1. Declarative Knowledge and Procedural Knowledge

1.1 Two Examples of Declarative Knowledge Based on Instruction

1.1.1 Trade school instructor
In the classroom setting, I explained how a water heater works, its functions, and building codes pertaining to where and how a water heater is to be installed. This example falls under declarative knowledge because it tells the learner about a process. In this case, the declarative knowledge is about how a water heater works, and general guidelines for installation. Students are able to understand the how water heaters function, etc., but applying that knowledge to requires that they learn the processes in a lab or on-the-job setting.

1.1.2 Flight instruction
A student pilot learns the Federal Aviation Regulations, the principals of flight, and the processes of flying an aircraft in what is called, “ground school.” This learning that takes place in a classroom setting is declarative because it informs the learner about what he or she needs to know about processes, and this knowledge later crosses over to procedural knowledge: flying the aircraft and applying all the information learned in the classroom to a hands-on setting.

1.2 Two Examples of Procedural Knowledge Based on Instruction

1.2.1 Trade school instructor
In the lab setting, I showed the students a step-by-step process in how to install a water heater. This example falls under procedural knowledge because it is task-oriented. Eventually
the students become competent enough in the process of various water heater installation scenarios that they don’t have to think too much about what they are doing. They just do it by habit. This descriptive knowledge knowing what to purchase and correct peripherals without also becomes automatic.

1.2.2 Flight instruction

A student pilot comes out of a classroom where he or she learned declarative knowledge of the principals of flight, Federal Aviation Regulations, and required maneuvers for the given flight lesson. Now the student pilot applies hands-on experience in operating an aircraft whether on the ground or in flight. This is an example of procedural knowledge because the student pilot is following a process learned from a checklist, classroom instruction, and demonstration from the flight instructor. When a student pilot becomes competent with a particular maneuver, he or she knows how to react to certain situations while in VFR flight. For example, if the aircraft finds itself in an unusual attitude, the pilot automatically reacts by leveling the wings and recovering the airspeed, or knows to avoid flying into a cloud. Although these procedures are taught declaratively in the classroom, they become procedural knowledge as they become practiced. One cannot just tell someone how to fly an aircraft.

2. Course/Training where Adult Principles Were Applied:

I recall a time when I took UCSC extension courses to further my skills in my career. One course in particular that I remember well is one on professional indexing. The instructor, Lori Latimer, made this course fun and exciting. “Happy to be there” was a phrase she used for
index entries that made sense and were useful to the reader. In this course, adult learning principles were applied in the following ways:

**Readiness:** The course focused on the learners’ needs. The learners needed to improve their indexing skills. For each participant, the course solved a problem in methods of indexing and enhanced professional growth. The way the problem in methods in indexing were solved was how to make logical index entries that made sense to the reader; that is, anticipating a term that the user would look for and inserting that term in the index. The way the class enhanced professional growth because it increased the skill level of the technical writers so they can apply that knowledge on the job.

**Experience:** The participants in the course were technical writers with prior knowledge of writing indexes. The course acknowledged the adult learners’ experience and allowed participants to apply their prior knowledge as technical writers in the course while doing class exercises.

**Autonomy:** The course provided class participation, and it respected the experience of the participants. In class exercises, the participants made their own decisions on what terms and concepts should be indexed and how.

**Action:** The training scenarios were applied successfully (at least in my case) on the job and at numerous companies where a printed manual required an index to be written.