# DIXIE STATE UNIVERSITY – DEPARTMENT OF EDUCATION ELEMENTARY $3^{\rm rd}$ SEMESTER LESSON PLAN TEMPLATE

(1/25/13)

Teacher Candidate Natalie Belka Grade Level 2<sup>nd</sup> Title The Three Types of Clouds

# **CONTEXTUAL FACTORS** (classroom factors)

#### **Contextual Factors:**

- 4 students that are ELL (Yvonne, Eric, Lesley, Veronica-she's repeating 2<sup>nd</sup> grade)
- 2 students with behavior challenges (Kinson, Trey)
- 1 student with vision impairment (Glasses- Cambria)
- 2 students that go to speech (Ashton, Harrison)
- 6 students are below reading level (Kinson, Keldan, Braylee, Andrew, Yvonne, Kylie-missed a lot of 1st grade)
- 4 students go to 3:1 reading intervention pull out sessions (Ashton, Keldon, Yvonne, Kinson)
- 1 Student with Autism (Trey)

#### Classroom environment:

Arranged in four groups of five tables, and one group with five people.

Cambria must be in the front, due to vision.

Trey and Kinson need procedures to be clarified and structured, they have a short attention span.

# **WALK-AWAY** (As a result of this lesson, what do I want the students to know, understand, and be able to do?)

## State Standard/Objective:

Standard 1 The Processes of Science, Communication of Science, and the Nature of Science. Students will be able to apply scientific processes, communicate scientific ideas effectively, and understand the nature of science.

Objective 1: Generating Evidence: Using the processes of scientific investigation (i.e. Framing questions, designing investigations, conducting investigations, collecting data, drawing conclusions)

- a. Framing questions: Observe using senses, create a hypothesis, and focus a question that can lead to an investigation.
- b. Designing investigations: Consider reasons that support ideas, identify ways to gather information that could test ideas, design fair tests, share designs with peers for input and refinement. Identify both the short- and long-term effects of tobacco use.
- c. Drawing conclusions: Analyzing data, making conclusions connected to the data or the evidence gathered, identifying limitations or conclusions, identifying future questions to investigate.

Objective 2: Communicating Science: Communicating effectively using science language and reasoning. sharing ideas with peers.

- d. Connecting ideas with reasons (evidence).
- e. Using multiple methods of communicating reasons/evidence (verbal, charts, graphs).

#### Content Walk-Away:

I will understand how clouds hold water. (SIOP 1 Content Objectives)

I will know the 3 types of clouds.

#### Language Walk-Away:

I will be able to verbally tell someone, and write about a Stratus, Cumulus, or Cirrus cloud. (SIOP 2 Language objective)

# Vocabulary:

**Cumulus**- These clouds are thick, fluffy, and produce heavy thunderstorms.

**Stratus**-These clouds are thin, layered, and spread out.

<u>Cirrus</u>- These clouds are light, feathery, fuzzy, and sunlight passes right through them.

ASSESSMENT EVIDENCE (What evidence do I need to show the students have learned the Walk-Away?)	Modifications/Accomm odations (ELL, IEP, GATE, etc.)
Formative Evidence (checking for understanding throughout the lesson):  I will listen to the students as they are discussing describing to their neighbor the cloud type they have chosen to create and describe. (SIOP 30)	SIOP 30 Assessment of comprehension and learning
Content Walk-Away Evidence (Summative): Students will create art of either a Stratus, Cumulus, or Cirrus cloud and write the type of cloud they have chosen. (SIOP 27, 28)  Language Walk-Away Evidence (Summative): Students will share with their group the cloud they have chosen to depict and describe how it represents the cloud type they have chosen. (SIOP 5, 6, 9, 16, 17)	SIOP 27 Review of key vocabulary SIOP 28 Review of content concepts  SIOP 5 Adaptation of Content SIOP 6 Meaningful activities SIOP 9 Key Vocabulary SIOP 16 Interaction SIOP 17 Grouping Configurations

