

TEACHING FUNDAMENTALS

INSTRUCTIONS & GUIDELINES

Welcome Instructor Candidate!

This is the online site for Teaching Fundamentals (TF), which is part of your homework assignment for the instructor course. The purpose of Teaching Fundamentals is to help you improve your teaching and management skills to become a more effective instructor and create the best learning experience for your students.

There are six modules to the online Teaching Fundamentals:

1. How People Learn 4. Teaching Strategies & Techniques

2. Psychology of Learning 5. Teaching Motor Skills

3. Communication 6. Leadership

You should complete modules 1-5 in sequence before going onto module 6.

At the end of each module, there is a Self-Assessment & Review section which reinforces the module's learning objectives and provides you with an opportunity to assess your understanding of the material.

The information in the modules are based on a number of educational theories which relate to skills-based learning, but the primary focus is on developing teaching strategies and techniques to help you become a more effective instructor. Psychologists and educators have studied and theorized about how people learn, and have developed (and continue to develop) an array of educational theories which can be divided into three main categories: behaviorism, cognitivism, and constructivism. None of these theories are exclusive, and many of them are intertwined in the text. If you would like to probe deeper into educational theories and how people learn, here are some suggested search words to use with your Internet search engine: learning theory, how people learn, behaviorism, cognitivism, constructivism, and Bloom's Taxonomy.

We wish you great success in your instructor course!

1 - HOW PEOPLE LEARN

Read the Instructions & Guidelines module before beginning this module.

OBJECTIVES

After reading this module, you should be able to:

- Define Sensory Input.
- Identify your own learning style and describe how it may affect your teaching style.
- Describe the 3 different types of learning styles: visual, auditory, and kinesthetic.
- Define Multiple Pathways/Multi-Sensory teaching.
- List at least 5 different teaching techniques for each learning style: visual, auditory, and kinesthetic.
- Identify your hemispheric preference and determine if you are: left brain, right brain, or whole brain.

Everybody's Different

No two students are exactly the same. Each brings a unique combination of background information, skills, hopes, fears, motives, and native talent. To some, boat handling seems to come naturally; to others it is mysterious and confusing. Some easily grasp concepts but falter with hands-on skills. Others are agile and dexterous but struggle with theory and concepts. The unique mixture of attributes each student possesses presents a unique challenge to an instructor.

Left to their own devices, new untrained instructors are often inclined to teach the way they learned it themselves. They reason that "If it worked for me, it will work for you too."

Unfortunately, the "good for me/good for you" method often achieves only limited success. It appeals to the instructor's personal learning style but not necessarily to that of every student. As a result, some students learn quickly; others do not. A novice instructor, who is not familiar with the differences in the way people learn, may unfairly blame the student.

If a student does not learn, it's a signal that the teaching is ineffective. All willing students have the capacity to learn. It is the instructor's job to determine how to best reach each individual and get the job done. The instructor succeeds only when the student does.

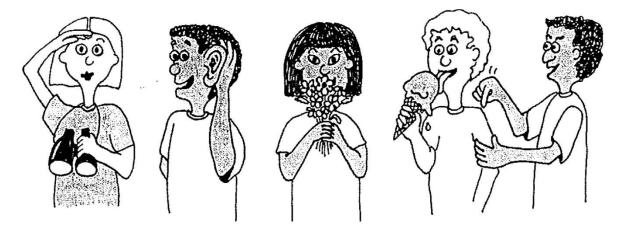
Veteran instructors can attest that a teaching technique which works well for one student may not necessarily work at all for another. If all people learned the same way, teaching would be a simple matter. But people are different.

Among their personal differences is the way people perceive, store, process, and recall information. The following section explores some key elements of how people learn and how different people learn differently.

Highlights Summary:

- Different people learn differently, including instructors.
- Teaching methods which once helped you learn may not be effective for all your students.
- If a student does not learn, the teaching is ineffective.
- An instructor succeeds only when the student does.

Because learning is the goal of teaching, an instructor should be familiar with the learning process. Learning begins with sensory input. Sensory input is the "raw data" taken in through the five senses: seeing, hearing, smelling, tasting and feeling (touch/movement).



Information is taken in through the five senses.

A Selective Process

In processing, storing and retrieving sensory information, everyone's brain operates a little differently. How we learn best and fastest varies from person to person. Some of us rely on or favor particular senses over others.

Specifically, some people remember best what they **see**. They are **visual learners**. Others remember best what they **hear**. They are **auditory learners**. Still others remember best what they physically **feel and do**. They are **kinesthetic learners**. Some people learn equally well all three ways.

