

CFI Workshop Module 7, Core Topic 13 Speaker's Notes – January through March 2012

Slide number:

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Our goal as an instructor is to take someone who knows nothing about aviation and teach them to be a safe and knowledgeable pilot in a reasonable amount of time.

We do this by first building a foundation and the structure one block at a time.

If the foundation is weak the end result will be a poorly trained and most likely an unsafe pilot.

Can they pass the checkride? – probably – because that may be all they were taught. We don't just teach the checkride, or the selected DPE's typical scenario.

That is not enough. We can and must do better.

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To teach someone something we need to understand what motivates them.

We all have certain core needs that must be met but each of us requires them in different amounts and in different ways.

It takes time to get to know your student and it takes experience to be able to read some of their needs in their body language

With experience we learn what to ask, and how to ask to learn these things

Then we need to learn how to provide what each different student needs to be successful.

Air, food and water we can easily deal with

Safety & Security is huge – this is a very scary airplane and They are trying to fly it. Your explanations and mannerisms make all the difference

Belongingness – do you turn around and walk away at the end of a lesson or are the students included in an “airport family”, introduced to each other and to others in the organization – mechanics, line persons, management, other instructors ?

YOU need to facilitate these interactions. The more connections your students have the more likely it is they will continue and thrive and recommend your flight school and you.

Self Esteem – we all need that and it is so easy to damage. All it takes is an unintended comment or misunderstanding – or truly tactless CFI

They may be having trouble “getting” something. We all did and do throughout life. Whatever you do guard their self esteem.

And when they “get it” Celebrate with them, share their success with others at the flight school, motivate other to succeed too

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Certain types of stress are universal.

We are all affected and it impacts our performance – as a pilot and instructor

But, each of us respond differently in a given circumstance

Past experiences have a huge impact, as do stories we have heard, impressions we have interpreted from others

As an instructor we need to learn to recognize these in our students and address them before the stress overwhelms the desire to fly

Ergonomics – planes are not designed for small or large people, shoulder harnesses are particularly bad for short people,

Some cannot see over the instrument panel and it is really had to learn to land that way – get pillows

Ergonomics and the CFI (A case of we don't know what we don't know so when we learn something new - let's share)

Student pilot, pre-solo completing pre-solo stage check in a C-172 that he had used for all his training. CFI stated that he was doing well but was having problems with the touchdown portion of the landings. They had spent quite a lot of time working on this problem.

Student was doing very well and performed exactly as presented.

I watched him while he tried to land. He was stretching to see forward and unable to do so, made a poor landing.

On taxi back I looked at him and at the panel and ask if he could see over it. His response was no, am I supposed to see over it?

I had him stop on the taxiway and I gave him some pillows to use to increase his eye level in the cockpit. He worked them onto the seat as best one can in such cramped quarters. When he first looked up after getting situated his eyes got wide and he said "I've never seen the taxiway before!" I ask if he was serious – he was. He had also never seen the centerline of the runway after the initial flare either. Now he could and he made a flawless landing.

We don't know what we don't know. We MUST, as instructors, share the insights we gain with others. The best instructors are always learning something new and sharing it with their students as well as other instructors.

5

We learn differently and it is not all Men are from Mars stuff
Sometimes this lack of understanding can make or break a student relationship.
It is Our job to understand and compensate to allow the student to learn in their own way.
There is no right or wrong – there is only different

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Not sure? ASK your student – how do you learn best?
Can we talk too much as instructors? YES
Can we demonstrate too much – YES

As soon as possible STOP COACHING, SHUT UP AND LET THEM FLY
Rescue them if necessary – but try to coach them back to the correct procedure rather than simply telling or taking the controls.
What about Your body language, particularly in the cockpit. Can that influence the student?
YES, it can
They quickly learn to “read” you. If you are calm, stressed, worried, hurried, confident – they can tell.
They will even turn the way you look (examiner on a check rides noticed applicants would immediately turn in the direction she looked – she was looking toward the field she had designated as the alternate.
In the pattern, you have a habit pattern you may not recognize but the student picks up on it.
They will make pattern turns, begin descent, flare based on physical feedback from you.
It is very hard to block all feedback.

