

Why is there so much poor instruction?©

It is my opinion that the problem is much the same as in most of the educational systems of the world. Teachers are expected to be dedicated to their profession, having both experience and knowledge of their subject, and willing to work for less pay than their skill and education warrants. The field of aviation is no different. When the aviation student pays thirty-two dollars per hour for instruction half of those dollars go to pay such fringe benefits as social security, workmen's compensation, unemployment and disability insurance, as well as the employers fixed costs for space, accounting, utilities and overhead.

Your FBO flight instructor is going to be making somewhere between ten and fifteen dollars per teaching hour. Additionally the flight instructor will be expected to spend a number of hours at the office counter at minimum wage. Is there any reason to expect quality personnel or instruction except where there is independent income helping the cause. Aviation is not unique in taking advantage of the newest instructor and mechanic recruits. Future expectations allow FBO operators significant leverage.

Although there are numerous textbooks about how to perform flight maneuvers the premiere source of how to teach and how student learn is the governments Flight Instructor's Handbook (FIH). This is the most compact source of teaching and learning theory I have ever read. Many educational texts will write chapters where the FIH uses a sentence. It contains a flying syllabus that I have used for thirty years. For the student the FIH would provide a good means of instructor evaluation in so far as formal teaching technique is concerned.

The weakness of the FIH is that teachers tend to teach the way they were taught. The CFI's contact with the FIH did not occur until most of his own instruction was completed. Personally, I have made the FIH a standard part of my student's required reading. Flight instruction existed long before there were textbooks. Flying texts that are most concerned with maneuvers concentrate on what the maneuver looks like and specific parameters of airspeed, pitch, and roll. Fundamental to a complex maneuver are a series of relatively simple basic control movements. It is the sequencing of these basics that creates the complete maneuver. This is as true in a level ninety degree turn as in the immelman turn.

There are instructor types who feel that 'their way' is the only way. To an extent I am one of these when dealing with those who would become instructors. A poor instructor has the potential of perpetuating a specific instructional defect through generations of instructors and a multiplicity of pilots. I have seen it happen.

I actually learned to fly by teaching. This is not peculiar to me, many instructors have learned the same way. I was fortunate in being a school teacher whose specialty was repairing the damage of prior teachers. I was able to discern the weaknesses in the instruction of my several instructors as well as their strengths. I became a cherry picker of the very best instructional procedures. Nothing new or created by me; just a few things that will make a great difference in the teaching and learning process.

My pet peeve is the tight hold on the yoke or stick. The potential student who takes a demo ride is usually allowed to use a full grip on the yoke. This grip is usually tight because of the sense of control it conveys. Even the design of the yoke grip implies that the full fist should be used. A simple change in this design that would inhibit the full tight grip would facilitate all flight instruction. I have flown with a few pilots who can use a full fist and still be light on the controls. For the vast majority of pilots the use of more than a finger and thumb on the yoke will result in excessive yoke pressure.

Teaching a student to fly with a light touch is not easy. It won't become easy until the student associates the light finger touch with the use of trim and reference to the horizon. The fatigue and stress usually experienced by student in training can be significantly reduced if they will only lighten up on the yoke. Every basic flight maneuver can be more successfully flown with only one finger and the thumb than with a full grip. As a student looking for an instructor a well worded question in this area could make a significant difference in how well you learn to fly. The most difficult part of learning to fly IFR for many pilots is to unlearn the VFR tight grip which absolutely will not work for IFR.

My next concern is related to making sure that the student knows the what and why of an instructional sequence. We have started working on landings from the very beginning. Landings don't begin around lesson six or seven, they begin in learning to fly the basics. If the basics are not firmly in place along with ground reference skills, any pattern operations are sure to expose deficiencies. The student must be made to understand and expect to attain reasonable mastery of the basics before doing landings. It is inefficient and wasteful to try to teach the basics of pattern operations along with landings.

Lastly, I feel that every student should be fore-warned that certain aspects of flying will require a series of lessons because of the complexities involved. Radio procedures come immediately to mind. If your airport has only one runway and limited departure/arrival possibilities the variations are limited. Parallel or intersecting runways quadruple the possibilities. The student should be prepared before engine start for each arrival and departure and well as the effect of wind changes. The cockpit is a terrible classroom. Do the teaching and practice before entering the airplane. If necessary write out the procedures to read. In the airplane prior to each initial radio contact, practice until it comes out in one smooth flow of words without punctuation.