

I have already submitted testimony on the neural argument supporting the passage of SB 948. Now I want to explain the importance of learning from our mistakes. Because I want to refer again to the work of George Lakoff, I have looked up the titles of his books and discovered that what I called “The Embodied Mind” was really entitled “Philosophy in the Flesh.” In an earlier book, “Metaphors We Live By,” he carries forward how the embodied mind works out its movements. After the unconscious intention summons up attention calling into play one’s conscious intention, there is the stimulation of muscles to create movement. Let’s say that the intention of that movement is to pick up a cup, bring its contents to one’s mouth, tilt it and begin swallowing its contents. It is likely that the child’s gross motor skills are such that the child in moving its arm will knock over the cup. This is a point of crisis, which in Korean script is the symbol for “opportunity” juxtaposed over the symbol for “danger.” In terms of storytelling, we have just moved from the beginning of a story to the point where conflict has led to crisis which calls for resolution, which is the middle of the story. In other words, we are programmed to write our own life stories through the actions we take. Just as the child might go through a series of attempts to grab that cup, raise it up, bring the cup to its lips, tilt the cup, and swallow its contents before they spill down the sides of its mouth and drip down its chest, we embody the structure of stories life presents us. While unstructured play allows children to learn from their mistakes, Erik Erikson lays out 8 stages of psychosocial development beginning with Trust vs. Mistrust (birth to 18 months), Autonomy vs. Shame and Doubt (Toddler years from 18 months to 3 years), Initiative vs. Guilt (Preschool years from 3 to 5), Industry vs. Inferiority (years from 6 to 11) when many teachers fail their students by not insisting on their writing in cursive, which allows them to reflect on how words have a beginning, middle, and end that defines their function in a sentence. Though there are 4 more stages, stage 3 and 4 are the years in which children receive instruction from their teachers. Obviously, school places children at risk (making the term “children-at-risk” somewhat redundant). This is where all teachers share common ground with students when it comes to learning from their mistakes. I can’t help but look back at every lesson I taught without experiencing shame and doubt that arose from exercising my autonomy in teaching lessons without enjoining students in taking an active role in shaping how their learning was to take place. Fortunately, retirement has allowed me the opportunity learn from those mistakes in time for me to share that learning with you. It is much harder to share those mistakes with one’s peers as they are being made, but exercising our own personal agency as teachers takes us, moving forward, through the last four stages of psychosocial development: Identity vs. Confusion (dare I share my lessons with my colleagues?), Intimacy vs. Isolation (might my opening up to others be better than closing my door and continuing to do my own thing/; Generativity vs. Stagnation (where I am now in retirement), and, finally (Integrity vs. Despair

(where your profession as legislators and ours as teachers and caring adults seems to be at this moment.)

So, let me tell you about Dr. Constance Amsden, a dyslexic professor who taught me a color-coding dialogical approach to grammar that changed my life as a teacher struggling to teach basic skills to high school students who had never been taught skills they were expected to acquire by the end of the 3<sup>rd</sup> grade. She was 80 years old when she was invited to return to California State University to teach a class to graduate students seeking to earn a Reading Specialist Certificate along with their master's degrees in education. She passed out a handful of short red and blue strips of paper to each of us to use in underlining words in the sentences we copied from what she wrote on the board along with the instructions we were to follow. The first instruction was: Place a red strip under the word that tells you "What's happening" in this sentence. The sentence was "Birds fly." From where she stood in the room, she could monitor our progress. Then, she asked what word we had underlined: we had all underlined "fly." The next instruction was: Place a blue strip of paper under the word that tells who or what "fly." This we did as well.

She asked that we keep these strips of paper in place as we wrote out the next sentence: "Candles burn." Then, she asked for a volunteer to read the first instruction on what to do with our red strip of paper. We followed those instructions, and another volunteer gave the instruction: "Place a blue strip of paper under the word that tells who or what 'burn'."

Then, Dr. Amsden wrote "Children play," and we were asked to read aloud the first instruction, which we did, and place the red strip where it belonged. Then we read the next instruction that included our answer to the first: "Place a blue strip of paper under the word that tells who or what 'play'." When we had finished, Dr. Amsden asked us to look at the underlining of these three sentences to see if we noticed anything. Yes, we did. We saw a pattern: the blue strip of paper came before the red.

With that, Dr. Amsden passed out yellow strips of paper and wrote another instruction on the board: "Does anything tell you whom or what . . . (followed by a blue line, then a red line and a question mark). If so, place a yellow marker under it." We were also asked to write either "who" or "what" above the words with blue markers underneath and "whom" or "what" under words with yellow markers placed under them.

