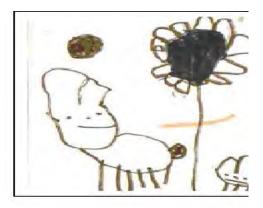
### THE FLOWERS THAT BLOOM IN THE SPRING

## Key Focus: Observation:

#### **Science**

Ms. Lu's class has begun to plant flowers in honor of spring. The classroom is flooded with books with themes and pictures about flowers, and each child is planting his or her own potted plant and watching it grow. Each day Ms. Lu places a different drawing medium and tool in the art center. At the end of the week, Hong produced these three flower pictures. Ms. Lu took some time to write a sentence about each:

Flower with markers, "The bunny and the flower" (4/3)



Flowers with watercolors, "The flowers are in a circle" (in Mandarin) (4/4)



Flower with colored pencils, "This is my flower" (4/5)



Reflecting on the

\*Participants may quickly shift from reflecting on the documentation to interpreting the observation or suggesting strategies for extending Documentation: learning. Remind participants to discuss the advantages and disadvantages of the documentation technique.

> **Ask:** What do these three pictures together tell you that one picture alone might have missed?

> Sample Responses: Together these pictures create a story of Hong's knowledge of flowers over the span of three days' time. By looking at the patterns and similarities across the pictures it is easier to understand what Hong is attuned to (stem, leaf, flower) and what she is not (roots, soil).

Interpretation of the Observation:

\*Remind participants that in their interpretation they are looking for patterns, critical incidents, or errors. It is important to stick to the data.

Ask: Cumulatively, what do these three pictures tell you about Hong's knowledge of flowers?

Sample Responses: Hong clearly understands that flowers have stems (as evident from the "t" shape of most of the flowers). She also knows that there is a "flowery" part that can vary in color and shape (for example, brown or blue, in a series of circles, or an abstract shape). Perception of size is interesting—the flower is larger than the bunnies in the first picture.

**Ask:** What more do you want to know about any of these pictures?

Sample Responses: Where did she get the idea for the circular watercolor flower design? Is this something that she saw somewhere? Why did she put a sun only in the first picture? The first day the sun is in the picture, but not on subsequent days (one wonders if on the first day the teacher talked about the flowers needing the sun to grow). It is interesting that in two of the pictures she adds animals (bunnies and a bird), indicating perhaps an interest in animals.

**Ask:** What else did you learn from these work samples?

Sample Responses: She drew two long ears, a face, trunk, legs, and a tail on the bunny, showing attention to detail, although her bunny has six legs. The bird is recognizable.

She uses complete sentences in dictation on the second and third pictures. On the third picture, the four word sentence is in English and includes a possessive pronoun (my). The teacher may want to look to see if other language samples show more use of verbs.

Relating Your Observation to the Child Outcomes Framework: \*Although participants can defend other interpretations, there should be general consensus that this observation demonstrates:

**4B1 (Science/Scientific Knowledge):** Expands knowledge of and abilities to observe, describe and discuss the natural world, materials, living things and natural processes.

**1B1** (Language Development/Speaking and Communicating): Develops increasing abilities to understand and use language to communicate information, experiences, ideas, feelings, opinions, needs, questions and for other varied purposes.

**1A4 (Language Development/ Listening and Understanding):** For non-English-speaking children, progresses in listening to and understanding English.

**5B1** (Creative Arts/Art): Gains ability in using different art media and materials in a variety of ways for creative expression and representation.

**7B1/3 (Approaches to Learning/Engagement and Persistence):** Grows in abilities to persist in and complete a variety of tasks, activities, projects and experiences. Shows growing capacity to maintain concentration over time on a task, question, set of directions or interactions, despite distractions and interruptions.

Next steps for large group instruction:

\*Help participants make connections between what they learn from the assessment and the next steps they want to take in instruction. If suggestions for instruction extend activities to new areas of learning, ask participants to consider what aspects of children's progress they would assess and how they would do so during those extension activities.

**Ask:** What would you recommend that the teacher do next for the class as a whole?

\*Responses will vary but might include:

- Talk with the group about the differences between markers, pencils, paint, and crayons and colored pencils. Use Hong's drawings as an example. Ask the class about the different effects that the different mediums produce. For example, the lines drawn with colored pencils are thinner. Perhaps water colors give more interesting effects, but can smudge and run.
- Talk with the children about the parts of the flower in more detail. Compare a drawing of the parts of the flower (for example, roots, veins in the flowers, leaves on the stems, pistil, stamen) to a real flower. Label the parts on the drawing. You may want to plant something in a clear container with the roots visible through the sides or gently pull a potted plant out of the pot to show the roots. Compare roots, stems, and flowers from different kinds of plants (potato, bean plant, marigold, spider plant). The teacher could collect work samples and put labels on each part a child names, or she could create a checklist to track the parts of a flower that children include in their drawings.
- Talk about safety and health issues as they relate to plants. For example, identify safety rules to avoid being hurt by poisonous

plants or plants with thorns. The teacher could keep track of which children could tell her safety rules about plants (for example, to look before you touch or wear gloves when reaching for plants that might have thorns).

# Next steps for individualized instruction:

**Ask:** How can you use Hong's pictures to elicit more language?

- \* Responses will vary but might include:
  - Ask her to tell you about what the bunnies are doing to see if you could get more use of verbs.
  - Ask her to tell you more about the flowers in the circle: Did she
    ever plant flowers in a circle or did she see flowers in a circle when
    she went to visit someplace? Perhaps she will describe her flowers
    more, talking about color or size.

## Additional Notes:

Work with Hong and other students in the class who are dual language learners (DLLs; children who have a home-language other than English) on thinking about English vocabulary specifically associated with flowers. Translate these words into Mandarin and talk about how they mean the same thing.

Work on modeling action words—comment on what Hong and other children are doing at different points in the day, then begin asking Hong what she is doing or what a friend near her is doing. Monitor her use of verbs.