7

How would you tailor your presentation for the different learning styles?
Lets say we are teaching the touchdown segment of a normal landing.

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Your job, as the consummate flight instructor, is to help your students acquire knowledge that will be the foundation for years of learning in aviation. In aviation learning never stops. We fly in a 3-dimensional environment that is constantly changing. No two days are exactly the same, it's always different. Help your students understand that they will never be able to stop learning in aviation. Each time they fly they will learn something about the weather, the airplane, the people they fly with, or themselves.

Knowledge refers to information that humans are consciously aware of and can articulate about the subject. For example: Knowledge about the fuel system of a particular aircraft. How much does it hold? How long does the fuel last? Why do we need fuel? How does an internal combustion engine use the fuel and when the fuel is burned, what happens to the center of gravity in that airplane?

How do students acquire knowledge? There are three phases of progression in acquiring knowledge.

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Memorization - A student's first attempt to acquire knowledge about a new topic amounts to memorizing facts about steps in a procedure. For example, when a student pilot is learning to use an altimeter, they may have memorized that the knob on the instrument is used to dial the current barometric pressure and that this number must be obtained from the recorded broadcast and set prior to flight. Memorizing facts and steps has an advantage: it allows students to get started quickly. For example, as soon as they memorize the purpose of the knob on the altimeter and the procedure for obtaining the current barometric pressure, they are able to properly configure the instrument for flight.

The limitations of memorization become apparent when a student is asked to solve a problem or provide an explanation of something that is not covered by the newly acquired knowledge. For example, when asked whether they would rather have the altimeter mistakenly set too high or too low when flying in mountainous terrain, they may not have an answer.

Understanding - A more experienced pilot can answer the altimeter question because she or he understands the ramifications of the question. Understanding, or the ability to notice similarities and make associations between the facts and procedural steps learned, is an important next stage in the knowledge acquisition process. At this stage, the learner begins to organize knowledge in useful ways and a collection of memorized facts gives way to understanding.

Understanding develops when students begin to organize known facts and steps into coherent groups that come together to form an understanding of how a thing or a process works. For example, after learning to adjust the mixture control in cruise flight, the student pilot learns that combustion requires a certain mixture of fuel and air, and that air becomes less dense as altitude increases. Combining these two ideas, they now understand the purpose of the mixture control is to keep these two quantities in balance as the aircraft changes altitude. "Mental model" or self-explanation is often used to refer to an organized collection of ideas that forms a learner's understanding of a thing or process.

The advantages of possessing this type of understanding include the following:

1. The learner is no longer limited to answering questions that match the memorized facts. For example, armed with the understanding of the mixture control, the student pilot may

now be able to produce answers to more challenging questions, such as what would happen if the mixture were set too rich or too lean.

2. Learners who understand a process have an easier time mastering variations of the processes, such as unfamiliar aircraft, new avionics systems, and unfamiliar airport procedures.

3. Understanding shared between people allows them to communicate more efficiently. For example, an experienced pilot might mention to an experienced mechanic that a magneto ran a bit rough during an engine run-up. This brief communication triggers access to a wealth of knowledge in the mind of the mechanic who instantly knows what must be done.

4. Learners who understand the purpose behind procedure steps are better able to remember the procedure steps later, or reconstruct them when they are forgotten.

Mental models evolve as learners through the intake of new information. For example, the CFI could ask the student pilot why flying with an inappropriate mixture setting is bad. A learner whose understanding includes knowledge about spark plugs and carbon deposits might answer correctly. If this same learner's understanding later extends to include knowledge about thermal efficiency and the stoichiometric equation for the combustion of gasoline (Gas stoichiometry is the quantitative relationship (ratio) between reactants and products in a chemical reaction with reactions that produce gases), the explanations are likely to become much more sophisticated. No individual's understanding of anything is ever "complete."

