

A. TASK**THE LEARNING PROCESS****OBJECTIVE**

To determine that the applicant exhibits instructional knowledge of the elements of the learning process.

KEY ELEMENTS

- The definition and characteristics of learning.
- Practical application of the laws of learning.
- Factors involved in how people learn.
- Recognition and proper use of the various levels of learning.
- Principles that are applied in learning a skill.
- Factors of forgetting and retention.
- How the transfer of learning affects the learning process.
- How the formation of habit patterns affects the learning process.

SCHEDULE

- Discuss objectives
- Review material
- Development
- Conclusion

EQUIPMENT

- FAR/AIM
- FOI handbool
- References
 - AC 60-14

INSTRUCTOR ACTIONS

- Discuss lesson objectives
- Present lecture
- Questions
- Homework

STUDENT ACTIONS

- Participate in discussion
- Take notes

COMPLETION STANDARDS

- Participate in discussion
- Take notes

A. TASK**THE LEARNING PROCESS****DEFINITION OF
LEARNING**

Learning is a change in behavior as a result of experience.

**CHARACTERISTICS
OF LEARNING**

- Learning is **PURPOSEFUL**:
Each student is a unique individual whose past experience affects readiness to learn and understanding of the requirements involved.
- Learning is **A RESULT OF EXPERIENCE**:
learning is an individual process from individual experience.
Knowledge cannot be poured into the students head
- Learning is **MULTIFACETED**:
This may involve verbal, conceptual, perceptual, or emotional elements, and elements of problem-solving all taking place at once.
- Learning is **AN ACTIVE PROCESS**:
For students to learn, they must react and respond.

**LAWS OF
LEARNING**

Laws of Learning are rules and principals that apply generally to the learning process. The first three are basic; the last three are result of experimental studies.

Readiness	Learn best when READY to learn (motivation/purpose/clear objective)
Exercise	Things most often repeated are best remembered. Basis of practice and drill.
Effect	Learning is strengthened when accompanied by a pleasant or satisfying feeling, and weakened with negativity
Primacy	Whats taught initially will be most impressionable
Intensity	A vivid, dramatic or exciting experience teaches more than boring routine
Recency	The thing most recently learned is best remembered

**LEARNING
FACTORS****HOW DO PEOPLE LEARN?**

- PERCEPTION** learning comes from perception directed to the brain by one or more of the 5 senses
- INSIGHT** The grouping of perceptions into meaningful wholes
- MOTIVATION** The most dominant force governing the students' progress and ability to learn.

A. TASK**THE LEARNING PROCESS****FOUR LAWS OF
LEARNING****PRINCIPALS
USED IN
LEARNING A
SKILL
(HOW PEOPLE LEARN)**

		(Examples)
Rote	Ability to repeat back what's been taught, without understanding or being able to apply what was learned.	Memorizing a definition, but unable to perform or explain it on your own.
Understanding	Perceiving and learning what's been taught	Can teach back definition
Application	Achieving the skill to apply what has been learned and to perform correctly	Performing definition
Correlation	Associating what has been learned with other	Using definition as a building block to learning another topic

Physical desire involves more than muscles

perception change as physical skill becomes easier.

Desire to learn

shorter learning time and more rapid progress takes place when a desire to learn exists.

Patterns to follow

best way to prepare a student is to provide a clear step by step example

Perform the skill

students need coordination between muscles/visual/tactile senses

Knowledge of results

important for student to be aware of their progress

Progress follows a pattern

learning a skill usually follows a pattern; there's rapid improvement in early stages followed by a learning plateau

Duration and organization of the lesson

in planning for student performance, length of time devoted to practice is very important

Evaluation versus critique

in early stages, practical suggestions are more valuable than a grade

Application of skill

students must use what has been learned, they must do the skill so well that it becomes easy to perform

PRACTICE MAKES PERMANENT. PERFECT PRACTICE MAKES PERFECT

A. TASK**THE LEARNING PROCESS****FACTORS IN FORGETTING****WHY STUDENTS FORGET****(Examples)**

- **DISUSE**
 - A person forgets things that are not used
- **INTERFERENCE**
 - A certain experience has overshadowed it, or the learning of something similar has interfered.
- **REPRESSION**
 - The submersion of ideas into the unconscious mind, the may unintentionally repress unpleasant material or that which produces anxiety.