All of us are capable of learning through every one of our available senses. A person who favors or relies on one sense over another is neither unable to learn, nor necessarily learns poorly, through the non-dominant senses. All senses pitch in to some degree. The proportions simply vary from one individual to another.

Auditory Learners

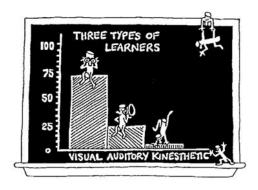
An auditory learner learns most effectively when information is conveyed with sound. Auditory learners retain better and faster when they can hear what they are learning.

Visual Learners

A visual learner imprints and retains information most effectively when it is presented visually, such as in pictures, graphics, videos, diagrams, demonstrations, etc. Visual learners retain better and faster when they can see what they are learning.

Kinesthetic Learners

A kinesthetic learner learns best by doing. Touching, physical manipulation, and the physical sensation of movement are what imprint information most easily in the kinesthetic learner's memory. A kinesthetic learner often becomes restless and bored during plain speeches and lectures, because simple listening is too passive. A kinesthetic learner retains information better when it is incorporated into some sort of physical activity. Kinesthetic learners retain better and faster when they can touch, feel or manipulate what they are learning.



All senses help in learning, but for many people some senses help more than others.

Get Your Three Senses In

Researchers estimate that roughly 70% of all people are visual learners. About 25% are auditory learners. And approximately 5% are kinesthetic learners. Children tend to be more kinesthetic than adults.

When teaching a class, an instructor may presume there is a mix of each type of learner present. Though the instructor may not know who's who, it does not particularly matter, provided the instructor employs techniques which reach all three learning modes. If so, every student can learn. None is excluded or left behind.

Visual Teaching Techniques include the use	e of:		
 ☐ Gestures ☐ Graphs ☐ Facial expressions ☐ Color coding ☐ Body language ☐ Text illustrations 	 □ Hand signals □ Handouts □ Chalkboard illustrations □ Props □ Physical demonstration □ DVDs/videos 		
Auditory Teaching Techniques include the	use of:		
□ Speech□ Whistle signals□ Loud hailers□ Audio equipment	 Instructor's voice Volume & tone Expressiveness & animation Word choice 		
Kinesthetic Teaching Techniques include the	ne use of:		
☐ Hands-on participation☐ Rote recitation☐ Land drills☐ Copying/note taking	□ Water drills□ Take-home projects□ Simulator practice□ Reading aloud		
Discover Your Learning Preferences To discover your sensory preference, click on the Self-Test #1 link.			
What is your Sensory preference? \	/isual, Auditory and or Kinesthetic		
Sensory Input Highlights Summary:			
Students primarily use three of the five senses when learning:			
 Seeing Hearing Feeling (physical touch, movement) 			

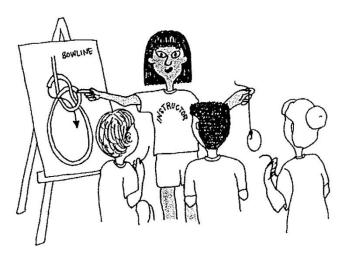
Some students may favor one sense over another. Some may learn faster by seeing or

doing rather than by just hearing it explained.

Multiple Pathways or Multi-Sensory Teaching Techniques

As a rule, the more student sensory pathways an instructor can bring into play the better. A student's retention is generally higher and there is less confusion when multiple sensory pathways receive an integrated unambiguous message simultaneously.

Ideally, the student should **see**, **hear** and **do**, all at once. Auditory teaching techniques, such as lecturing, may work adequately for highly auditory learners. Visual techniques, such as demonstrations, may work fine for highly visual learners. Yet, combining auditory with visual teaching techniques (e.g., explaining while demonstrating) works even better for both auditory and visual learners. Better still, blending visual, auditory and kinesthetic techniques (e.g., telling and showing while the students are doing) improves learning for all students.



Multiple Pathways Teaching Using Three Senses Instead of One

The use of integrated visual, auditory, and kinesthetic teaching techniques allows every student to learn the way that suits him or her best, while receiving the same reinforcing message through their non-dominant senses. Learning takes place better and faster, and a class of students is more likely to progress at a uniform pace. As a bonus, multiple pathway teaching livens up the teaching environment, makes it more fun, and helps to raise motivation and morale.