Now the sentences she wrote were like those that appear below:

'Pilots fly planes.'

"Teachers test students."

"Students test teachers."

Again, we saw a pattern and noticed that the meanings the last two sentences changed along with the order of the words they contained. We had just learned how syntax helps determine meaning.

There is more to say about this dialogical approach, but the essence of it is that questions and the information they seek are two sides of the same coin. Children have a deeper intuitive understanding of language than they are consciously aware they possess.

I would like to share with you a recent experience I had when substituting for a 3<sup>rd</sup> grade teacher who allowed me to use an introductory grammar lesson to his students using this color-coding dialogical approach. Another mentor of mine, Dorothy Doyle, introduced me to a functional grammar she created where the terms “noun” and “pronoun” were seen as unnatural and unproductive. She divided words and groups of words as carrying out one of four functions: there were Identity Words, Operation Words, Modification Words, and Relationship Words. Identity Words were of three types: 1) words that identified Real Things; 2) words that identified Imaginary Things; 3) words used as if they were things, words that identified concepts and beliefs and words standing in for real and imaginary things, like pronouns and words like “hands” as in “all hands on decks” and “chocolate” in answering which kind of ice cream you prefer.

After these 3<sup>rd</sup>-grade students had color-coded “Birds fly,” I introduced them to Dorothy Doyle’s lesson on Statements of Fact and Statements of Opinion. Statements of Fact are subject to being proved true or false. Statements of Opinion are not subject to such examination. If someone says that peanut butter sandwiches are delicious, that is an Statement of Opinion that is not subject to being declared true or false even if many people would disagree. So, I asked the class whether the sentence, “Birds fly,” was a Statement of Fact or a Statement of Opinion. They told me it was a statement of fact. Then, I asked them if they knew of any birds that didn’t fly. Hands shot up and voices called out a number of birds they knew that did not fly and some that fluttered wings but never got so far off the ground that we might call it “flying.” “So, if the sentence ‘Birds fly’ is a Statement of Fact, is it true or is it false?” Even those who stopped to think for a second declared that it was true.

“Okay, so if it is true and there are all of these exceptions, what do we mean when we say ‘birds fly’? If I used the past tense and said that bird flew over my head, that is a matter of history that either took place or didn’t. So, when we say that birds fly, using the present tense, do we mean they are flying right now?” They were pretty sure that was not how the present tense was being used. Then they got it: enough birds had been observed in the

past to be flying enough times that it made sense to share that birds in general were able to fly. They had moved beyond time and space into the fourth dimension in which potential, as defined by Aristotle, was a characteristic to be considered in defining what is considered to be true.

But, if I were to tell my peers that third grade students were capable of being taught grammar, logic, the art of reasoning, and rhetoric, the art of persuasion, they would think I was getting ahead of myself. However, if we honor the experience of students and are willing to empower them by helping them tap into their unconscious awareness to gain a greater understanding of their potential for academic growth, we must give them and ourselves the agency to learn from our mistakes, because, in its essence, that's what learning is!

We were then given orange markers of various lengths and were asked to write down the next instruction written on the board: Does anything tell you "how," "how often" or "how much," "when," "where," "why," or "under what conditions" "blue" "red" ("yellow")? If so, place orange markers under those words, word combinations, or word phrases and write above each what question they address.

The first two sentences that followed were easy:

"School served pizza today."

"Yesterday school served pancakes."

Words with orange markers could move around without changing the meaning of the sentence! But, because the order was different from what might be expected, Dr. Amsden told us to place a comma after “Yesterday.”

The next sentence hit us by surprise: “Suddenly, Shelley slipped several times on the ice in front of the school without falling.” Questions arose: Did “Suddenly” tell when or how this happened? We never dealt with grammatical terms until we finished how questions served as the flip side of the information provided.

Now, I want to share with you the color “green” that got me into trouble when I was subbing as a teacher’s aide and suggested that the rules she had written on use of commas in a series of adjectives did not always apply.

Unlike words underlined with orange, words with a green marker placed under them appear before or after the words they describe, except when the sentence expresses a state of being, which would expand the realm of sentences beyond telling us what’s happening. This is, after all, an incremental approach to teaching, which works better when introducing students to written language than when they believe they already know as much as needed to get by.

Here is the instruction Dr. Amsden wrote on the board: Do any words tell you which, how many or how much, or what kind of things are involved in what’s happening? If so, put a green marker under them. Sounds easy, but it is a remarkable step forward because they function as “determiners,” “quantifiers,” and “qualifiers”—expected to be supplied if they are not implicit in what they describe.