the directions either on the board or on an instructional sheet. I also liked the advice that was given regarding assigning specific tasks to individuals in the group. One person could have been in charge of materials, while another would be in charge of gluing the project.

5. To follow up on this lesson, what would you teach next?

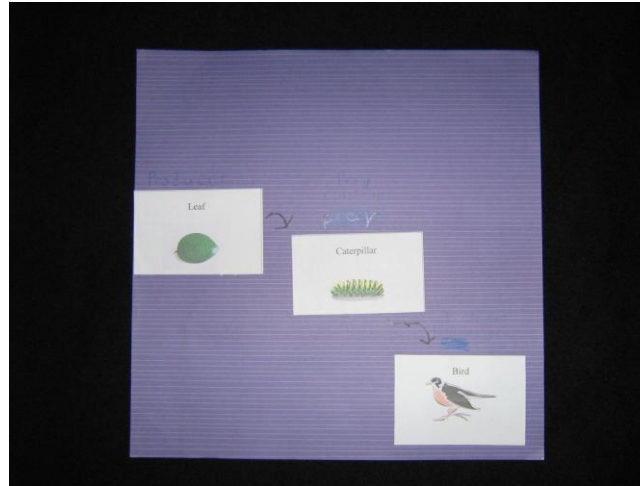
As a follow up to this lesson I would reiterate the predator/prey relationship then move on to teach how certain creatures have adapted to such relationship by developing defenses such as camouflage. There are several activities related to the concept of camouflage that also reiterate the predator/prey relationship using movement. I think that given the fact this group had a lot of body movements happening throughout the lesson that they may be better able to learn if they are allowed to move about more often. I would have to be very explicit though in my expectations of their behavior before the activity began.

Reflection and Samples of Student Work

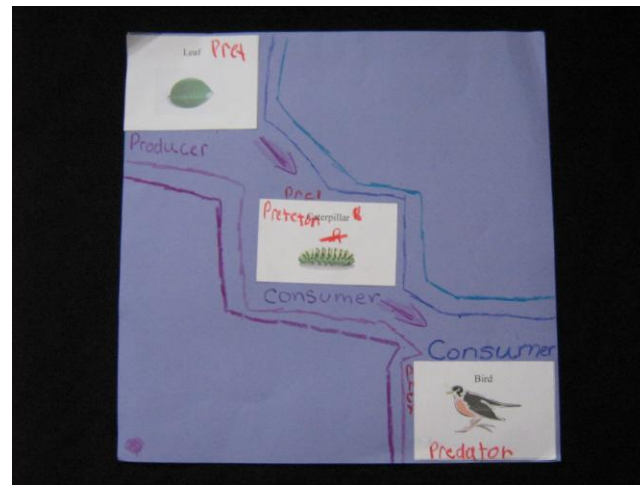
After a formative assessment of the students' posters, I realized that six of the eleven posters had arrows that did not point towards the flow of energy. This is a misconception that I will want to address in future lessons with this group or make sure to reiterate if I were to teach this same lesson again. Though some of the posters had misspellings, I was still able to see that the students were aware of which of the living things in the poster had what role in the food chain. In future lessons I may want to clarify key terms (that I had written on the board) will need to be spelled correctly. One of the posters had somewhat graphic drawings over the deer. These students may need a reminder about appropriate vs. inappropriate drawings for projects such as this one.

This lesson did not have enough emphasis on the arrows pointing towards the flow of energy. That being stated I would say that this lesson was successfully performed by the students. They were actively engaged in the classroom lesson prior to the project and overall worked well in the small groups. As the students worked in groups I walked around the room and checked their understanding of the lesson. The majority of the students were able to reiterate to me the roles each of the living things had in the food chain.