Highlights Summary:

To reach all types of learners:

- Show them (visually)
- Tell them (auditory)
- Have them do it (kinesthetics)

Left Brain/Right Brain

Sensory input is only the "raw data" of learning. It needs further processing to become useful. The brain processes sensory input by **neurochemically** sorting and transforming it into what we call awareness, thought and understanding. The manner in which our brain perceives and responds to the surrounding environment is sometimes characterized by psychologists as being either **right-brained or left-brained**.

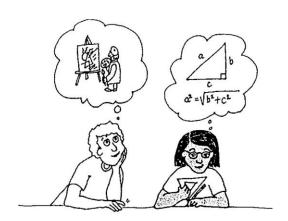
The human brain has two distinct cerebral hemispheres, right and left. Each side specializes in particular mental activities. Similar to being right or left-handed, some people's brains tend to rely on one hemisphere more than the other when processing information. Because each hemisphere specializes in different mental activities, its relative contribution often gives rise to distinctive thought patterns and learning traits in different individuals.

Some of the principal characteristics and mental activities associated with each hemisphere are listed below

Left-Brain	Right-Brain
Abstract thinking	Concrete thinking
Analytic thinking	Intuitive thinking
Auditory activity	Visual activity
Deductive reasoning	Inductive reasoning
Logical thinking	Holistic thinking

Though a bit technical, the above offers further insight into why people sometimes think, learn, and communicate so differently. It applies to instructors as much as students, so it suggests why some students and instructors seem to see eye to eye, while others appear to operate on very different wavelengths, mutually confused and frustrated.

While some people may rely on one brain hemisphere more than the other, we all still use all parts of our brain. It is simply a matter of proportion. Everybody is a bit different. The blend of proportions form a recipe, of sorts, for our individual thought patterns.



Artists and Engineers Not everyone thinks alike.

Discover Your Hemispheric Preference

To find out more about your own brain hemisphere preference, click on the <u>Self-Test #2</u> link.

What is your hemispheric preference? Left brain, Right brain or Whole brain (no preference)

What Am I???

New instructors ought to spend some time becoming familiar with their own learning and problem solving characteristics. An instructor's personal learning style favoritism or bias could blind him to the learning needs of students who require a different approach.

The previous self-tests should help you to understand a bit more about your own learning style. After taking the self-tests ask yourself:

- Do I favor one sensory pathway over another?
- Do I respond better to one teaching technique than another?
- How much does it influence the way I teach and communicate with others?
- Do I recognize and understand those differences in others?
- Am I patient with those who learn differently?
- What modifications could I make in my teaching style to accommodate them?

Monitor and Adjust

You should be prepared to adjust your teaching style to reach all your students, not just a few. To do that well it is helpful to know yourself, understand your students, carefully monitor student responsiveness, and adjust your teaching style to meet them on their own mental turf.

Highlights Summary:

- Know your preferences to become a better instructor.
- Understand your own learning style before teaching others.
- Understand how you yourself perceive, process and store information.
- The Sensory Preference Self-Test will help you understand your own strengths and weaknesses in how you perceive the world around you.
- The Hemispheric Preference Self-Test will help you understand more about how you personally process information, solve problems and respond to your environment.

SELF-TEST #1

SENSORY PREFERENCE

This self-test is designed to help you understand whether you learn best by seeing, hearing or doing. By becoming more aware of your own learning style you will develop a better understanding of the differences in your students' styles and adjust your teaching techniques to their needs.

Simply answer each question honestly and enter your answer in the appropriate column 5, 3, or 1. Do not dwell on any particular question. Your first impulse usually provides the best response.

Directions: Each of the statements below will be scored using the following point scale.

OFTEN = 5 SOMETIMES = 3 SELDOM = 1

5	3	1	
	-		_ 1. I remember more about a subject by listening than reading about it.
			_ 2. I am better at following written directions than oral ones.
			_ 3. When learning something new I like to jot down notes to review later.
			_ 4. I bear down hard when I write with a pen or pencil.
			_ 5. I require explanations of graphs, diagrams or visual directions.
			_ 6. I like working with tools.
			_ 7. I like and have little difficulty developing graphs and charts.
			$_$ 8. I can easily tell if sounds match when I hear pairs of sounds.
			_ 9. I remember things best when I write them down several times.
			_ 10. I can understand and follow directions on maps.
			_ 11. I learn school material better by listening to lectures and recordings.
			$_$ 12. I play with coins, keys or other objects in my pockets.
			$_$ 13. I can remember how to spell words better if I say the letters out loud $$ rather than write them down.
	· 		$_$ 14. I understand news items better when I read them in the paper rather than listening to the radio.
			_ 15. I chew gum or snack while I study.
			$_$ 16. I find that the best way to remember something is to visualize it in my mind.
			$_$ 17. I learn to spell words by writing imaginary letters with my finger tips.
			_ 18. I prefer to listen to a good lecture or speech than read a text on the same subject.
			$_$ 19. I am good at working and solving jigsaw puzzles and mazes.
			$_$ 20. I grip or fiddle with objects while I am learning something new.
			$_$ 21. I'd rather listen to the news on a radio than read about it in a newspaper.
			_ 22. I get information on interesting subjects by reading about them.
	· 		$_$ 23. I am uncomfortable hugging, handshaking, touching others, etc.
			_ 24. I am better at following spoken directions than written ones.