Approx.	ACTIVE LEARNING PLAN
Time	
	Activate/Building Background Knowledge Ask the students "Do you remember what Ms. Thurston taught you about the water cycle? Wait for response, "We have the Sun, Clouds, rain, water (drawing them on the board). Who can describe to me a part of the water cycle?" Wait for response, "What does the sun do?" Wait time (Helps with evaporation), "What does the clouds do?" Wait time (Holds the condensation), "What is the proper term for rain? Wait time (Precipitation), "Precipitation falls and it is what?" wait time (in the stage of collection)." Then I will have the students think about a time when they have been outside at home, or at the park and have looked in the sky and have observed the clouds. I will ask the Students, "What have you noticed when they look up in the sky at the clouds?" wait time, I will then read with them the book, "Dreams", by Peter Spier. (SIOP 3, 7, 8, 18)

Formative assessment:		
Learning Goal	Success Criteria	Assessment Strategy
Students will review that	Students will speak their	I will listen to what the
Clouds are a part of the	thoughts of their	students observed or
water cycle and that there	background knowledge with	thought about as they have
are different types of clouds.	cloud within the water	observed clouds in their
	cycles and will express how	experiences.
	clouds look different.	

Modification/accommodations: (ELL, IEP, GATE, etc.)

ELL/low level reading Students – I will draw the water cycle on the board as well as read a picture book to allow these students to have more concrete information.

Kinson – Make eye contact and encourage him to explore his past experiences.

Trey – Have him search for prior knowledge that I could validate him in a positive way. Give him positive feedback as he participates

# Focus Lesson ("I do it")

I will first identify the content and Language walk-aways. Helping them know what to expect. We will discuss the characteristics of clouds and re-emphasize the way clouds retain all the condensation until they cannot hold it anymore resulting in Precipitation. I will then conduct and experiment to depict this process.

I will hold up a cotton ball and with an eyedropper have the students turn to their neighbor and **hypothesize** how many drops the cotton ball will be able to hold until it drips precipitation.

Following the experiment I will pose the question, "Do you think all clouds can hold the same amount of condensation?" Wait time, "Are clouds all the same?" Wait time. I will hold up the book to remind them of all the different clouds that were represented in the story. I will continue asking questions that will lead then to capturing the fact that there are different types of clouds.

(SIOP 1, 2, 3, 4, 9)

### Formative Assessment:

Learning Goal	Success Criteria	Assessment Strategy
Students will understand	The students will be able to	I will listen to them in their
that clouds hold water.	speak and express the	responses to the questions
	knowledge that clouds are	posed. I will have them
	different, they hold different	stand up if they think there
	amounts of condensation,	are different types of clouds,
	and different clouds hold	then will have them explain
	different amounts.	their reasoning.

# *Modification/accommodations:*

ELL/low level reading Students – Visual experiment will help them. Ask them if they can explain the word hypothesis.

Kinson – He will help put food coloring in the water so we can see it better.

Trey – He will be our counter as the drops fall (this will help him to stay focused and excited about what he is learning).

# Guided Instruction ("We do it")

Video Presentation about the three different types of clouds-**Stratus**, **Cumulus**, and **Cirrus**.

**Cumulus-**thick and fluffy and produce heavy thunderstorms

**Stratus-**thin, layered, and spread out

**Cirrus**- light and feathery, fuzzy, and sunlight passes right through them.

We will stop periodically and as a class define each of the clouds. Also during the video we will pause frequently to identify the type of cloud presented on the screen at the given time. (SIOP 4, 6, 8, 9, 16, 18)

#### Formative Assessment:

Learning Goal	Success Criteria	Assessment Strategy
Students will be able to	Students will write and	I will evaluate the
identify the three types of	define the three types of	worksheets that the
clouds.	clouds.	students fill out that express
		the three types of clouds
		and what they are.

# *Modification/accommodations:*

ELL low level reading Students – Have these students take turns in writing the definitions on the board so they can better link their learning to the lesson.

Kinson – Ask him specifically to identify a cloud in the film

Trey – This is a different stimulus activity so it will provide a good variety to allow him to stay focused.