Concept Learning - Concept learning is based on the assumption that humans tend to group objects, events, ideas, people, etc., that share one or more major attributes that set them apart. It also involves discrimination between types of things or ideas inside or outside of a concept set. By grouping information into concepts, humans reduce the complexities of life and create manageable categories. Although many theories about concept learning exist, categorization has always been a central aspect.

Concept learning enhances student understanding when students formulate generalized concepts from particular facts or steps. Generalized concepts are more powerful than facts because instead of literally describing one thing, they describe many things at once.

For example, a new flight student who sees several examples of weight-shift control (WSC) aircraft may formulate a category for WSC aircraft based on the wing, which is large and fabric covered. The power of the category becomes obvious when the student sees a sport plane.

Because of the similar wing, he or she immediately categorizes it as an ultra light and ascribes many of the properties of ultra light aircraft to the sport plane. In this way, the student has used a generalized concept to begin understanding something new.

Most learners exhibit a natural tendency to categorize and become adept at recognizing members of most any category they create. If something is encountered that does not fit into a category, these learners formulate a new category or revise the definitions of existing categories. In the above example, the student eventually must revise the category of ultra light to light-sport aircraft which encompasses both types of aircraft. Therefore, an important part of the learning process is continual revision of the categories used when learners encounter new things or exceptions to things previously catalogued.

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Is your student receiving your intended message? Or, has it been filtered along the way and what they received is definitely NOT what you sent.

Encourage them to ALWAYS ASK and verify all new information.

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Listening and hearing are not the same thing.

The message sent is not always the message we receive.

Our personal knowledge and background filters and shades the message in a unique way.

Without really getting to know someone we cannot understand how they actually receive our message.

The picture shows some of the ways in which humans can become better listeners. Discuss each of the inter-locking blocks.

1. Are you ready to listen?
2. Listen to understand, not refute
3. Be responsible for listening.
4. Take notes.
5. Be emotionally calm.
6. Listen for main ideas.
7. Guard against daydreaming.

12

Initially, all learning comes from perceptions, which are directed to the brain by one or more of the five senses: sight, hearing, touch, smell, and taste. Psychologists have also found that learning occurs most rapidly when information is received through more than one sense at the same time.

Perception involves more than the reception of stimuli from the five senses; it also involves a person giving meaning to sensations. People base their actions on the way they believe things to be. The experienced AMT, for example, perceives an engine malfunction quite differently than does an inexperienced student. This occurs because the beginning aviation student is overwhelmed by stimuli and often focuses on meaningless things, thus missing key information. It is important for the instructor to direct trainee's perceptions initially so that the student detects and perceives relevant information.

What factors affect perception?

Both internal and external factors affect an individual's ability to perceive:

- Physical organism
- Goals and values
- Self-concept
- Time and opportunity
- Element of threat

Physical Organism – Pilots must be able to see, hear, feel, and respond adequately while they are in the air.

Goals and Values - Every experience and sensation, which is funneled into one's central nervous system, is colored by the individual's own beliefs and value structures. Spectators at a ball game may see an infraction or foul differently depending on which team they support. The values of the student are important for the instructor to know, because this knowledge assists in predicting how the student interprets experiences and instructions.

