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JIM LABRE

Know how your students learn

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Teaching flight students is a unique and rewarding experience, but it can definitely come with challenges. One of the biggest is figuring out how to teach. Teaching students to fly isn't just about jumping into the plane and going flying, hoping they absorb the methods by simply being in the aircraft. It's about knowing how to actually present your student with material in a manner that will be most understandable to him.

When someone becomes a certificated flight instructor (CFI), he is "forced" to learn about the FAA's Fundamentals of Instruction (FOI). In many cases, CFI candidates are told to "memorize this for the test" and then forget the information because they are told they won't use it afterward—and many times, we get the impression the FAA overemphasizes this area of training in testing CFI candidates.

In most cases, though, the instructor who told the CFI candi-

date that he won't need the FOI information probably has never taken the time to think about how much she uses these basics of learning psychology in her day-to-day instruction. After taking some time to evaluate it further, a CFI will find that this subject material is considerably more valuable than she initially realized—or was told.

Part of the job of working with students involves determining how best to teach the material. To do this, the instructor needs to

take the time to understand what method of learning works best for each particular student. Individual students learn differently, and the instructor must take that into account. When he identifies how his student will best learn the material, the instructor can tailor how he is going to teach so that he works most effectively and efficiently with that student.

Environmental Considerations

The environment where you teach can have a direct effect on whether or not your students will retain the information you are presenting. If you teach in an area that has a high level of background noise, it may be a distraction and hinder the student's ability to retain information. Some individuals have a greater ability to handle background noise, but some need it to be more comfortable and quiet. Again, it depends on the individual.

The time of day can be a factor, too. For the student who is trying to learn to fly while also carrying on a family life and a career outside of aviation, flying at the end of a busy workday may not be as effective. She may be tired, frustrated, or just preoccupied with other things. Find times of the day—and days of the week—that will allow the student to be most focused on the tasks at hand without distraction. Some students will be more attune to morning lessons, some to afternoons. Ask what her preference is and accommodate your schedule to work with her most favorable times for training as best you can.

Psychological Factors

Why does someone want to learn to fly? Typically it is because he has

a passion for aviation and wants to use it for travel purposes. Very few people come to flight-training operations with no motivation, yet it's different in each student, and it's the job of the instructor to understand a student's reasoning so

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you can help prod him along in his progress.

As an instructor, knowing your students' motivation to learn to fly will help you understand how to keep them moving forward, as well as how to continue to motivate them through plateaus and stoppages in their training. Help your students understand the progress they are making; if they recognize that all those baby steps they've made have begun to add up to some serious mileage, it serves as a reward mechanism and keeps them striving to continue their progress.

Be aware of your student's social obligations. There may be times when his training efforts are sidetracked by other factors in his life. Family, work, or other social obligations may stop him from being able to continue his training at times, and as much as many of us in aviation hate to admit it, most people do have lives outside of the airport. When you find a student is going to have a period of time that will take him away from his flight

training, consider giving him some basic homework to review when he has free time. This will keep him thinking about aviation until he is able to continue his training.

Learning any new skill can be frustrating, and sometimes persistence is important. For example, when a student is learning to land, there are periods of frustration when she "just can't seem to get it right." Help the student work through these frustrating times by appealing to her need to have persistence. Show her that if she continues to work at it, she will get it right. This is particularly important during periods of stress or adversity. Help the student step up to the challenge before her.

Speaking of stress, the amount that your student is under can affect her ability to learn effectively. If you find your student has arrived at a lesson and is visibly distressed, you may want to reconsider the type of lesson you're teaching that day. In cases like this, sometimes just taking the student up flying and letting her enjoy the flight will help alleviate some of the stress she is under. This is not the day to pile on new and complicated maneuvers or materials. Instead, it might be a good opportunity to take the time to brush up on some other maneuvers that are already familiar to the student or just to do a relaxing flight to a nearby airport.

When teaching, the material you are teaching must mean something to the student, which means you must find common reference points to relate the material to that student. If the information is not meaningful, the student will not recognize why it is important to learn. This leaves it up to you to not only teach the information,



but also to teach the why, the how, and the what. If you don't know the answers to these questions in relation to the material you are teaching, it is time for you to go back and study more.

Visual Versus Auditory Learners

Students may differ in how they are best able to process information—and how the information should be presented to them to allow them to most effectively learn the subject material. In a broad spectrum, people generally fall into the categories of either visual or auditory learners.

Visual learners typically learn best by visualizing information. They relate most effectively to written information, notes, diagrams, and pictures. Many will learn information better if they take notes. For these students, physically writing information down in their study process will allow them to more easily remember the subject material. When teaching these students,

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sending them home with chapters to read, presenting handouts with descriptions and diagrams, and helping them to take notes on areas of study will be most effective to teach this new information.

Auditory learners typically relate best to spoken-language teaching. An instructor will be most effective talking with these learners and verbally teaching them new informa-

tion. In many cases they will also relate well to pictures, visualizations, and auditory descriptions that an instructor gives.

Instructors who have students who fall into this category will find that they have an aversion to going home and reading chapters or memorizing detailed lists and descriptions. In contrast, however, they will typically be more able to remember details that the instructor told them during their lessons. As a result, these students will sometimes require more direct

teaching time with the instructor than those who are more comfortable reading through materials on their own.

Why Students Sometimes Forget

When we forget information, it normally falls into one of four reasons. These include repression, amnesia, decay, and interference.

Let's get the first two out of the way first: Repression and amnesia are medically or psychologically linked. Repression is typically linked to a traumatic experience that an individual has blocked out of her memory—hopefully, as an instructor, you never give a student a bad enough ride that she needs to repress the experience. Amnesia is typically related to some form of an injury. Although both are reasons why we forget information, they usually don't explain why we forget what we study or learn, and so they would rarely be experienced in a flight-training environment.

Interference relates to the fact that, many times, as an individual learns information, there are other things happening at the same time that distract her from learning properly the first time. If there are environmental distractions, the student is not able to concentrate. If there are other distracting factors present, the information she is trying to learn may not really stick for her. In this case, she will have to repeat some of the learning process.

The most common reason is decay or disuse. As time passes, it's natural to forget information, especially information that isn't used or practiced. This is best fought by reviewing and using that information. From an instructional standpoint, it's important to review information periodically, not just assume that if the student knew it once he will always remember it. Go over older material before introducing new material to refresh it in the student's mind. That will also help him feel confident in his knowledge as he proceeds to learning new things.

Presenting information in a variety of manners can also be highly important to a student's

ability to recall information. For example, the average person remembers 90 percent of what he does and sees, 70 percent of what he does, 30 percent of what he sees, 26 percent of what he hears, and 10 percent of what he reads. These numbers are important. We can see that if we sent the student home to just read the material, the likelihood of him recalling the majority of the material would be slim. However, looking at the other end of the spectrum, if we show a student a maneuver and have him complete it, the combination of doing and seeing dramatically increases his potential for recalling the information. As an instructor, try to present material to a student in as many different ways as possible. The more

senses you appeal to, the greater the chance that the information that you teach will be retained.

When teaching students, it is important to understand how they learn. Knowing what motivates them, what will allow them the best chance at recalling the information, and how to best present them the information you are trying to teach will make you a more effective instructor. It will also help the students to learn more efficiently and more quickly, and in many cases save them valuable training time and financial resources. You will gain the reputation of being an effective teacher who tailors the lesson structure to the needs of the student. And as that grows, so will your number of students.

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