TEACHING DURING FLIGHT PLANNING

Of all the teaching situations, pre-flight planning is probably the most neglected. There are several reasons for this. First, the CFI expects the student has already learned the material in ground school or self study. Also, both the student and the CFI are eager to get airborne. The schedule is usually tight, many instructors are paid only for flight time, and besides – talking is OK, but flying is FUN. The biggest problem, though, is that we simply don’t think of flight planning as an opportunity to teach. We count on formal academics and the weather briefing to provide everything students need to know. This is often a mistake. Flight planning is a perfect opportunity to teach important things we cannot cover adequately in the classroom or briefing. Since all factors are “real” the day you’re actually flying, it’s easier to emphasize the importance of each detail than in a hypothetical situation from class. Organization is the key for making the most of planning time. We have to teach students each area of operation covered by the syllabus and PTS. We can teach a few techniques for flight execution during the planning time. Once you see flight planning as an opportunity to teach, you can use this time to set up your briefing and your flight for success.

Organization: Planning to Teach

Instructors need to have a plan for teaching just like we have a flight plan, and the teaching plan comes first. It does not have to be long or detailed, but it must be targeted to specific student “knowledge needs.” The plan starts with the syllabus and gradebooks (or personal experience with the student). The syllabus will show what planning elements are essential to meet the objectives. Instructors must make sure these things happen first. Gradebooks will show unaccomplished tasks and areas students have struggled with. These are the next things to plan for.
Once you know what you want to teach, you are ready to design the flight. This should happen well before flight planning time. Too often it does not. Designing the flight means planning the sequence of events to achieve all desired learning objectives (DLO), unaccomplished tasks, and advanced techniques you want to introduce. Design the scenario and events to exercise specific planning and execution skills students need to meet the objectives. On most flights, the sequence of events is critical. First, clean up any gaps in knowledge or skill from previous flights. This is essential to ensure students have the foundation required to progress to the next step. Second, put the upcoming events in the best order to maximize the building block approach. Let each event develop skills and prepare the student for the event to follow. Accomplish any instructor demonstrations, observe, or practice items at the end of the flight. Now that you have the order of events set, determine which of these events you’ll be teaching during flight planning.

As you begin flight planning, organization is even more important. Time is short. Be ready, start & finish on time, and apply short, precise teaching at appropriate times.

Coordinate planning support in advance. If available, bring a Flight Service Weather Briefer into your teaching plan, and let him tailor the presentation to support the objectives you have provided. Time permitting, give him something to teach. As you teach specifics, keep these two priorities in mind:

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**Teaching Priorities for Flight Planning**

1. Cover syllabus requirements first: teach planning skills that apply to today’s flight.
2. Preview flying tasks she will see today, and skills she will need to accomplish them.

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**Teaching How to Plan Flights**

The first priority is to teach the students how to plan, and how to find and use flight planning information, documents and tools. Help them understand what planning factors influence flight execution and why, so they can make intelligent choices as they plan. Demonstrate planning tasks they have not seen before; otherwise, give students clear direction and get out of their way. Be available for questions and check their progress periodically, but do not pressure them or do the planning for them. Give students plenty of room to choose their own techniques and try new approaches. Teach the pros and cons of a variety of techniques rather than telling absolutely which ones are right or
wrong. Be willing to fly the plan they have chosen, so long as it is safe and will accomplish your learning and syllabus objectives. It will probably make a stronger impression by asking about a missing piece of information at a key time in-flight than it would have if you helped them get it during planning. Just remember to get the information on your own! For example: Set up a divert scenario during a cross-country flight. Is the airfield open? Were there any NOTAMS? Is the runway long enough? Is there an instrument approach? Did the student check these items during flight planning?

**Look for Teachable Moments**

As you work with your students, look for situations where you can teach with a short burst of instruction. As students are considering an approach at the destination, for example, you can help with a minute or two on the factors and trade-offs that influence this decision. Today’s weather, sun angle, lead-in features, obstacles, and aircraft systems can all fit into a short, precise teachable moment. The key is to fire off the teaching burst when students are already thinking about that topic. Offer only a few of these, teach them quickly, and get back out of the way.

These techniques will set them up for success on today’s flight, and will teach them how to plan in the future.

Quality control is your final task as you teach flight planning. Never let poor flight planning keep you from meeting training objectives. Build a checklist to help you review the planning. A few minutes should give you enough time to catch any show-stoppers and add missing information. You are not looking for minor errors or techniques, just issues that would affect safe execution and achievement of learning objectives.

**Teaching During Flight Planning**

Once planning is underway and under control, you may be able to teach a few things about execution. Keep this teaching very short, at least until all the planning is done. This kind of teaching should focus on specific tasks and flying skills the student will see that day. Teach things you would like to include in a detailed flight brief if there was time. Focus on unfamiliar tasks and how to avoid common student errors. Check your student’s gradebook for problem areas and teach to these. Plan to exercise these skills during the flight.

Don’t be afraid to use “guest speakers” to teach specific topics during flight planning. Bringing in ATC specialists to discuss advanced details is perfectly fine. Remember, you don’t have to know everything about everything. Learning
carefully coordinated expert help shows you are a thinking instructor who puts students’ needs above your own ego. Be sure let your guest help know exactly what you want them to teach, when, and for how long. Strict time limits are critical unless you are planning the day prior to a flight. Incidentally, this is a perfect opportunity to give upgrading instructors or candidates a chance to teach topics they know best. This gives them teaching experience in a small, controllable setting as well as giving students the expert help. In this sense, you are doing double duty, teaching your own students and the next generation of instructors.

Instruction is also different for skills vs. integration rides. Skills rides focus on the basic tasks of each maneuver, more-or-less in isolation from each other. During flight planning, teach about the pacing and transition between events. If you choose to teach on specific skills or tasks, focus on the few that are most difficult or unfamiliar, like lazy eight’s or a spiral to landing.

**Don’t Waste a Great Opportunity – Teach During Flight Planning**

Even though there is much to do during planning time, you can still make room for teaching. Start with a teaching plan, provide bite-sized instruction, and keep your teaching focused on tasks and skills that directly relate to the flight. Choose topics that will reinforce important knowledge, and pre-brief the most difficult or unfamiliar flight events. The techniques covered here will work for virtually any teaching opportunity that happens before a flight. Keep these things in mind as you work with your students prior to a flight, or even afterward. Don’t overlook this teaching opportunity. Use it to make your flight time more effective.