

ADVANCED INSTRUCTIONAL TECHNIQUES

Part IV

Dual Channel Learning

Domains of Learning

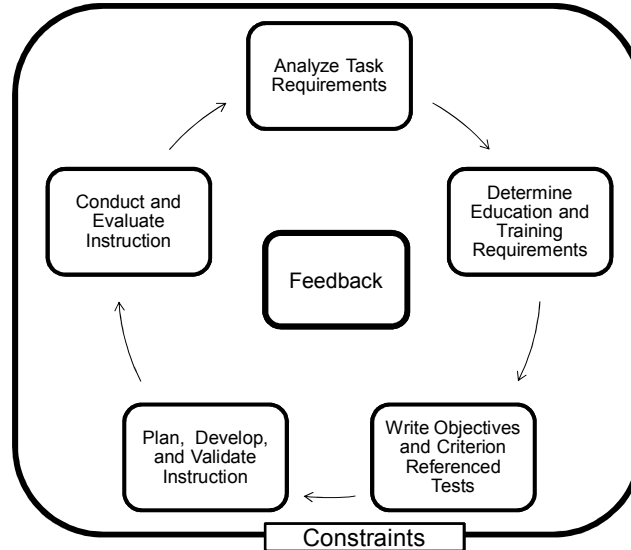
and Evaluation

Edward N. Ryan Jr. CET

Class Objectives (Part 4)

- ▣ Dual Channel learning, Domains of learning and Evaluation
- ▣ Upon completion of training students will be able to:
 - State the three domains of learning
 - State the three types of learning
 - Select the level of learning based on the ISD step 1&2
 - Select the correct test instrument for the type of learning
 - Select the correct test instrument for the level of learning
 - Discuss the concept of Dual Channel learning

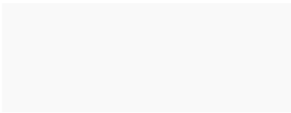
ISD The Five Step Process



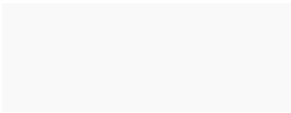
Domains of Learning

- ▣ Cognitive Domain-What We Know
 - Black and White, Facts, Procedures
 - Illustrations only to support objectives
- ▣ Affective Domain-How We Feel
 - Colors, Pictures, Sound, Touch, Smell, Motion
 - Descriptive Language, Emotions
- ▣ Psychomotor Domain
 - Physical Skills, Hand Eye Coordination
 - Endurance, Classic Conditioning, Instrumental Conditioning

Domains of Learning

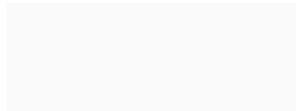
- ▣ Cognitive Domain – Often associated with Operant (Instrumental) Conditioning – the modification of voluntary behavior
 - ▣ The Law of Affect – Reinforcement and Punishment
 - ▣ General Stimulus – Sight and Sound
 - ▣ Herzberg's motivation-hygiene theory
- 

Domains of Learning

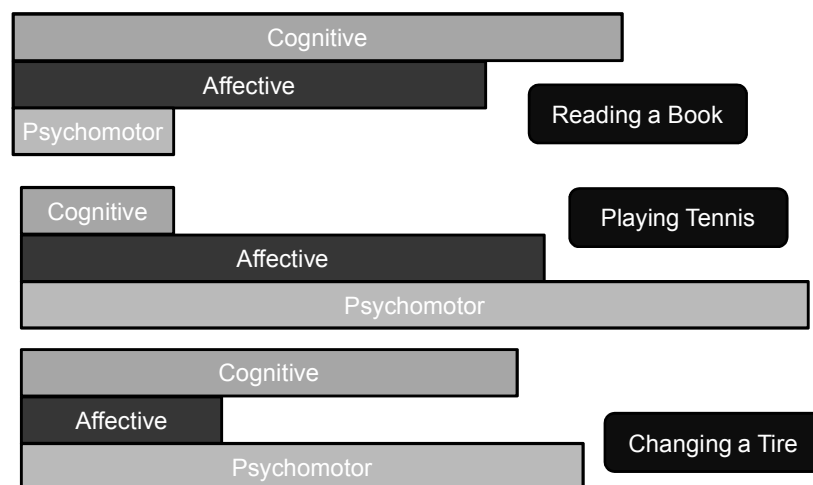
- ▣ Affective Domain – Usually associated with Classical (Reflexive) Conditioning preceded by Antecedent Conditions – Not maintained by Consequences
 - ▣ Law of Intensity – Vivid learning experience
 - ▣ General stimulus – Sight (Colors and Motion), Sound, Touch, Taste, Smell
- 

Domains of Learning

- ▣ Psychomotor Domain – May be associated with Classical (Reflexive) Conditioning and Operant (Instrumental) Conditioning – the modification of voluntary behavior
- ▣ Law of Intensity – Law of Exercise – Law of Affect
- ▣ General stimulus – Sight (Colors and Motion), Sound, Touch, Taste, Smell



Active Domains




Types of Learning Dual Channel

- ▣ Subject Knowledge – Channel 1
 - General background information
 - Regulatory information
 - General concepts and procedures
- ▣ Task Knowledge – Channel 2
 - Specific procedures
 - Technical information
- ▣ Task Performance – Channel 2
 - Observable
 - Physical skills





Task – Vehicle Operation w/ No Previous Training

Subject Knowledge

OFFICIAL HANDBOOK
**2012
Florida Driver's
Handbook**



The shape of a road sign can tell you as much about the sign's message as its color.