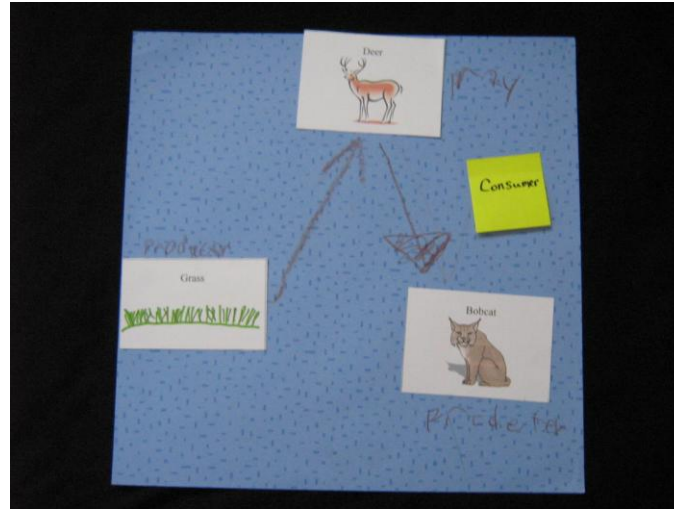
As a follow up to this lesson I would want to see if the students would be able to demonstrate their understanding of the concepts covered in this lesson on an individual level. I would also want to see if they can determine other living things that they could use to represent a food chain. I would also want to make certain that explicit instruction is given regarding the flow of energy and how it is represented with arrows.



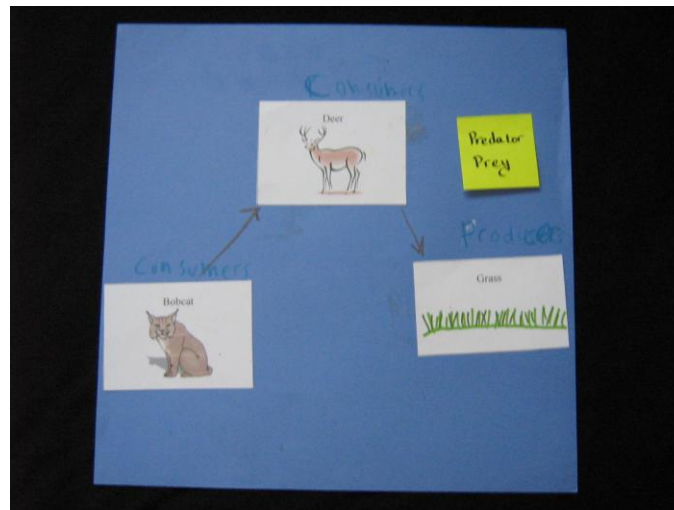
(Above) This poster has all labels correct and arrows pointing towards the flow of energy



(Above) This poster has all labels correct and arrows pointing towards the flow of energy



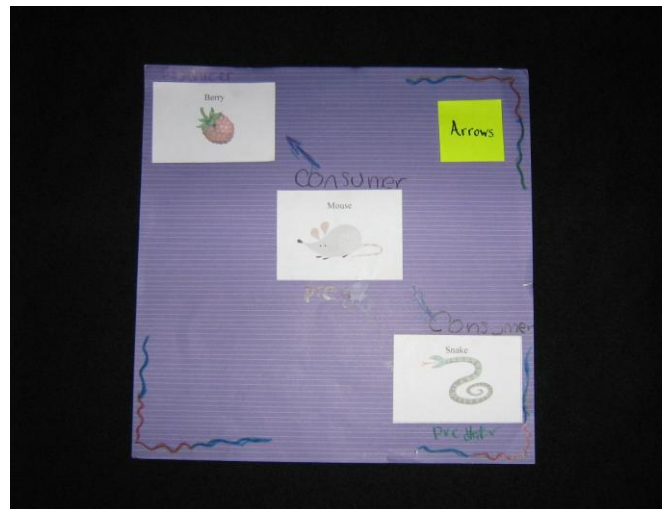
(Above) This poster has the arrows pointing towards the flow of energy but no label for *consumer*.



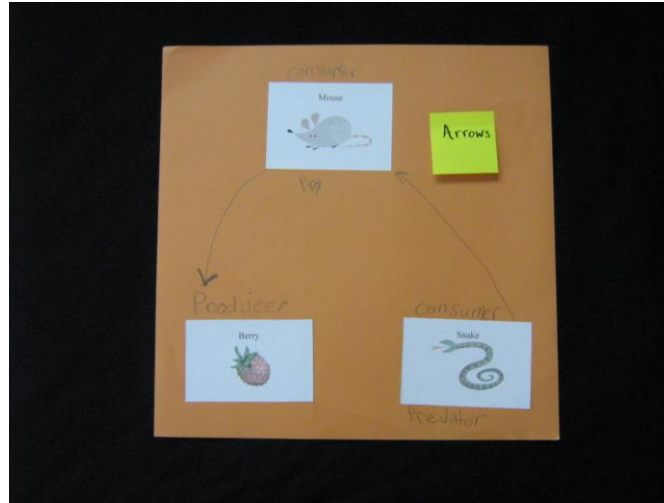
(Above) This poster has the arrows pointing towards the flow of energy but no labels for *predator* or *prey*.