# Collaborative/Cooperative ("You do it together")

I will have the students discuss with their shoulder partner the differences between clouds. I will ask, "What is a Cumulus cloud?" wait time "What is a Stratus cloud?" wait time, and "What is a Cirrus cloud?" (SIOP 6, 9, 16, 17, 18)

#### Formative Assessment:

Learning Goal	Success Criteria	Assessment Strategy
Students will be able to	Students will be able to	I will listen to the students
identify the three types of	speak/identify with their	tell their groups the
clouds.	shoulder partner the	differences they have
	differences between	gathered about the three
	Cumulus, Stratus, and	types of clouds.
	Cirrus clouds.	

# Modification/accommodations:

ELL low level reading Students – In this part of the lesson I will make sure to continuously repeat the types of clouds so the words can become more familiar. Repetition leads to habit and knowledge.

Kinson – Partner him with a high level child

Trey – Have Trey sitting up close where I am so he will be more attentive and involved.

# <u>Independent ("You do it alone")</u>

"Each of you will create a picture of a cloud of your choice by gluing these cotton balls to form your cloud. You can create either a cumulus, stratus, or cirrus cloud and then write down the cloud that you have depicted at the top of your page (SIOP 3, 5, 6, 9, 29, 30)

#### Summative Assessment:

The students will create a picture of a cloud and identify it's at the top of the page.

## *Modification/accommodations:*

ELL low level reading Students – Pictures help them to express and solidify their knowledge process (Same with all the other students).

<u>Closure/Review of walk-aways, vocabulary, and essential questions</u>
(Note: Closure includes student interactions, reflection, and/or demonstrations.)

I will ask the students to present their artwork to their group. They will show and then tell them the reason why their cloud is Stratus, Cumulus, or Cirrus. (SIOP 9, 16, 17, 18, 27)

"Great job students! We all worked hard today learning about how clouds hold condensation. We were able to make a **hypothesis** and perform and experiment to see how clouds work. We also learned that there are three different types of clouds. I hope you remember that the *Cumulus* are thick and fluffy and produce heavy thunderstorms; *Stratus* are thin, layered, and spread out; and *Cirrus* are light and feathery, fuzzy, and sunlight passes right through them. (SIOP 27, 28)

### **SIOP Indicators** (Add SIOP number and description within the lesson plan)

**Preparation:** 1-Content objectives, 2-Language objectives, 3-Content appropriate, 4-Supplementary materials, 5-Adaptation of content, 6-Meaningful activities

**Building Background:** 7-Linked to background, 8-Linked to past learning, 9-Key vocabulary **Comprehensive Input:** 10-Appropriate speech, 11-Clear explanation, 12-Variety of techniques **Interaction:** 16-Opportunity for interaction, 17-Grouping supports objectives, 18-Wait time, 19-Opportunity for L1 students

**Practice/Application:** 20-Hands-on materials, 21-Activities to apply content/language knowledge, 22-Language skills: reading, writing, listening, speaking

**Lesson Delivery:** 23-Content objective supported, 24-Language objective supported, 25-Students engaged, 26-Pacing

Review/Assessment: 27-Review vocabulary, 28-Review concepts, 29-Feedback, 30-Assessment

### **TEACHING NOTES**

What do I need to remember to do?

Wait time, get video/smart board/projector ready, prepare vocab words,

# Materials to have ready?

Bring the Dreams book, cotton balls, paper, glue, cup of water, eye dropper, food coloring, worksheet to fill out in the video, vocab words

# Approximate time needed for lesson?

40 minutes for lesson, 20 minutes for cloud art project

### REFLECTION AFTER LESSON

How can I use the assessment data to reflect on & evaluate the outcomes of teaching and learning? How can I transfer what I learned from teaching this lesson to future teaching? What was effective and not effective? What goals can I set to improve my practice and student learning?

The assessment data will be a great indicator if the students fulfilled their objectives because not only do they need to depict a specific cloud, but they have to define how their cloud portrays the respective cloud they have chosen. Then afterward they need to verbalize and express it to their peers, which require them to show and explain their thinking. Based off their response and feedback I receive from all the assessment evidence I will be able to adapt and tweak instruction to help students be more active agents in their learning.