Mr. Sosnow, my fourth-grade teacher, interrupted the class as we copied our homework assignments into our black-and-white marble composition books from the chalkboard. With a sly look in his eye, Mr. Sosnow informed the class that he had a special homework assignment for us. He instructed us that by tomorrow, we were to find out how air is made.

I ran home, burst through the front door and blurted out the question as soon as I saw my mother: “Mom! Where does air come from?” She looked puzzled. She said, “You mean the air we breathe?” “Yes!,” I replied impatiently, “It’s our homework assignment.” Mom explained that the air we breathe is made by plants. I stopped in my tracks. “Made by plants?????,” I asked. She said that it is called photosynthesis. I thought for sure this was one of those rare times when my mother was mistaken. I thought for sure this could not be correct because we had lots of plants in our house and in our yard and I never once saw a plant make any oxygen. She saw my doubt, my disbelief, and my suspicion. She said, “If you don’t believe me – look it up.” In our house “look it up” meant the Oxford dictionary or our beloved set of World Book Encyclopedias. I ran to the bookshelves and returned to the dining room table with the “E-F” book of the encyclopedia - to look up fotosynthesis. My mother informed me I needed the “P” book. I thought if I needed the “P,” then surely she did not know what she was talking about. I
would likely, I told myself, have to wait until my dad got home from work - he would know about oxygen since my mom was, clearly, uninformed. My mom sat at the table with me and helped me find photosynthesis in the "P" volume of the encyclopedia. I was amazed! Oxygen comes from plants – it was in the book! I wrote up the findings from my investigation. When my dad got home, I regaled him with my vast knowledge of the way green leaves take carbon dioxide, water, and sunlight and turn them into oxygen.

The next morning Mr. Sosnow created a panel of students to present their findings. Each child, in turn, offered his/her explanation of the production of oxygen. I heard several creative, and one outlandish, notions. I was the final student to speak. I explained photosynthesis and showed a concept map my mom helped me copy from the encyclopedia. At the end of the panel presentations, each student in the class cast a vote for the best explanation of the origin of oxygen. Photosynthesis and I won in a landslide.

The beauty of this fourth-grade learning exercise was that Mr. Sosnow knew his students did not know about photosynthesis. The aim of the assignment was discovery. So often in adult classrooms, teachers pose questions, create learning assignments, and craft assignments for grading which presuppose that our students possess certain kinds of knowledge. But what are adult students supposed to know? And if it is so clear, why do so many learners not know?

So much of the ecology of higher education communicates that learning is for adults who already know. My fear is that students spend more time pretending to know than they do in discovery, investigation, encounter, and wonder. Our adult students have learned to create strategies against being blamed, punished, embarrassed, and shamed for not knowing what they are supposed to already know. Their charade comes in many forms: asking shallow questions at the beginning of the class to get air time, belligerent silence during classroom discussions, physically hiding behind computers or, to my personal annoyance, talking over people to prove they know what they do not know. Students will also filibuster or attempt to derail the conversation for a conversation set by their own agenda to exhaust the time of the session. All of these behaviors are defensive tactics to survive classrooms where the supposed-to-know knowledge is simply not known. The intense pressure to perform knowing often stifles inquiry.

What knowledge should teachers of adults be able to expect? I can honestly say I do not know. It is the same “I do not know” when asked what kinds of jobs adult learners will have in a society in such flux that current jobs are folding and new jobs are not yet conceived. Education cannot meet the needs of a world that is changing at breakneck speed. The enterprise of education does not know what it is supposed to know – just like our students.
I confess, when I think of what my students do not know, I am, more often than not, judging persons as remedial, mis-educated, and under-prepared. If I/we shed our arcane notions of stagnate cognitive standards which are already out-of-step with the world, focus upon the learner’s curiosity, and aim at giving the needed tools for investigation, discovery, and inquiry, perhaps we would, together, create more meaningful learning. Adults who make it into a classroom in higher education know a lot, they know enough. How much trust would it take to work with a student to find out what he/she does not know so learning would be more meaningful? How many discovery assignments are needed to support students who do not know?

In the fourth-grade exercise, I experienced amazement because what I did not know was not held against me. Instead, what I did not know was my point of inquiry and consequently amazement. My successful inquiry convinced me that the world was a mysterious place and a place where the mystery could be interrogated and understood - at least a little bit. I want my adult learners to be amazed as they learn new ideas, as they encounter new perspectives, as they discover the new complexities of old thoughts, beliefs, and traditions - even if the discovery is about what I think is basic.