Scoring: copy the point value from each of the above questions onto the correspondingly numbered spaces below. Total each column to obtain your personal sensory preference values. The largest sum total indicates your most preferred learning preference, and the smallest sum total indicates your least preferred learning preference.

VISUAL		AUDITORY		KINESTHETIC	
Question #	Points	Question #	Points	Question #	Points
2		1		4	
3		5		6	
7		8		9	
10		11		12	
14		13		15	
16		18		17	
20		21		19	
22		24		23	
Total =		Total =		Total =	

Adapted. from the original Barsch Learning Style Inventory by Dr. Jeffrey Barsch, EdD. with permission of Academic Therapy Publications, 20 Commercial Blvd., Novato, CA 94947

SELF-TEST #2

HEMISPHERIC PREFERENCE

Directions: Circle the number corresponding to the answer which describes you best.

- 1. In school I was/am usually better at
 - 1. math
 - 2. art
- 2. In school I was/am usually better at
 - 1. languages
 - 2. crafts
- 3. I normally reach decisions by
 - 1. step by step analysis
 - 2. getting a "feel" for the solution as a whole
- 4. In work or personal life I usually follow hunches only when I can justify them logically.
 - 1. True
 - 2. False
- 5. I often follow hunches which "feel" right even though they may not seem logical.
 - 1. True
 - 2. False
- 6. Have you ever had the feeling, before being told, that a very close friend or immediate family member was sick or in serious trouble?
 - 1. Yes
 - 2. No
- 7. In sketching maps, pictures or plans I have a better than average sense of direction and how the elements relate to one another.
 - 1. True
 - 2. False
- 8. It is more gratifying to me when a personal project
 - 1. is well planned
 - 2. contributes to something new

- 9. I find problem solving more satisfying when I
 - 1. think it all through carefully
 - 2. try fitting interesting new ideas together
- 10. Frequently I have hunches about upcoming events which prove to be correct?
 - 1. True
 - 2. False

Scoring: add the numbers you have circled

My Total: _____

10 to 14 = left brain

16 to 20 = right brain

15 = whole brain, no dominance

Self-Assessment & Review

True or False
1 Everybody's different and their learning style may not be the same as yours.
2 When you teach a lesson, try add techniques for all learning styles.
3 Since most people are auditory learners, use verbal lectures as your main teaching technique.
4 To improve student learning, you should incorporate visual, auditory and kinesthetic techniques in your lessons.
Fill in the Blanks
5. Researchers estimate 70% of all people are learners, 25 % are learners and 5% are learners.
6 or is using visual, auditory and kinesthetic teaching techniques in your lesson.
7. Of the 5 senses, which are the 3 most used by students learning boating skills?
seeing tasting smelling hearing touching
8. My learning style is primarily Auditory VisualKinesthetic.
9. My hemispheric dominance is Left Brain Right Brain Whole Brain
Multiple Choice (choose correct answer)
10. Gestures, illustrations, props, body language, facial expressions, color-coding are examples of what type of teaching technique?
a. multiple pathways/multi-sensory
b. visual
c. auditory
d. kinesthetic

11. Speech, whistle signals, loud hailers, instructor's voice, volume, tone, expressiveness, word choice, animation are examples of what type of teaching technique?
a. multiple pathways/multi-sensory
b. visual
c. auditory
d. kinesthetic
12. What kind of teaching uses techniques that involve more than one sense?
a. multiple pathways/multi-sensory
b. visual
c. auditory
d. kinesthetic
13. When a person takes in information through the 5 senses, what is this called?
a. auditory input
b. sensory input
c. visual input
d. kinesthetic input
Questions to Think About & Ask Yourself
As part of your instructor course, you will be teaching lessons. Check to be sure you added teaching techniques to reach visual, auditory, and kinesthetic learners.
14. If your learning style is auditory, how may it affect your teaching style?