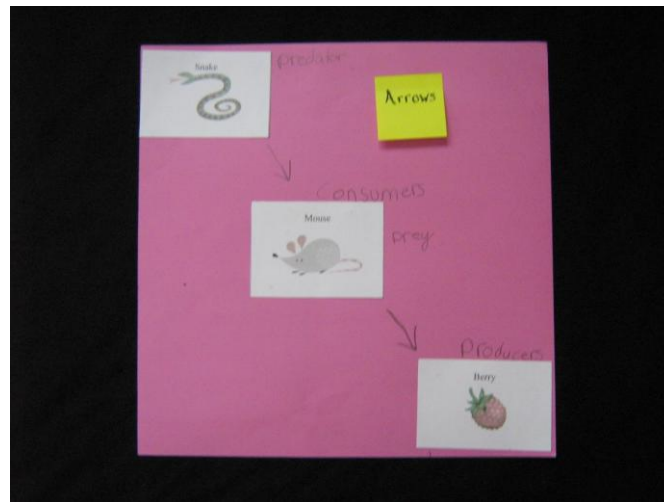
(Above) This poster has no labels for *prey* or *predator* and the arrows pointing with the flow of energy.



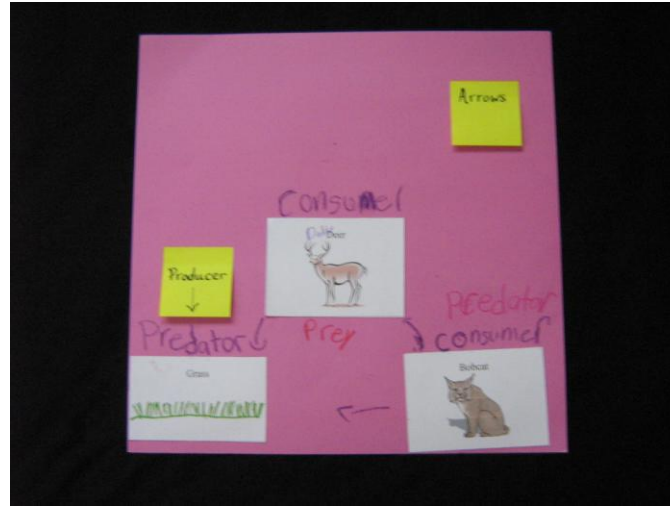
(Above) This poster has all the labels correct but the arrows are not pointing towards the flow of energy.



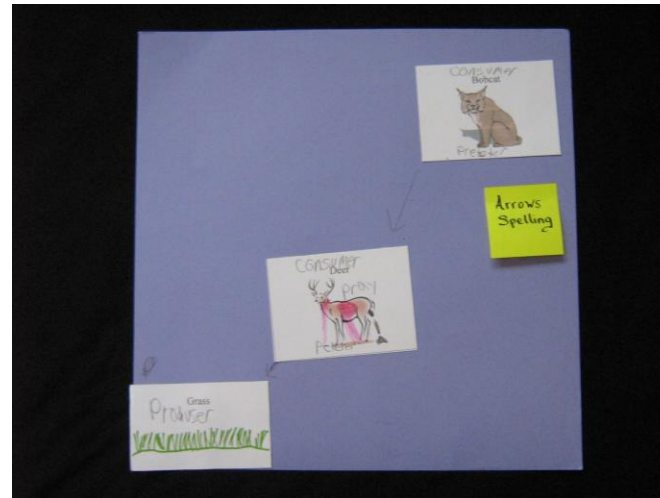
(Above) This poster has all the labels correct but the arrows are not pointing towards the flow of energy.



