

I.A. Human Behavior and Effective Communication

Objectives	The student should develop knowledge of the elements related to human behavior and effective communication as required in the CFI PTS.
Elements	<ul style="list-style-type: none">✦ Definitions of human behavior✦ Human needs and motivation✦ Defense mechanisms✦ Student emotional reactions✦ Basic elements of communication✦ Barriers to effective communication
Schedule	<ol style="list-style-type: none">1. Discuss objectives2. Review material3. Development4. Conclusion
Equipment	<ul style="list-style-type: none">✦ White board✦ Markers✦ References
Instructor's Actions	<ol style="list-style-type: none">1. Discuss lesson objectives2. Present lecture3. Questions4. Homework
Student's Actions	Participate in discussion Take notes
Completion Standards	Understand the three basic elements of the communication process Recognize barriers to communication Develop communication skills to convey desired information to the students

References

FAA-H-8083-9, *Aviation Instructor's Handbook* (Chapter 1, Chapter 3)

Instructor Notes

Introduction

Overview—review objectives and elements
Why—learning is a change of behavior as a result of experience.
Knowing why people act the way they do is essential to bring about this change. Understanding human behavior leads to successful instruction.

Definitions of human behavior

Study of human behavior—an attempt to explain how and why humans function the way they do.
Product of innate human nature and individual experience/environment.

Life course of humans—as individual matures, mode of action moves from dependency to self-direction. Student’s age impacts curriculum design.

Observe human behavior to understand learning needs of students.

Personality types

Seemingly random variation in human behavior is orderly and consistent. Myers Briggs Type Indicator (MBTI) distills human behavior into 16 distinct personality types.

Instructor and student relationship

Work with personality type, not against it.
Match/mismatch between the way an instructor teaches and the way a student learns contributes to student satisfaction/dissatisfaction.
Understand your teaching style and adapt to fit student’s learning.

Human needs and motivation

Human needs: things all humans require for normal growth and development.

Murray described needs as primary (based on biological needs) or secondary (generally psychological).

Maslow broke down further—some needs take precedence over others.

Hierarchy of human needs: organization of human needs into levels of importance. Needs satisfied in order of importance—once a need is satisfied, it no longer provides motivation, person strives to satisfy needs of next higher level.

Physiological

Biological needs: need for air, food, water, human body maintenance.
Unless biological needs are met, student cannot concentrate fully on learning.

Security

Keeping oneself from harm—all humans have a need to feel safe.

	<p>Stress flight safety during training to mitigate feelings of insecurity.</p>
Belonging	<p>Social need to give and receive love, affection, and the sense of belonging. Students out of normal surroundings during training—need for belonging more pronounced. Help students feel at ease and reinforce their decision to pursue aviation.</p>
Esteem	<p>Need for stable, firmly based, high level of self-respect and respect from others. Get esteem internally and externally. Internally/relating to self-esteem: confidence, independence, achievement, competence, knowledge. Externally/relating to reputation: status, recognition, appreciation, and respect of associates.</p>
Cognitive and aesthetic	<p>Cognitive: need to know and understand (understand what’s going on around them—take control of the situation or make informed choices about next steps.) Aesthetic: emotional needs; connects with human emotions.</p>
Self-actualization	<p>All other needs must be satisfied first. Person’s need to be/do what they were “born to do” and achieve potential. Self-actualized people are problem-focused, appreciate life, are concerned about personal growth, and have peak experiences.</p>
Defense mechanisms	<p>Biological or psychological. Unconscious mental process to protect oneself from anxiety, unpleasant emotions, or to provide a refuge from a situation with which one cannot deal. Soften feelings of failure, alleviate feelings of guilt, help an individual cope with reality, and protect one’s self-image. Appear unconsciously. Tend to distort, transform, or otherwise falsify reality.</p>
Repression	<p>Placing uncomfortable thoughts into inaccessible areas of the unconscious mind; pushed away to be dealt with later or hopefully never. Memories may reappear in dreams or slips of the tongue.</p>
Denial	<p>Refusal to accept a reality because it is too threatening. Form of repression: stressful thoughts are banned from memory. Related to minimization (accepting what happened but in diluted form).</p>
Compensation	<p>Counterbalancing perceived weaknesses by emphasizing strength in other areas—disguise the presence of a weak/undesirable quality by emphasizing a more positive one.</p>

