

Diary – Friday, July 16

Mini story: Constructing Knowledge with a Little Help from My Friends

Peers make up a hugely powerful component of the intellectual environment in school. Children come to school with different strengths and different knowledge. The civic forum of the school functions most efficiently when these differing strengths are valued and utilized to support everyone's construction of knowledge.



In researching the question “what can feet do?” the class was experimenting with painting with feet. Maya got the idea to cover her exposed skin with the blue and yellow paint. Julia liked this idea and followed Maya’s lead. They soon looked quite froglike.



While Ryan was contemplating whether walking in straw with paint-covered feet would be a good idea, mother Lisa commented that the straw might stick to the paint and make his feet look hairy. “Then he’d be a frog mammal,” joked Julia, referring to the paint being like frog skin and the straw being like mammal hair. “Frogs are mammals,” Maya appeared to deduce from the conversation. As a teacher, I now had a choice to make. I could correct Maya’s statement in hopes of stopping the misconception in its tracks. I could ignore the statement, recognizing that at four-years-old, it is not essential that Maya know that frogs are amphibians, and trusting that she will learn this particular fact later. What I chose to do was to value and utilize the vast scientific knowledge I know Julia possesses. I did not know specifically that she could reliably categorize frogs as “not

mammals,” but my observations of her to this point led me to believe that she could. “Are frogs mammals?” I mused to no one in particular, hoping to give Julia another chance to hear Maya’s assertion. “No,” said Julia, quite confidently and loudly. Maya did not react, but I believe that she heard. Later, a similar situation arose:



Maya and Julia were playing with the farm animal figurines. Maya was holding a horse figurine and a baby rabbit figurine. “Horses eat baby bunnies,” she announced. I let the statement stand. Would Julia come through for Maya this time too? A little while later, Maya announced, “Horses eat ducks.” Was Maya searching for a relationship between the different types of farm animals? Was she trying to puzzle out the question of what horses eat? Julia recognized her cue: “Horses eat oats and carrots,” she announced. Maya immediately began looking for things that could be oats and carrots for the horses. Later, Maya herself, perhaps now finding herself on the right track, announced, “And horses eat hay.”

These two opportunities for Julia to share her scientific knowledge with her buddy Maya, along with the ideas – such as painting oneself like a frog – that Julia gets from Maya, represent the strength of the peer group. One of my goals as a teacher is to create the intellectual environment which allows children to learn from each other. Julia and Maya hold valuable and unique positions in our community of colearners. Why does Julia so quickly follow Maya’s lead in endeavors such as painting oneself like a frog? Why does Maya so quickly and without argument accept Julia’s corrections of scientific fact? I believe it is because they know and value each other’s strengths. When Julia follows Maya’s imaginative ideas, she is telling Maya, “I value your ways of inventing.” When Maya trusts Julia’s scientific knowledge, she is telling Julia, “I value what you know. You are a valuable member of our learning community.”