Self-concept – Is the student confident, timid, insecure? If we continue to support and reinforce the student’s positive self image, the student will remain receptive to learning more. The negative self-concept inhibits the learning process by introducing psychological barriers, which keep the student from perceiving new experiences as positive, or it may inhibit their ability to properly process what they just experienced. For example: Your student is doing a great job at landings, you praise them for it, however they have small things to improve upon. You suggest trying the turn to base a little bit farther out to prevent the longer than desired landing. When it works out, you praise them again, but now you want you them to work on airspeed control and you emphasize the trim wheel. On the next approach their use of the trim and airspeed control works better and you praise them. The student is accepting the positive inputs from you on what they were doing, which bolsters their self-image...”I can do this!” They now are able to receive more information on how to time their approaches or to use the trim more effectively, because the learning environment is positive. On the other hand: Your student is doing a lousy job landing and you tell them so. “If the concrete was five feet lower that would have been a good landing!” “I think my back is broken” Negative comments don’t help the student learn and in the long run they make learning for the student more difficult. Did you learn more from the Flight Instructor that guided you, or the one that chided you?

Time & Opportunity – A well planned and effective syllabus allows time for learning.

Meaningful repetition is required to learn something well, but not to the point of boredom. Keep the training interesting, moving and tied together so the student can see the connection in all of the flight maneuvers we practice.

Element or threat – Fear of the unknown will inhibit learning. Flying is scary to many people, even pilots! Some pilots are good at everything VFR, but they are terrified of flying in the clouds. Your job as the flight instructor is to give the student confidence in knowledge. They know the airplane won’t fall out of the sky, because you are sitting next to them, but what about when they are solo? You will build the required knowledge into the student and through their sole manipulation of the flight controls they will prove to themselves that they can fly the airplane, even without your hands on the controls. Spins on the first flight would scare most students away from further flight training. If you have a spin-capable aircraft available, spin indoctrination prior to their checkride might not be a bad idea. You have described the spin process to your student numerous times, you have diagrammed it, they understand what makes it spin, but they’ve never “been there” in the flight training. Lead them into it, normal stalls, cross-controlled stalls. Be gentle on the flight controls to show them how easy it is to get an airplane spinning by mistreating the flight controls.

13

What are we talking about?

We forget the multiple meanings words have and that we did not understand the jargon when we first started either.

Taxi – a car you call to take you somewhere - so why do we taxi on the ground?

Takeoff power – get rid of it??

Slip – and fall, of paper, women’s clothing - it is a long reach to cross controlling the plane

ARC – St Louis, of the Covenant, Noah’s BOAT, part of an instrument approach

Go around – go around what?

Stall – quit – the engine quits?? Then we fall out of the sky / horses / bathrooms /

Spin – engine quits, won’t restart plane becomes uncontrollable and we all die (or maybe it is a VERY basic aerobatic maneuver)

Porpoise - Flipper? or bounce down the runway / pitch up and down in the air
Wheelbarrow – device to move dirt and “stuff” or nose wheel first down the runway

Are the students engaged with the training? Are they distracted by outside forces you don't even recognize? Is your speaking tone of voice mono-syllable and they are falling asleep? Is it beyond lunch time and you are still talking? All of these can have an effect on your ability to transfer your knowledge to the student. Pay attention to their faces, get them engaged by asking questions about the subject material. By observing human behavior, an instructor can gain the knowledge needed to better understand him or herself as an instructor as well as the learning needs of students. Understanding human behavior leads to successful communication and instruction.

14

The nature of language and the way it is used often lead to misunderstandings. These misunderstandings can be identified by four barriers to effective communication: lack of common experience, confusion between the symbol and the symbolized object, overuse of abstractions, and interference.

Lack of Common Experience

Lack of common experience between the communicator (instructor) and the receiver (student) is probably the greatest single barrier to effective communication. Communication can be effective only to the extent that the experiences (physical, mental, and emotional) of the people concerned are similar.

Many people seem to believe that words transport meanings from speaker to listener in the same way that a truck carries bricks from one location to another. Words, however, rarely carry precisely the same meaning from the mind of the instructor to the mind of the student. In fact, words, in themselves, do not transfer meanings at all. Whether spoken or written, words are merely stimuli used to arouse a response in the student.