Projection	Places unacceptable impulses onto someone else, relegates blame for own shortcomings, mistakes, and impulses to others
Rationalization	Subconscious technique for justifying actions that would otherwise be unacceptable. Students cannot accept the real reasons for their behavior and substitute excuses for reasons. True rationalization—individuals sincerely believe in their excuses.
Reaction formation	Fakes belief opposite to true belief, because the true belief causes anxiety. Protect themselves from dangerous desires by developing opposite behavior patterns.
Fantasy	Daydreaming about how things should be rather than doing anything about how things are. Using imagination to escape from reality into a fictitious world.
Displacement	Unconscious shift of emotion, affect, or desire from the original object to a more acceptable, less threatening substitute.
Student emotional reactions	Learn how to analyze student behavior before and during each flight lesson. Then develop and use appropriate techniques for instruction.
Anxiety	Most significant psychological factor affecting flight instruction. Feeling of worry, nervousness, or unease about something with uncertain outcome. Results from fear of anything threatening student, real or imagined. Affects ability to learn from perceptions. Countered by reinforcing enjoyment of flying and teaching student to cope with fears. Treat fears as normal reaction instead of ignoring them. Introduce maneuvers with care—students should know what to expect and what their reactions should be. Minimize student anxiety by emphasizing the benefits and pleasurable experiences that can be derived from flying, rather than continuously citing the unhappy consequences of faulty performances.
Normal reactions to stress	Think rationally, respond rapidly and exactly, within limits of experience and training, sensitive to all aspects of surroundings. Automatic responses—proper training in emergency ops.

Abnormal reactions to stress

Response may be completely absent or inadequate—random or illogical, or they may do more than is called for by the situation. Inappropriate reactions, such as extreme over-cooperation, painstaking self-control, inappropriate laughter or singing, and very rapid changes in emotion. Marked changes in mood on different lessons. Severe anger directed to CFI or others.

Flight instructor actions regarding seriously abnormal students

Refrain from instructing student suffering from serious psychological abnormalities. Assure the student does not continue flight training or become certificated as a pilot. Have student fly with another instructor (one not acquainted with student) in an evaluation flight. Then confer with instructor to agree whether further investigation is justified. Withhold endorsements and recommendations for solo flight ops or practical tests. Can discuss with FSDO or AME.

Teaching the adult student

Average aviation student age ~30 years old. Learning is a means to an end, not an end in itself. Adults are ready to learn when assuming new roles, are autonomous and self-directed, need independence. Goal and relevancy oriented, practical, want to solve problems and apply new knowledge immediately. Need to be shown respect and increase/maintain sense of self-esteem. To help adults learn, provide a training syllabus, help them integrate new ideas with what they already know, clarify expectations, recognize student's need to control pace, use SBT to take advantage of independence, refrain from "spoon-feeding."

Basic elements of communication

Communication takes place when one person transmits ideas/feelings to another. **Effectiveness** of communication measured by similarity between idea transmitted and idea received. Three elements of communication process: **source**, **symbols**, **receiver**.

Source

Sender, speaker, writer, encoder, transmitter, instructor. Effectiveness related to three factors:
✦ Ability to select and use language.
✦ Reveals attitudes toward themselves as communicator, toward ideas being communicated, and toward the receivers.
✦ Accurate, up-to-date, and stimulating material. Strive to have the most current and interesting information possible.

Symbols

Simple oral and visual codes (words in the vocabulary, common gestures and facial expressions).

Ideas communicated when symbols are combined in meaningful wholes (ideas, sentences, paragraphs, etc.)

Symbols perceived through one of three sensory channels:

- ✦ Visual
- ✦ Auditory
- ✦ Kinesthetic

Use a variety of channels for more success in gaining/retaining attention.

Determine parts more suited to starting/ending and those best for explaining/clarifying/emphasizing. Determine which medium is best suited for transmission.

Monitor feedback to modify symbols as required.

Students need feedback—inform of performance, serve as motivation.

Praise: builds student's self-confidence, reinforces favorable behavior.

Negative feedback: use carefully, only in private, non-judgmental.

