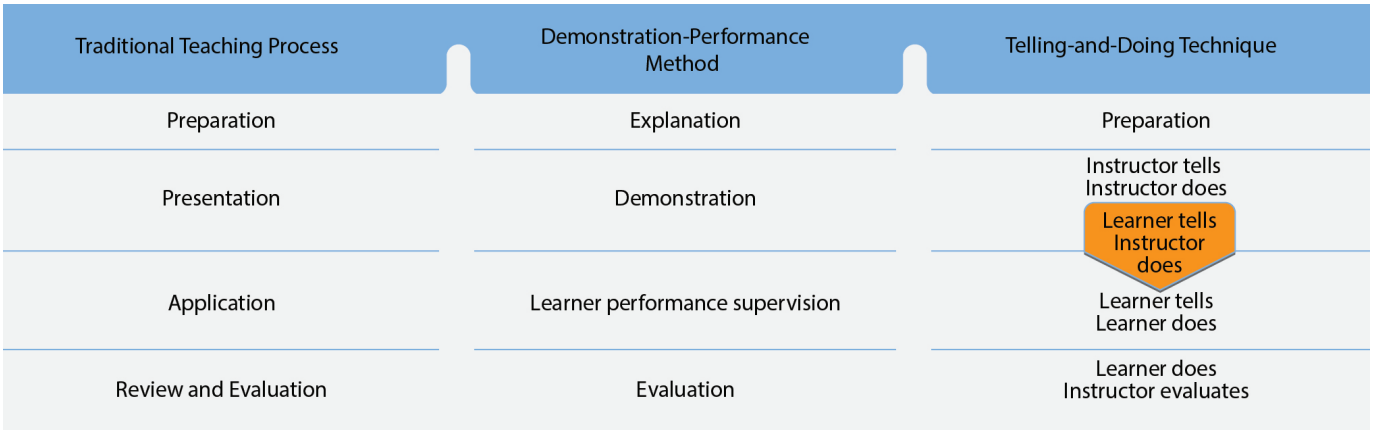

Figure 9-7. *This comparison of steps in the teaching process, the demonstration-performance method, and the telling-and-doing technique highlights similarities as well as differences. The main difference in the telling-and-doing technique is the important transition, learner tells—instructor does, which occurs between the second and third step.*

Instructor Tells—Instructor Does

First, the flight instructor gives a carefully planned demonstration of the procedure or maneuver with accompanying verbal explanation. While demonstrating inflight maneuvers, the instructor should explain the required power settings, aircraft attitudes, and describe any other pertinent factors that may apply. This is the only step in which the learner plays a passive role. It is important for the demonstration to conform to the explanation as closely as possible. In addition, it should be demonstrated in the same sequence in which it was explained so as to avoid confusion and provide reinforcement. Since learners generally imitate the instructor's performance, the instructor needs to demonstrate the skill exactly the way the learners are expected to practice it, including all safety procedures that should be followed. As previously explained, if the demonstration does not closely conform to the explanation, this deviation should be immediately acknowledged and explained.

Most physical skills lend themselves to a sequential pattern where the skill is explained in the same step-by-step order normally used to perform it. When the skill being taught relates to previously learned procedures or maneuvers, the known to unknown strategy may be effective. When teaching more than one skill at the same time, the simple-to-complex strategy works well. By starting with the simplest skill, a learner gains confidence and is less likely to become frustrated when building skills that are more complex.

Another consideration in this phase is the language used. Instructors should attempt to avoid unnecessary jargon and technical terms that their learners do not know. Instructors should also take care to clearly describe the actions learners are expected to perform. Communication is the key. It is neither appropriate nor effective for instructors to try to impress learners with their expertise by using language that is unnecessarily complicated.

As an example, a level turn might be demonstrated and described by the instructor in the following way:

- Use outside visual references and monitor the flight instruments.
- After clearing the airspace around the aircraft, add power slightly, turn the aircraft in the desired direction, and apply a slight amount of back pressure on the yoke to maintain altitude. Maintain coordinated flight by applying rudder in the direction of the turn.
- Remember, the ailerons control the roll rate, as well as the angle of bank. The rate at which the aircraft rolls depends on how much aileron deflection is used. How far the aircraft rolls (steepness of the bank) depends on how long the ailerons are deflected, since the aircraft continues to roll as long as the ailerons are deflected. When the desired angle of bank is reached, neutralize the ailerons, and trim as appropriate.
- Lead the roll-out by approximately one-half the number of degrees of the angle of bank. Use coordinated aileron and rudder control pressures. Simultaneously begin releasing the back pressure so aileron, rudder, and elevator pressures are neutralized when the aircraft reaches the wings-level position.
- Leading the roll-out heading by one-half the bank angle is a good rule of thumb for initial training. However, keep in mind that the required amount of lead really depends on the type of turn, turn rate, and roll-out rate. As a pilot gains experience, he or she will develop a consistent roll-in and roll-out technique for various types of turns. Upon reaching a wings-level attitude, reduce power and trim to remove control pressures.