**Research Lesson Findings and Follow-up Unit Plan**

**After debriefing the lessons, focusing on the data collected by the observers, the teachers generated the following chart outlining what students demonstrated:**

|  |  |
| --- | --- |
| Know | Not Yet... |
| * How to match the quantity to the number of objects for numbers 0-5 * Comfortable using the 10 frame as a tool. * Tray helped with dice. * Intro new games during small group times. * Visuals with instructions help. * 3/4 students counted all. * ¼ of students counted on from 10. * Some students collaborated and checked their final count * Number recognition 11-19 | * Seeing that numbers 11-19 are composed of 10 and ones. * Combining groups accurately. |

**This lesson study team was interested in exploring manageable ways to have students utilize manipulatives in their math work. Part of their research was around the math concept of tens and ones, and part of their focus was on how to introduce work with tools so that students would be productive.**

The team observed some helpful factors – distributing manipulatives in small, pre-portioned containers, modeling use of the manipulatives and introducing the activities to small groups of students at a time, rather than with the whole class.

Based on their observations the Kindergarten team mapped out their next Unit, sequence of lessons, to build upon student understanding. Many of these activities are from Kathy Richardson’s book, Developing Number Concepts.

Part/Part Whole

* storyboards with combinations
* break it (to see combinations)
* coloring tiles
* spill the beans
* number quilt
* domino towers
* guess my combination

Missing Part

* bears in the cave (covered)
* story situations w/missing parts
* break it (hide part)