Receiver

Listener, reader, decoder, student—individual to whom the message is directed.

Effective communication has taken place when the receiver reacts with understanding and changes behavior accordingly.

Receiver characteristics: abilities, attitudes, experiences.

- ✦ Students come with a wide variety of abilities.

Differences in age, gender, cultural background, and education. Be aware of possible differences, but don't overdo it or make assumptions.

Aviation student exhibits more developed sense of motivation and self-concept.

- ✦ The attitudes students exhibit may indicate resistance, willingness, or passive neutrality.

Varied communicative approach works best in reaching most students.

- ✦ Experience, background, and education level will determine the instructor's approach.

Student's knowledge, abilities, and attitudes guide instructor in communicating.

Barriers to effective communication

Nature of language leads to misunderstandings.

Misunderstandings identified by four barriers to effective communication.

Lack of common experience, confusion between symbol and symbolized object, overuse of abstractions, interference.

Lack of common experience	<p>Greatest single barrier to effective communication.</p> <p>Words rarely cover precisely the same meaning from instructor's mind to student's mind. Communicator's words cannot communicate the desired meaning unless the receiver has some experience with the objects/concepts the words refer to.</p> <p>Speak the same language—make sure the student understands the terminology.</p>
Confusion between the symbol and the symbolized object	<p>Confusion results when a word is confused with what it is meant to represent. Words and connotations they carry can be different.</p> <p>Words and symbols do not always represent the same thing to everyone, be aware of differences and make sure associations are clear.</p>
Overuse of abstractions	<p>Abstractions: words that are general rather than specific.</p> <p>Concrete words/terms refer to objects people can relate directly to their own experience.</p> <p>Abstract words stand for ideas that cannot be directly experienced, things that do not call forth mental images in the minds of the students.</p> <p>Avoid in most cases—they do not evoke the same specific items in student's mind that instructor intends.</p>
Interference	<p>Physiological: any biological problem that may inhibit symbol reception (hearing loss, illness, ...).</p> <p>Environmental: caused by external physical conditions (noise).</p> <p>Psychological: product of how the instructor and student feel at the time. If either is not committed to process, or if there is fear/mistrust, communication is impaired.</p>
Developing communication skills	<p>Must be developed.</p> <p>Do not occur automatically.</p>
Role playing	<p>Practice instructing to develop communication skills and techniques.</p> <p>Learn to think in terms of SBT.</p>
Instructional communication	<p>Instruction has taken place when the instructor has explained a particular procedure and determined that the desired student response has occurred.</p> <p>Know the topic well; do not be afraid to use examples of past experiences to illustrate particular points.</p> <p>Determine the level of understanding by some sort of evaluation.</p>
Listening	<p>Be a good listener to become better acquainted with students.</p>

Questioning

Teaching students how to listen will improve information transfer.
Pilot must be ready to listen and be responsible for listening.
Listen to understand rather than refute—if certain areas arouse emotion, be aware and take extra measures to listen.
Listen for the main ideas; don't daydream; take notes.

Good questioning can determine how well a student understands.
Ask open-ended and focused questions. Open ended allows student to explain more fully; focused allows the instructor to concentrate on desired areas.
Paraphrasing and perception checking can confirm understanding.
Perception checking: state instructor's perceptions of student behavior; student can clarify as necessary

Instructional enhancement

The deeper the knowledge about an area, the better the instructor will be at conveying it.

Conclusion

Brief review of main points.

At the end of the lesson, find something positive to send the student on their way with a positive attitude. Human behavior affects learning, and human needs must be met before students can learn. Be mindful of defense mechanisms and observe the students. With communication, understanding starts with the communicator.

CFI PTS

Objective: To determine that the applicant exhibits instructional knowledge of human behavior and effective communication and how these impact effective learning by describing:

1. Definitions of human behavior.
2. Human needs and motivation.
3. Defense mechanisms.
4. Student emotional reactions.
5. Basic elements of communication.
6. Barriers to effective communication.
7. Developing communication skills.

To add – Theory X and Y

Personality is important

Self-defense mechanisms are realistic

To a student, the CFI is Chuck Yeager

Find SOMETHING to send them on their way with a positive attitude