15. If your learning style is visual, how may it affect your teaching style?
16. If your learning style is kinesthetic, how may it affect your teaching style
Answers:
<u>1. T</u>
<u>2. T</u>
<u>3. F</u>
<u>4. T</u>
5. Visual: auditory; kinesthetic
6. Multiple pathways; multi-sensory
7. Seeing; hearing; touching
<u>10. B</u>
<u>11. C</u>
<u>12. A</u>
<u>13. B</u>

2 - PSYCHOLOGY OF LEARNING

Read the Instructions & Guidelines module before beginning this module.

OBJECTIVES

After reading this module, you should be able to:

- Explain how *Positive Reinforcement* encourages learning.
- Explain *Extinction* and describe how to avoid it.
- Describe *Intermittent Reinforcement* and *Self-Reinforcement*. Give an example of each type.
- Explain how Fear, Extinction and Avoidance Behavior interfer with learning.
- Explain three ways behavior is modified or changed.
- Describe Intrinsic and Extrinsic Rewards. List an example of intangible and tangible rewards.
- Explain Feedback Sandwich. List the three components of a Feedback Sandwich.

Behavioral Psychology offers a good deal of insight into individual learning behavior when instructing. In experimental psychology, the training process is called *conditioning*.

Conditioning

Conditioned Response

Behaviorists hold that the conditioned response explains why we do what we do. They say that behavior is learned, shaped, repeated, or curbed by a variety of rewards and punishments in our environment. Put succinctly, people tend to do what is pleasant or rewarding, and tend not to do what is unpleasant or results in punishment. Accordingly, a system of rewards, no rewards, or punishment can be used to bring about, modify, or discourage specific behavior patterns.

Positive Reinforcement

In the conditioned response a desired behavior is encouraged by the instructor by pairing it with a reward called positive reinforcement. To condition equipment care, for example, every time a student cleans and stores the equipment properly the instructor would respond with positive reinforcement. Positive reinforcement is something desirable or rewarding, such as praise. "You did a very careful and thorough job with the equipment clean-up today, Tammy. Well done. I'm very pleased."



Positive Reinforcement

Important Tip:

Be *specific* when using positive reinforcement. The student needs to understand why they are being praised.

INSTRUCTORS TAKE NOTE...

- Positive reinforcement is encouraging and stimulates behavior.
- If a behavior is not positively reinforced, it will extinguish.

The idea is to pair the desired behavior with the "reward" of a compliment. The reward is conditional. It depends on the subject's display of the correct behavior, hence the name *conditioned* response. The underlying intent, of course, is to encourage Tammy to get in the everyday habit of keeping the equipment clean, neat and orderly. Such regular positive reinforcement encourages regular positive behavior. Positive reinforcement is the cornerstone of motivation, morale and performance.

Extinction

A specific behavior is less likely to occur if it is no longer positively reinforced. Eventually it may cease altogether. In psychology that process is called *extinction*.

If, for example, the instructor never again seems to notice or care about Tammy's hard work in making things shipshape, she may eventually stop putting so much effort into it. Once she no longer perceives any further benefit, she may no longer bother to do it at all. At that point the behavior extinguishes.

Students depend on their instructor to teach them the correct way to perform a task and to convey the need and value of it. An instructor's failure to acknowledge or positively reinforce a student's effort may be perceived by the student as indifference. Indifference, whether real or imagined, on the part of the instructor naturally leads to non-performance on the part of the student; because it implies the task is not very important.

The conditioning process is like a series of small unwritten agreements between instructor and student. "I'll do this if you do that." The student's expectation of repeat reward encourages repeat behavior. If suddenly the reward no longer comes, it signals to the student that the deal is off. The *conditioned behavior* then begins to extinguish. So, to encourage or maintain a student's important behavior patterns an instructor should keep up his/her end of the bargain. *Positively reinforce desirable behavior or risk its extinction.*

Intermittent Reinforcement

After a period of steady conditioning, where reward is always given for a desired behavior, sometimes intermittent positive reinforcement may be substituted without risking extinction. For example, in time Tammy may become so accustomed to tidying up the equipment that eventually only occasional praise may be required to inspire her to keep up her good work.

Switching from a regular (every time) to an intermittent (occasional) positive reinforcement schedule may even become necessary after a while. After a certain

amount of conditioning, positive reinforcement can go stale and lose its appeal. In other words, too much of a good thing is no longer as good.