The student's past experience with the words and things to which they refer determines how the student responds to what the instructor says. A communicator's words cannot communicate the desired meaning to another person unless the listener or reader has had some experience with the objects or concepts to which these words refer. Since it is the students' experience that forms vocabulary, it is also essential that instructors speak the same language as the students. If the instructor's terminology is necessary to convey the idea, some time needs to be spent making certain the students understand that terminology.

For example, a maintenance instructor tells a student to time the magnetos. A student new to the maintenance field might think a stopwatch or clock would be necessary to do the requested task. Instruction would be necessary for the student to understand that the procedure has nothing to do with the usual concept of time.

The English language abounds in words that mean different things to different people. To a farmer, the word “tractor” means the machine that pulls the implements to cultivate the soil; to a trucker, it is the vehicle used to pull a semi trailer; in aviation, a tractor propeller is the opposite of a pusher propeller. Each technical field has its own vocabulary. Technical words might mean something entirely different to a person outside that field, or perhaps mean nothing at all. In order for communication to be effective, the students' understanding of the meaning of the words needs to be the same as the instructor's understanding.

Confusion Between the Symbol and the Symbolized Object

Confusion between the symbol and the symbolized object results when a word is confused with what it is meant to represent. Although it is obvious that words and the connotations they carry can be different, people sometimes fail to make the distinction. An aviation maintenance technician (AMT) might be introduced as a mechanic. To many people, the term mechanic conjures up images of a person laboring over an automobile. Being referred to as an aircraft mechanic might be an improvement in some people's minds, but neither really portrays the training and skill of the AMT. Words and symbols do not always represent the same thing to every person. To communicate effectively, speakers and writers should be aware of these differences. Words and symbols can then be chosen to represent what the speaker or writer intends.

Abstractions

Abstractions are words that are general rather than specific. Concrete words or terms refer to objects people can relate directly to their own experiences. These words or terms specify an idea that can be perceived or a thing that can be visualized. Abstract words, on the other hand, stand for ideas that cannot be directly experienced, things that do not call forth mental images in the minds of the students. The word aircraft is an abstract word. It does not call to mind a specific aircraft in the imaginations of various students. One student may visualize an airplane, another student might visualize a helicopter, and still another student might visualize an airship. Although the word airplane is more specific, various students might envision anything from a Boeing 777 to a Piper Cub.

Aircraft engines represent another example of abstractions. When an instructor refers to aircraft engines in general, some students might think of jet engines, while others would think of reciprocating engines. Even reciprocating engine is too abstract since it could be a radial engine, an inline engine, a V-type engine, or an opposed type engine. Use of the technical language of engines, as in Lycoming IO-360, would narrow the engine type, but would only be understood by students who have learned the terminology particular to aircraft engines.

Abstractions should be avoided in most cases, but there are times when abstractions are necessary and useful. Aerodynamics is applicable to all aircraft and is an example of an abstraction that can lead to understanding aircraft flight characteristics. The danger of abstractions is that they do not evoke the same specific items of experience in the minds of the students that the instructor intends. When such terms are used, they should be linked with specific experiences through examples and illustrations.

Interference

Some barriers to effective communication can be controlled by the instructor. Interference, or the prevention of a process or activity from being carried out properly, is composed of factors outside the control of the instructor. These factors include physiological, environmental, and psychological interference. To communicate effectively, the instructor should consider the effects of these factors. Environmental interference is caused by external physical conditions. One example of this is the noise level found in many light aircraft. Noise not only impairs the communication process, but also can result in long-term damage to hearing. One solution to this problem is the use of headphones and an intercom system. If an intercom system is not available, a good solution is the use of earplugs. It has been shown that in addition to

protecting hearing, use of earplugs actually clarifies speaker output. Vibration is another possible example of environmental interference, applicable to rotary wing aircraft.

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Levels of Understanding:

Rote.... The step by step process or list to follow for each task

Understanding.... WHY do we do it that way?

Application.... Requires some judgment – which pieces of the task are required now and in what sequence?