● Octagon: Exclusively for stop signs.		Octagon: Stop Stop Signs are always octagonal (8 sided). A stop sign means that you must bring your vehicle to a complete halt at the marked stop line. If there is no marked stop line, stop before entering the crosswalk on the near side of the intersection. If there is no crosswalk, stop at a point nearest the intersecting roadway where you have a clear view of approaching traffic on the intersecting roadway before entering the intersection.
▭ Horizontal Rectangle: Generally for guide signs.		A 4-Way Stop Sign means that there are four stop signs at this intersection. Traffic from all four directions must stop. The first vehicle to reach the intersection should move forward first. If two vehicles reach the intersection at the same time, the driver on the left yields to the driver on the right.
▲ Triangle: Exclusively for yield signs.		Triangle: Yield Slow down and give vehicles crossing your path the right-of-way. If the way is clear, you may move forward slowly without stopping. Yield signs are usually placed where auxiliary roads lead into major roads.
▶ Pennant: Advance warning of no passing zones.		Pennant: No Passing You are entering a no passing zone. This sign is placed on the left side of the road, facing the driver.
◇ Diamond: Exclusively to warn of existing or possible hazards on roadways or adjacent areas.		Diamond: Warning Narrow bridge. These signs warn you of special conditions or dangers ahead. Words or symbols on the sign will show why you need to use caution.
▭ Vertical Rectangle: Generally for regulatory signs.		
▲ Pentagon: School advance and school crossing signs.		
● Round: Railroad advance warning signs.		
✕ Crossbuck: Railroad crossing.		

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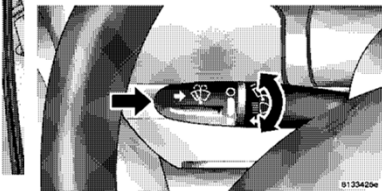
Task – Vehicle Operation w/ No Previous Training

Task Knowledge

THINGS TO KNOW BEFORE STARTING YOUR VEHICLE 49

3. UNDERSTANDING THE FEATURES OF YOUR VEHICLE 127

156 UNDERSTANDING THE FEATURES OF YOUR VEHICLE



Windshield Wiper/Washer Control

NO To use the washer, press the end of the multifunction
befc lever in when spray is desired, the washers will spray for
4. I a maximum of 20 seconds or until the lever is released. If
the another washer cycle is desired the end of the lever must
be pressed again to get another 20 second washer cycle. If
the lever is depressed while in the delay range, the
wipers will operate for several seconds after the lever is
released, and then resume the intermittent interval pre-
viously selected.

If the end of the lever is depressed while in the OFF
position, the wipers will operate for approximately two
wipe cycles, then turn OFF.

WARNING!

Sudden loss of visibility through the windshield
could lead to an accident. You might not see other
vehicles or other obstacles. To avoid sudden icing of
the windshield during freezing weather, warm the
windshield with defroster before and during wind-
shield washer use.

Task – Vehicle Operation w/ No Previous Training

Task Performance

Driving Test

•You must provide a vehicle for the driving test. If you do not have a valid license, you must be accompanied by a licensed driver. An interpreter can be used during the driving test. No other passengers are permitted. You are expected to perform the following maneuvers on the driving test:

•Turn About-

(Three Point Turn)

Turn your car around in a 30' to 40' space.

•Shift Gears -

Change gears smoothly and correctly (if your car has a manual shift transmission).

•Approach of Crossing -

Get in the proper lane and look in each direction. Change gears smoothly and correctly (if your car has a manual shift transmission).

•Observe Right-of-Way -

Allow pedestrians to cross, pull over and stop for emergency vehicles and do not enter an intersection where you will interfere with other traffic.

Levels of Training

	SCALE VALUE	DEFINITION: <i>THE INDIVIDUAL</i>
SUBJECT KNOWLEDGE LEVELS	A.	can identify basic facts and terms about the subject. (Facts)
	B.	can identify relationship about basic facts and state general principles about the subject. (Principles)
	C.	can analyze facts and principles and draw conclusions about the subject. (Analysis)
	D.	can evaluate conditions and make proper decisions about the subject. (Evaluation)

Levels of Training

	SCALE VALUE	DEFINITION: <i>THE INDIVIDUAL</i>
TASK KNOWLEDGE LEVELS	a.	can name parts tools and simple facts about the task. (Nomenclature)
	b.	can determine a step by step procedure for doing the task. (Procedures)
	c.	can identify why and when each step must be done, and why each step is needed. (Operating Principles)
	d.	can predict, isolate and resolve problems about the task. (Advanced Theory)

