Lesson Plan: Insects

Background:

The big ideas addressed in this unit are: **Insects have unique structures**, **behaviors and basic needs such as food**, water, air and waste removal. **Insects are all related to each other**, yet exhibit variations and complex life cycles.

Students are using FOSS insect kit. During these investigations they will:

• Develop a curiosity and interest in insects and a respect for them as living things.

- Experience some of the great diversity of forms in the animal kingdom.
- Become familiar with some of the life sequences that different types of insects exhibit (simple and complete metamorphosis).
- Observe the behaviors of insects at different stages of their life cycle.
- Provide for the needs of insects (air, water, food, and space).
- Acquire the vocabulary associated with insect life.

This is the second introductory lesson in the unit. This lesson will help prepare students to write entries about observations of different insects at various stages of development in their science notebooks.

English Language Development Levels: Entering through bridging

Grade Level: 2

Standards: CCSS

CCSS.ELA-Literacy.SL.2.1a Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion).

CCSS.ELA-Literacy.L.2.1e Use adjectives and adverbs, and choose between them depending on what is to be modified.

The Science Content in this lesson does not align with the Next Generation Science Standards for Grade 2. At the present time we are using FOSS kits. As the new standards are phased in, the kits will be changed.

ELD Standards:

Standard 2: English language learners **communicate** information, ideas and concepts necessary for academic success in the content area of **Language Arts.**

Standard 4: English language learners **communicate** information, ideas and concepts necessary for academic success in the content area of **Science**.

Suggested Differentiation Strategies

Vocabulary

For entering and emerging students vocabulary pictures are all labeled English and Spanish on a word wall.

Developing and expanding students have word banks and graphic organizers

Expanding students would have graphic organizers

Cultural Objectives

In addition to the language & content objectives, it is key to have cultural objectives for ELLs. While it is overwhelming to put these in writing for the students, embedded in our instruction is the objective that throughout this unit, students are encouraged to share pictures/experiences from their native countries.

Emotional / Social Objectives

As an early childhood urban educator. many of our lessons have emotional / social objectives. Although these are not written up, they are embedded in the lesson. In this lesson students are expected to work cooperatively with a partner and solve problems. Much thought is given to create groupings that address cognitive goals, language goals, and personal social goals as well.

Motivation

Teacher uses TPR during the modeling for lower proficiency students.

Presentation:

Teacher uses TPR during modeling. Word walls are available for students to support use of adjectives.

Preparation Content Objectives:

1. We will <u>classify</u> pictures of different insects at various stages of development.

Language Objectives

Communicative:

We will write words or sentences telling how we **<u>classify</u>** the insects with a partner. **Linguistic**

We will use **<u>adjectives</u>** to describe the insects.

Key Vocabulary

- classify
- color words and number words
- examples of other adjectives

Materials

• pictures of different insects at various stages of development for students to sort and classify.

- word banks of adjectives with picture support
- 12 X 18 inch construction paper

Motivation

• Call group together on the rug. Recall the video we watched earlier about the Entomologists. Give the children opportunities to share what they remembered from the video. You may want to have the video ready to show just the clip where the entomologists are sorting the insects into similar groups. Remind the students that in math we have been learning about different shapes and we play the secret rule game where we sort and classify shapes into groups according to an attribute. Then we tell the "Secret Rule" about the group. Today we are going to play that game with pictures of insects.

• We will read our objectives, which are typed in a large font and placed in a clear Lucite picture frame. Sometimes pictures are added to facilitate comprehension. The students participate in a shared reading.

Presentation

• Teacher models cutting up the pictures of insects and describing several of them. Have students think, pair, share to brainstorm some sample descriptions. Invite students to suggest some possible ways to classify the pictures using the sentence stem: "These pictures go together because... and including an adjective. Make a list of the adjectives that students suggest so it will provide support for

Presentation:

cont'd

The chart where teacher scribes adjectives that students use during think, pair, share will serve as an additional support during Practice /Application

Practice/ Application

Partners will be assigned by the teacher, according to WIDA proficiency levels. Students will be partnered within one ELD level.

Review/ Assessment

Sharing provides great opportunities to check on social / emotional objectives as well as your language and content objectives. writing. At some point I will model how to offer an alternate classification. This provides opportunities to problem solve and develop consensus.

• Teacher then quickly reviews the sequence of events, recording them on a chart:

- 1. Work together to cut all your pictures.
- 2. Describe each picture using at least one adjective.
- 3. Sort your pictures into groups.
- 4. Work cooperatively to glue your pictures on a paper.

5. Classify the pictures: Take turns writing the secret rules about the picture.

• Pass out the materials to the groups. Before students start the actual work, have them label the contents of the bag and tell what they will do with the materials.

Practice/Application

• Students work with partners to classify the pictures according to the "secret rule."

• The teacher observes as partners work cooperatively to complete the task, offering support and facilitating if needed.

Review/Assessment

• Have partners share their finished projects, allowing the opportunity for others to guess the "secret rule." This provides another occasion for them to use their expressive language and incorporates the higher level thinking skills of analyzing and synthesizing.

• Review content and language objectives and discuss if we met them. Have students look at their labels for insect classifications and highlight the adjectives. This provides feedback for both students and teachers.

• Teacher formatively assesses during Practice and Application, as well as in assessment, how students are able to use adjectives to describe the different insects. At the word level: color words, number of legs, insect names, head, thorax, abdomen, egg, larva, pupa, adult, cocoon; At the sentence level: simple complete sentences or complex sentences using adjectives; At the discourse level: This particular activity does not lend itself to discourse in writing, however, it could be observed during practice and application through the observation of partner conversations. This would include connected descriptive sentences both complete simple and complex.