Correlation.... Ties the steps together with the understanding and the judgment. For example: When shooting a power-off approach we do the before landing checklist (the steps), which includes the carb heat and mixture (Why? We want the engine to continue running in case our judgment is off on how soon to close the throttle.) The winds are blowing moderately out of the south, we are landing south, when should I turn base leg? (Sooner than you would in calm winds) (Why? the wind will slow you groundspeed when you turn final and if you don't cover the ground you will end up short of the runway.) So, I've completed the before landing checklist, I've made all my radio calls, I'm cleared to land, I've visually verified the runway is clear, I've checked the windsock, I've cleared the area for other aircraft, I'm maintaining my best glide speed, I've trimmed the aircraft to help me fly, and I think I'll turn base here because my last attempt ended up short of the runway and I had to go around. We are looking for automatic responses to learned stimuli in the student. Are they making the corrections they need to, all the while flying the aircraft to a safe landing. Correlation ties everything together that the student has been taught and learned from prior mistakes, however it still leaves the door wide-open for new stimulus and more learning.

16

It is easy to Tell the student what to do and when to do it.

Involve the student in the What, Why, How, and Understanding of each task/segment of the lesson.

Rather than lecture – guide the student into the lesson and the resulting knowledge.

Encourage questions, Try to ask for information and build on the response rather than lecture

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A student with their own agenda may be unwilling to pay attention or participate in a segment they feel is unimportant.

Sometimes the only option is another instructor or an honest open conversation with the student.

A positive, enthusiastic response is our goal !

We must teach in a way that presents Value to the student and allows them to accept what we teach

Rearrange value system: create organization, new value structure (human factors, CRM, planning)

STUDENT BUY-IN – they get the whole message, not only the physical flying skills but also the intellectual skills (ADM), the human factors

Until other influences intervene they will use what they learned – good and bad. Don't show them bad habits!

If your influence has been strong enough they may become one of the pilots who do it right, because that's how it's done

It is **their** State of Mind, and you are molding their “aviation mind.”

18

Learner Centered Grading – What is it?

The student is given the parameters, the standards. After the flight or the maneuver the student evaluates their own performance of the maneuvers. Learner centered grading (outcomes assessment) is a vital part of the FITS concept. Previous syllabi and curriculum have depended on a grading scale designed to maximize student management and ease of instructor use. Thus the traditional: “excellent, good, fair, poor” or “exceeds standards, meets standards, needs more training” often met the instructor’s needs but not the student’s. The learner centered grading is a way for the instructor and student to determine the student’s level of knowledge and understanding. “Describe” is the student explaining the maneuver in adequate detail so you, the CFI, can evaluate if they know the requirements of the maneuver. “Perform” is used to describe proficiency in a skill item such as an approach or landing. “Manage-Decide” is used to describe proficiency in the SRM area such as ADM. “Explain”, and “practice” are used to describe student learning levels below proficiency in both.

Student is involved in determining his/her progress toward the goal

This helps them understand the process and identify missing areas

This is much more meaningful than a standard grade for each lesson.

Rather than traditional Pass / Fail on a flight or lesson or a universal grade of “average” work with them to see their progress on the chart.

Explain what is expected at each level so the student understands what to expect and why it is important

At what level of understanding/performance are they now?

What steps are necessary to reach the next level?

The traditional grade of 3 for every student and every lesson is not useful. It tells the student nothing.

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Discuss what could be involved in these topics

Example: worried about stalls and emergency procedures (lack of understanding) more interesting operations – LANDINGS, cross countries

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Learn how to say I Don’t Know or I’m Not Sure – “let me check into that and get back to you”

Ever try to explain something to the student while they are back-taxing to the runway for another take-off? How much do you think they heard and remembered? Taxiing is not a good time for complex instruction. Make notes for the post-flight debrief. If critical to the next take-off or landing, consider a short explanation in the run-up area when you are parked. Avoids runway incursions too!