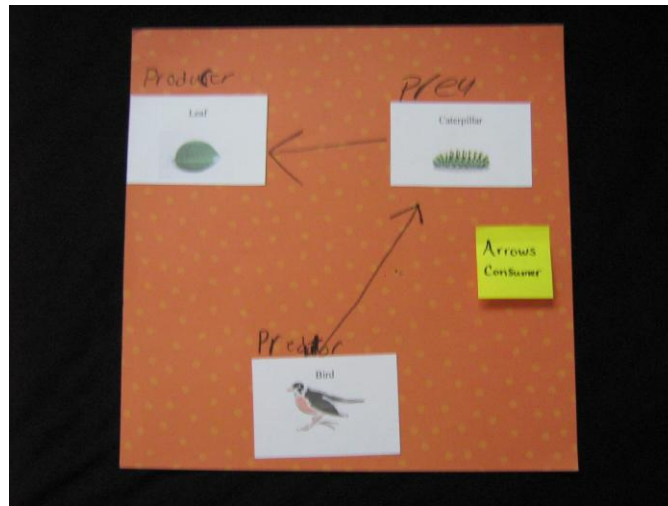
(Above) This poster has all the labels correct but the arrows are not pointing towards the flow of energy.



(Above) This poster has one mislabel and the arrows are not pointing towards the flow of energy.



(Above) This poster has labels misspelled (*producer*, *pray*) and the arrows are not pointing towards the flow of energy.



(Above) This poster has the arrows pointing away from the flow of energy and no label for consumer.

FORM No. 700 Supervisors' Observation
1106 ED

Candidate _____ Date _____

2

**ALVERNO COLLEGE
SUPERVISOR'S OBSERVATION
OF ED 315 Field Student**
(Includes Observation, Seminar Requirements, Project, Logs, and Lesson Plans/Self Evaluation)

Candidate: Carrie Reno

Check One: 1st Observation 2nd Observation Other

Supervisor: Darlene Habanek

Date: 3/11/09

Cooperating Teacher: Christine Milani

Number of Students: 25

School: Honey Creek Continuos Progress

Grade: 3 Subject(s): Science

Directions:											
<p>After each description, check the box that best reflects the candidate's level of demonstration in that area.</p> <p>Please support your choices in the adjacent Evidence section and Final Remarks area at the end of the form.</p> <p>Possible sources of evidence include lesson plans, self evaluations, project, logs, your observations & conferences with the student.</p>		Not Observed	Little/No Evidence	Minimal Evidence	Sufficient Evidence	Extensive Evidence	State Standards Education Abilities	<p>Circle 2 or 3 criteria and then describe in writing evidence of key teaching behavior. For at least one criterion in each category, also provide evidence of student behavior. Student behavior <u>not</u> required for <i>Planning and Preparation</i> and <i>Professional Responsibilities</i> categories.</p> <p align="center">Evidence</p>			
Planning and Preparation (Conceptualization/Diagnosis)								Candidate Behavior			
1. Uses teaching resources and curriculum materials that are appropriate in representing the ideas and concepts.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Standards 1 and 7 (Conceptualization, Diagnosis)	Your planning was complete - and your demonstrated flexibility by adapting the plan that was for a smaller group to a large group with not much time. Your plan included moving from large group instruction to small group focused work and then back to large group. You mad ematerials that reinforced tha concepts and were engaging. You led the students to links between what they knew and the newer concepts effortlessly.				
2. Plans instruction appropriate to students' stages of development and learning styles.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>						
3. Links new ideas to familiar ideas and makes connections to students' experiences.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>						
4. Provides opportunities for active engagement, manipulation and testing of ideas and materials.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>						
5. Knows how to enhance learning through the use of a variety of materials.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>						
6. Values flexibility in the teaching process by monitoring and adjusting plans and adapting instruction when necessary and appropriate.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>						

FORM NO. ??? ED 315
0807 ED

	NO	L/NE	ME	SE	EXE	State S	Evidence
Planning and Preparation (Conceptualization/Diagnosis) continued							Candidate Behavior
7. Chooses appropriate teaching strategies, learning experiences, and materials to achieve different instructional purposes and to meet student needs.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Standards 1 and 7 (Conceptualization, Diagnosis)	You introduced vocabulary and gave hints with dramatic flair that pulled in kids who were participating with enthusiasm. You moved from large to small groups which increased student involvement. You show your own enthusiasm for the responses of individual kids which makes them feel recognized and honors their ideas.
8. Varies his or her role in the instructional process in relation to the content and purposes of instruction.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
9. Plans motivational instruction by relating lessons to students' personal interest.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
10. Seeks to find ways to meet the needs of diverse learners.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		