Tammy could become so accustomed to her daily compliments, for example, that she may begin taking them for granted. As a result, the quality or consistency of her work may start to slip. In such a case it would be better for the instructor to ease up and provide only occasional reinforcement, praising Tammy only when her work is truly exceptional rather than simply good. Switching to an intermittent reinforcement schedule at the right time raises the stakes, restores the perceived value of the positive reinforcement, and leads to improved performance. Intermittent reinforcement is the motivational basis for coaching students and athletes to higher performance.

Self-Reinforcement

In time, certain behavior can become self-reinforcing. An internal motivation develops so the behavior no longer requires outside positive reinforcement. Tammy, for instance, may eventually learn to take independent personal pride in the quality of her work. She may feel good about herself and the neat appearance of her equipment, so she wants to keep it tidy even when no one else is likely to notice. At that point Tammy has developed her own internal positive reinforcement which no longer depends on the instructor's praise. This is an important goal of the instructor's efforts, generating students' self-motivation.

Avoidance Behavior

Awareness Tip

An unpleasant or negative experience such as extreme temperatures, an uncooperative crewmate, an embarrassing error or a collision can lead to avoidance behavior.

A student who has an unpleasant (punishing) experience, such as a collision or a crash landing, may later refuse to take the helm again or, worse, give up boating altogether. Though the only mistake may have been a single momentary steering error, a student may overreact to the past embarrassment by avoiding the entire situation.

Boating is a recreational activity. It should be fun. A student's avoidance behavior is a signal to the instructor that the fun is missing and needs to be salvaged. **Avoidance behavior is usually the product of fear.** So the source of the fear must be identified and addressed.

Fear

Fear can be a serious impediment to learning. It may sometimes go unnoticed and unchecked, because it is often hidden behind avoidance behavior.

Reluctant students who are impassive, who avoid involvement, or who regularly defer certain tasks to others, may actually be avoiding the activity out of

Awareness Tip

Fear can lead to avoidance behavior.

A student who develops a sudden headache or complains of nausea may be expressing hidden fear.

When it is no longer fun, a student will eventually stop boating altogether.

fear. It may be a fear of failure, fear of embarrassment, or even fear of some imagined danger.

Instructors need to recognize fear and compensate for it by restoring positive reinforcement to the fearful situation. It requires patience and understanding. Often, working through a troublesome maneuver side by side with a student, offering encouragement, bolstering self-esteem, and creating a positively reinforcing series of personal successes, will help to allay fear, restore confidence, and rebuild positive motivation.

Motivation

Learning comes much more quickly when a student is comfortable, relaxed, and willing. A student is not simply a passive receptacle for information but an active participant in a learning process. It is a partnership between instructor and student. As in any partnership, willing and earnest teamwork can make all the difference. Willingness stems from motivation, and motivation may stem from a variety of sources.

There are three categories of principal motivating factors:

- 1. Extrinsic rewards
- 2. Intrinsic rewards
- 3. Negative sanctions

Extrinsic Rewards

Extrinsic rewards include all of the positive reinforcement, which comes from others.

They include:

- Tangible keepsakes and mementos such as trophies, plaques, diplomas, certificates, prizes, T-shirts, etc.
- Intangibles such as approval, praise, compliments, encouragement, admiration, enthusiasm, friendship, or respect of instructors, parents or peers.

Extrinsic rewards are particularly helpful tools when teaching beginners, because beginners need a good deal of initial encouragement. In everyday teaching and coaching, instructor praise and encouragement are the most effective and economical extrinsic awards.

Motivation Tips

- Don't keep awards a secret. Let your students know about them in advance, so they will have something to strive for.
- Awards motivate best when presented publicly. Peer approval motivates more than keepsakes.
- Award ceremonies work best when they are brief and well-focused.
- "Praise in public; reprimand in private."

There is an old saying, "praise in public; reprimand in private". Praising worthy achievement in public leverages its reinforcing effect dramatically, particularly when praise is given in the presence of those whom the recipient respects. Taking the time to honor or appreciate a deserving individual with public recognition, praise, or thanks, pays motivation dividends for a long time.

Reprimands in public, on the other hand, often have just the opposite effect and should be avoided. The unpredictably damaging effect of a public reprimand on a student's overall morale and motivation should not be underestimated. "Reprimand in private" is wise advice which is all too often overlooked.



Intrinsic Rewards

Intrinsic Rewards

Intrinsic rewards are intangible self-reinforcing influences, which develop from the emotions of the individual student. They may be the pride of accomplishment, the sense of triumph in achieving excellence or mastering a difficult challenge. They also include feelings of enhanced self-worth, satisfaction in overcoming a fear, the thrill of participation, enjoying the company of friends, or simple fun and excitement. Intrinsic rewards are self-reinforcing and form the basis of positive long-term self-motivation.