Levels of Training

	SCALE VALUE	DEFINITION: <i>THE INDIVIDUAL</i>
TASK	1.	can do simple parts of the task. Must be shown or told how to do most of the task. (Extremely Limited)
PERFORMANCE	2.	can do most parts of the task. Needs help only with the hardest parts. (Partially Proficient)
LEVELS	3.	can do all parts of the task. Needs only a spot check of the completed work. (Competent / Proficient)
	4.	can do the complete task quickly and accurately. Can tell and show others how to do the task. (Highly Proficient)

Task – Vehicle Operation w/ No Previous Training

- ☐ Subject Knowledge - **B**
 - General background information
 - Regulatory information
 - General concepts and procedures
- ☐ Task Knowledge - **b**
 - Specific procedures
 - Technical information
- ☐ Task Performance - **2**
 - Observable
 - Physical skills

Unit 6 Training Evaluation

- ▣ Select the correct evaluation method for the level of training required.
- ▣ Construct a multiple choice question
- ▣ Construct a short essay question
- ▣ Construct a performance checklist

Training Evaluation

- ▣ Normally accomplished during step 3 of the ISD process.
- ▣ Based on the Objectives
- ▣ Shows student has attained the learning objective.
- ▣ Demonstrates personal growth to the student.
- ▣ Provides feedback to step 1 of the ISD process.

Evaluation and Measurement

- ▣ Specific to the type of learning
 - Psychomotor domain = Observation / performance checklists
 - Affective domain = Observation / Written or Verbal Tests
 - Cognitive = Tests (written / verbal)
 - ▣ Written:
 - True False
 - Matching
 - Multiple Choice
 - Fill in the Blank
 - Short Essay



Evaluation and Measurement

- ▣ Cognitive = Tests (written / verbal)
 - Verbal:
 - Direct
 - Recital
 - Verbal Drill
 - Student Presentation



Evaluation and Measurement

- ▣ Problem Solving
- ▣ All domains of learning
- ▣ Most time consuming to administer
- ▣ Most difficult to develop
- ▣ Must evaluate the solution as well as the method or path

Practical Application

1910.146(g) Training. (Permit Required Confined Space)

1910.146(g)(1)

The employer shall provide training so that all employees whose work is regulated by this section acquire the understanding, knowledge, and skills necessary for the safe performance of the duties assigned under this section.

1910.146(g)(3)

The training shall establish employee proficiency in the duties required by this section and shall introduce new or revised procedures, as necessary, for compliance with this section.

Practical Application

1910.146(g)(4)

The employer shall certify that the training required by paragraphs (g)(1) through (g)(3) of this section has been accomplished. The certification shall contain each employee's name, the signatures or initials of the trainers, and the dates of training. The certification shall be available for inspection by employees and their authorized representatives.

What is a Certification?

Formal procedure by which an accredited or authorized person or agency assesses and verifies (and attests in writing by issuing a certificate) the attributes, characteristics, quality, qualification, or status of individuals or organizations, goods or services, procedures or processes, or events or situations, in accordance with established requirements or standards.

- ▣ ***A testament usually in writing by a person or agency of authority, as to fact, state, or truth. Often it is an indicator of future performance.***

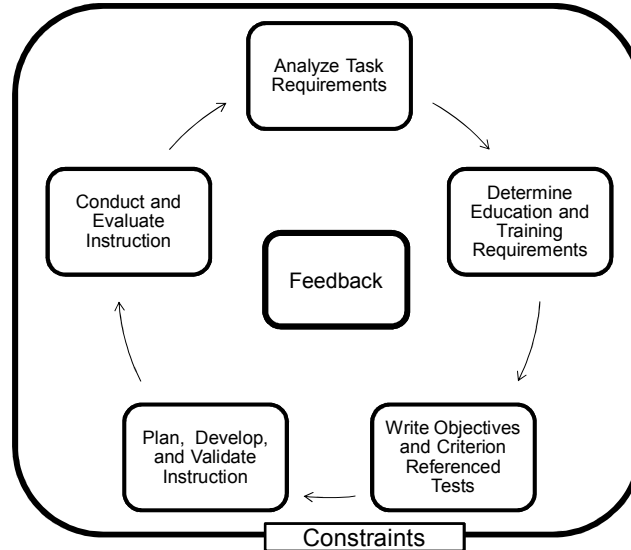
Parts of a Personal Certification

- ▣ Identification, description and scope
- ▣ Documentary evidence of education and training
- ▣ Documentary evidence of performance
- ▣ Time – Date of the certification and effective duration
- ▣ The statement of certification including authorized signatures

Summary

- ▣ You are the tour guide
- ▣ Determine the need
- ▣ Use the ISD process
- ▣ Do the objectives
- ▣ Criterion referenced tests
- ▣ 8 steps to planning
- ▣ Evaluate the training

ISD The Five Step Process



The Legal Ease

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