Little/No Evidence Minimal Evidence Sufficient Evidence Extensive Evidence

Classroom Environment (Coordination/Integrative Interaction)							Candidate Behavior	Student Behavior
1. Shows respect for the diverse talents of all learners.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Standards 2,3 and 5 (Coordination, Integrative Interaction)	You asked them to share with each other when there was so much response that you couldn't call on everyone. Good idea but make sure everyone does it - give enough time and eaves drop. Kids in back row did little sharing. You used good prompts - "Eyes on me , all ears ready, all mouths quiet" - very effective.	Students chose partners - some awkwardly. (this plan was not what you wanted) groups worked pretty well anyway. Most completed the task. Conversation in most groups was about the task - occasional off task topics. Some off task behavior taken care of quickly.
2. Uses knowledge about human motivation and behavior to develop strategies for organizing and supporting individual and group work.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
3. Is committed to the expression and use of democratic values in the classroom.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
4. Organizes, allocates, and manages the resources of time, space, activities and attention to engage students in productive tasks.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
5. Knows how to help students work productively and cooperatively with each other.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
6. Uses strategies of effective classroom management to promote positive relationships, cooperation, and purposeful learning in the classroom.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
7. Respects students as individuals with differing personal and family background and various skills, talents and interests.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>			

FORM No. 700 Supervisors' Observation
1106 ED

Candidate _____ Date _____

5

11. Communicates in ways that demonstrate a sensitivity to cultural and gender differences.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
12. Models appropriate communication strategies in conveying ideas and information.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
13. Supports learner expression in speaking and writing, and other media.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
14. Knows how to ask questions and stimulate discussion in different ways.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		

Little/No Evidence Minimal Evidence Sufficient Evidence Extensive Evidence

	NO	L/NE	ME	SE	EXE	State S	Evidence	
Assessment (Diagnosis/Integrative Interaction)							Candidate Behavior	Student Behavior
1. Knows how to select and construct assessment strategies and instruments.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Standards 8 and 9 (Diagnosis, Integrative Interaction)	You chose a group to show their example. Was everyone else done. Time expectation would have helped. You used your judgement about what kind of assistance certain students and groups needed as you monitored their work.	
2. Uses appropriate assessment techniques to enhance his or her knowledge of learners, evaluate students' progress and performances, and modify teaching and learning strategies.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
3. Solicits and uses information about students' experiences, learning behavior, needs and progress from cooperating teachers and the students themselves.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
4. Evaluates the effect of class activities on both individuals and the class as a whole, collecting information through observation of classroom interactions, questioning, and analysis of student work.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
5. Uses classroom observation and information about students as sources for evaluating the outcomes of teaching and as a basis for reflecting on and revising practice.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>			

Little/No Evidence Minimal Evidence Sufficient Evidence Extensive Evidence

Professional Responsibilities (Communication/Integrative Interaction)						Candidate Behavior
1. Relates professionally and effectively with the cooperating teacher and faculty.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	You have an open and positive rapport in this classroom with the coop.
2. Dresses professionally and consistently	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

FORM NO. ??? ED 315
1107 ED

FORM No. 700 Supervisors' Observation
1106 ED

Candidate _____ Date _____

6

portrays a professional demeanor.						
3. Is enthusiastic about teaching.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
4. Seeks out the cooperating teacher to support his/her development as a learner and a teacher.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Little/No Evidence Minimal Evidence Sufficient Evidence Extensive Evidence

Summary Statement and Areas to Concentrate on Improving: Keep working on ways to provide direction for classroom behavior that is productive and is built into the lessons. Structure group work to provide direction for each member and a time limit to get the task accomplished and keep everyone together and seated. Keep up your enthusiasm and dedication to the kids!

Overall Performance

Little/No Evidence Minimal Evidence Sufficient Evidence Extensive Evidence

Validated: Yes No