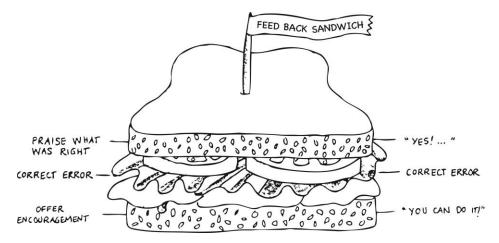
The Feedback Sandwich

When teaching a new skill, an instructor's casual blunt criticism may sometimes discourage the very behavior it is intended to improve. Critical remarks should be constructive and worded tactfully. When an instructor critiques a student's performance, negative feedback should be surrounded with encouragement. If, for example, Tammy oversteers when making a turn, and the instructor simply comments, "That was a lousy turn," Tammy learns nothing useful and may very well feel hurt or discouraged by her instructor's terse and callous remark.

In a *feedback sandwich* the instructor gets the message across without the sting by layering negative feedback, like a sandwich, in between slices of positive feedback.

- 1. The instructor starts off with a positive remark, such as "Good effort, Tammy. You nearly nailed it that time."
- 2. Then the instructor slips in the negative part of the feedback, "But you oversteered a bit." tactfully sparing Tammy's ego by focusing on the specific part of the maneuver which did not measure up.
- 3. Then the instructor constructively offers a remedy to the problem, "Begin straightening your course a little sooner during the turn." And finally the instructor leaves the student with a positive and encouraging comment, "Let me see you try it again. I know you can do this."

A tactful *feedback sandwich* is perceived positively and can boost motivation. Instructors need to be aware of how their comments are perceived and felt, so they can avoid the pitfalls of negativity. Obvious and potentially embarrassing student mistakes, such as accidental collisions, do not need to be pointed out at all. Announcing the event across the water to the whole group may only add humiliation to an already embarrassing situation. It would be more constructive to use the experience as a teaching tool, helping the students understand what went wrong and how to prevent a recurrence.



Positive remarks, praise and encouragement bring out the best in students. Negative remarks often bring out the worst. A student's eager willingness to learn should be carefully cultivated and never jeopardized by an instructor's insensitive or careless remarks. Although boating is just a recreational pastime, teaching it is sometimes a very personal and delicate matter. It can either encourage or discourage a student's further pursuit of the sport. It is a responsibility which conscientious instructors should not take lightly.

Teaching Tip

Remember what it feels like to learn a new skill. Respect the integrity of your students as they go through this learning process.

Self-Assessment & Review

Please choose your area for more specific area question.





Powerboat P. 71

Keelboat P. 74

3 - COMMUNICATION

Read the Instructions & Guidelines module before beginning this module.

Objectives

After reading this module, you should be able to:

- Identify 3 different types of distractions (environmental, student, instructor) and give 2 examples for each type.
- Define *direct* and *indirect commands* and give an example for each.
- Explain how voice quality, pace/timing and word choice affect verbal communication.
- Explain how gestures, body language, eye contact, mannerisms and presence affect non-verbal communication.
- List the advantages and disadvantages of group instruction and private lessons.
- Identify at least 3 ways to improve on-water communication.

Communication Tip

It is important to continually monitor that your students understand what you are trying to teach.

Productive teaching begins with clear communication. Communication is successful when an intended message is accurately conveyed by the instructor and understood by the student. But it is not a simple matter of "I talk. You listen." The everyday communication between instructor and student has many elements. Some are obvious, others quite subtle. The following section explores the complexities of communicating effectively, both on and off the water.

Distractions

Anything competing for the student's attention is a distraction. Distractions draw attention away from the specific lesson and interfere with learning. Because of distractions a conveyed message may come through fragmented, distorted or not at all.

Distractions may come from the surrounding environment, student preoccupations, or even the instructor's own appearance and behavior. To assist student concentration an instructor should seek and eliminate as many distractions as possible. Distractions may be divided into three broad categories: environmental, student, and instructor.



Be sure the teaching area is free of as many environmental distractions as possible.

Environmental Distractions

Include noises, sights, odors, extreme temperatures, uncomfortable or badly arranged seating, poor lighting, poor ventilation, other students, intervening boating traffic, and anything else in or around the teaching environment which might capture the student's attention at the expense of the lesson plan.