Havent performed a high-wind landing in a while due to calm conditions

Recently performed a high wind landing so the next landing was more abrupt and harder than it needed to be

Recently forced to perform a high wind landing when unprepared resulting in a fear of landings in general

FACTORS IN RETENTION**HOW TO HELP STUDENT RETAIN WHATS BEEN LEARNED****(Examples)**

- **PRAISE** stimulates remembering
- **RECALL** is prompted by association
- **FAVORABLE ATTITUDES AID IN RETENTION** people only learn and remember what they wish to know.
- **LEARN WITH ALL OF OUR SENSES IS MOST EFFECTIVE** the best perception results from all senses working together
- **MEANINGFUL REPETITION AIDS RECALL**

Congratulate the student after performing a safe launch

Have student recite back key points from launching checklist

Ask the student what their most and least favorite part of the launch was and why.

Discuss what senses the student used during the launch and how it helped them perform (smell for leaks, feel the fire from the burner, look for tears etc)

Discuss how the student can strengthen their standard operating procedures for the next launch

A. TASK**THE LEARNING PROCESS****TRANSFER OF
LEARNING****THE TRANSFER OF LEARNING AND HOW IT EFFECTS THE
LEARNING PROCESS**

Degree of transfer involved in all learning since all learning is based on prior learned experience. People interpret new things in terms of what they already know.

Positive transfer - learning of skill A helps to learn skill B

Negative transfer - learning of skill A hinders the learning of skill B

To achieve positive transfer...

- Plan for transfer as a primary objective.
- Plan to transfer as a primary objective
- Ensure the student understands that what they are learning can be applied in other situations.
- Maintain high-order learning standards.
- Provide meaningful learning experiences that will build confidence in the ability to transfer learning.
- Use material that helps form valid concepts and generalizations by making relationships clear.

HABIT PATTERNS**HOW THE FORMATION OF HABIT PATTERNS EFFECT THE
LEARNING PROCESS**

The formation of correct habit patterns from the beginning of any learning process is essential to further learning and for correct performance after the completion of training. Remember, primacy is one of the fundamental principles of learning. Therefore, it is their instructors responsibility to insist on correct techniques and procedures from the outside of training to provide proper habit patterns. It is much easier to foster proper habits from the beginning of training than to correct faulty ones later.

A. **TASK****THE LEARNING PROCESS
VISUAL AIDS**

<p style="text-align: center;">Characteristics of Learning</p> <p style="text-align: center;"><u>PEMA</u></p> <p style="text-align: center;"> Purposeful Experience Multifaceted Active Process </p>	<p style="text-align: center;">Laws of Learning</p> <p style="text-align: center;"><u>REEPIR</u></p> <p style="text-align: center;"> Readiness Exercise Effect Primacy Intensity Recency </p>
<p style="text-align: center;">How People Learn</p> <p style="text-align: center;"><u>PIM</u></p> <p style="text-align: center;"> Perception Insight Motivation </p>	<p style="text-align: center;">Four levels of learning</p> <p style="text-align: center;"><u>RUAC</u></p> <p style="text-align: center;"> Rote Understanding Application Correlation </p>
<p style="text-align: center;">Principles utilized in learning a skill</p> <p> Perceptions change as the skill gets easier Give step-by-step examples A desire to learn aids learning Coordination between visual and tactile Students must know how well they're doing Progress plateaus Keep duration of lessons proper length Evaluate, don't criticize Apply/practice the skill </p>	<p style="text-align: center;">Forgetting</p> <p style="text-align: center;"><u>RID</u></p> <p style="text-align: center;"> Repression Interference Disuse </p>