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Sometimes a shorter lesson yields greater results. If the student is frustrated with one maneuver, try another. Realize they might have had a bad day too! Give yourself time to recover between students. You want to give your best to each of your students every time you fly.

22

Aviation Instructor Responsibilities

The job of an aviation instructor is to teach. Earlier we reviewed how people learn, the teaching process, and teaching methods. As indicated, the learning process can be made easier by helping students learn, providing adequate instruction to meet established standards, measuring student performance against those standards, and emphasizing the positive.

Since students look to aviation instructors as authorities in their respective areas, it is important that instructors not only know how to teach, but that they project a knowledgeable and professional image. You Mr. or Ms. CFI are the key to the aviation knowledge your student will have gained in the 60-75 hours (national average) that you work with them. You are their safety advocate, they will watch you and replicate your flying techniques, even when you are not with them.

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DON'T:

1. Demand unreasonable progress
2. Forget personal hygiene (You might have to forgo the garlic on the Italian food for a while)
3. Compare them to Other Students
4. Demean the student or their progress in any way

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Pretty tough assignment. You have 60-80 hours to train this student so that they will have the necessary skills to avoid accident or incident throughout their flying career. How are you going to do that? How much "aviation" did you learn after you received your Private Pilot certificate? You will never be able to train them for every situation that they will encounter. However, the basics of stick and rudder skills, regulations, ADM, flight planning and weather interpretation will carry them along ways down the road and keep their "knowledge door" open for further learning.

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Flight instructors must provide the most comprehensive ground and flight instruction possible. They should be current and proficient in the aircraft they use for flight instruction, encouraging each pilot to learn as much as he or she can and to continually "raise the bar." Flight instructors have the responsibility of producing the safest pilots possible with the overall focus on education and learning. It is also important to convey an understanding of why pilots are trained to standards and how they are set.

Instructors should not introduce the minimum acceptable standards for passing the check ride when introducing lesson tasks. The minimum standards to pass the check ride should be introduced during the "3 hours of preparation" for the check ride. Keep the PTS in the proper perspective, with emphasis on the Practical Test Standard (PTS) increasing later in the training. Flight instructors need to provide adequate flight and ground instruction for "special emphasis" items listed in each PTS for airplane, helicopter, and light sport aircraft. The student needs to be knowledgeable in these special emphasis areas because examiners and authorized instructors place special emphasis upon areas considered critical to flight safety. Special emphasis items include, but are not limited to:

1. Positive aircraft control
2. Procedures for positive exchange of flight controls
3. Stall and spin awareness (if appropriate)
4. Collision avoidance
5. Wake turbulence and low-level wind turbulence and wind shear avoidance
6. Runway incursion avoidance
7. Controlled flight into terrain (CFIT)
8. Aeronautical decision-making (ADM)/risk management
9. Checklist usage
10. Spatial disorientation
11. Temporary flight restrictions (TFR)
12. Special use airspace (SUA)
13. Aviation security
14. Wire strike avoidance

Flight instructors should be current on the latest procedures regarding pilot training, certification, and safety. It is the flight instructor's responsibility to maintain a current library of information. These sources are listed in the appropriate PTS, and other sources can be located on the Internet at www.faa.gov and www.faasafety.gov. The FAA website provides comprehensive information to pilots and instructors. Other aviation organizations also have excellent information. However, an instructor is bound to follow any procedures in the manner prescribed by the FAA. If an instructor needs any assistance, he or she should contact a more experienced instructor, an FAA Designated Pilot Examiner (DPE), or the local Flight Standards District Office (FSDO).

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The Aviator's Model Code of Conduct presents broad guidance and recommendations for General Aviation (GA) pilots to improve airmanship, flight safety, and to sustain and improve the GA community. The Code of Conduct presents a vision of excellence in GA aviation. Its principles both complement and supplement what is merely legal. The Code of Conduct is not a "standard" and is not intended to be implemented as such.