Student Distractions

Include personal discomforts or preoccupations such as fatigue, illness, pain, hunger, thirst, family problems, uncomfortable clothing, fear or nervousness, a vision or hearing impairment, emotional or physical maladies, and any other such personal or private matters which may weigh on a student's mind and compete for attention.

Instructor Distractions

Include peculiar mannerisms, gestures, or speech patterns, poor hygiene or grooming, inappropriate dress or language, poor attitude, bad manners, or any other attributes which may unnecessarily draw attention away from the intended message.

Direct vs. Indirect Commands

A *direct command* is very explicit and is appropriate when a beginner is confused or is having trouble understanding technical terms. "Turn the wheel left" is a direct command.

An *indirect command* is a communication short-cut frequently used with more experienced students who understand what intermediate steps are required to achieve the intended result. They save the instructor time and words, and may be used as long as the student is appropriately responsive. But if the student appears confused or balks, the instructor may need to revert to simpler direct commands. Beginners often need mostly direct commands until they become accustomed to performing routine maneuvers and are familiar with proper terminology. "Turn into the wind" is an indirect command.

Teaching Tip

Provide bathroom and refreshment breaks at appropriate intervals (generally 60 to 90 minutes). They cost a little time, but they make structured time much more productive.

Teaching Tip

An instructor should arrive early and prearrange the teaching environment as much as practical to minimize distractions and help focus student concentration.

Teaching Tip

Look in a mirror before class. See what you look like. Prepare your lesson plan well so you can be relaxed with the material. Have someone videotape you teaching a class sometime, so you can see for yourself how you appear.

Repetition

Repetition is a normal and necessary part of teaching. The more important the point, the more important it is to repeat it. There are several good reasons to repeat yourself. Some students may not have been paying attention the first time. Some may have not heard you clearly. Some may have not understood fully. Repetition gives them another chance to learn and you another chance to succeed. There is an old saying, "Three times for the average mind."

Verbal Communication

This refers to what you say and how you sound when you say it. There are several key elements.

Voice Quality

Some voices are easy to listen to; others can be quite dull. The quality of an instructor's voice can help or hinder the learning process. Be conscious of the sound of your voice. Do you enunciate clearly so everyone can understand every word? Do you use an appropriate volume, projecting your voice so you can be heard clearly in the back of the room? Does the pitch and tone of your voice vary with enthusiasm and emphasis, or does it remain flat and monotonous?

Pace and Timing

Do you speak too quickly to be fully understood or too slowly to be interesting and hold attention? Nervous novice instructors often speak too quickly. Veteran instructors know the value of slowing down, even pausing now and then for emphasis and assimilation. A few well-chosen words spoken slowly and clearly usually leave a more lasting impression than a breathless stream of unbroken syllables.

Word Choice

Big and obscure words are wasted if your students don't understand them. Choose a simple clear vocabulary which everyone can follow. Generally, the simpler the better.

When using nautical terminology or technical jargon, be sure to define each term as you go along. If you are not positive every student recalls terms previously defined, pause to repeat their definition. Some students are understandably shy about speaking up to confess their ignorance of a term. Don't risk losing your audience by carelessly assuming they share your vocabulary.

Avoid verbal excesses such as guttural pauses (e.g. "ums" and "ers") and stale, trite or overused expressions. They usually distract more than they contribute to the lesson.

Non-Verbal Communication

People unconsciously communicate without words all the time. What people verbalize is only part of the communication process. Non-verbal communication includes everything about you *other than* your spoken words, which contributes to what and how your message is received by your students.

Presence

Your students, almost certainly, will size you up as soon as they first meet you to decide if they are comfortable submitting to you leadership. A confident, deliberate and enthusiastic appearance will get you started on the right foot. Stand up straight, keep your head up, stay focused, look people in the eye, be well organized, speak clearly and take charge.

Gestures

Gestures can work for you or against you. If your gestures are meaningful and clearly help amplify your point, by all means use them. If they are just excess motion or a nervous habit, however, they are a distraction and should be avoided. The eye is naturally drawn to motion. If there is no useful message in your gestures, don't let them draw visual attention away from a more productive part of the lesson.

Body Language

How you hold your body can work for you or against you as well. Your posture conveys implied messages about your mood and attitude. Crossed arms or legs suggest defensiveness. A cocked head suggests skepticism or defiance. Leaning forward in a chair or standing too close may suggest assertiveness or aggression. Your total appearance determines how your students will respond to you. For a positive response project a friendly open image. Be body conscious.

Eye Contact

Is a powerful teaching tool. It not only concentrates and focuses the attention of the student it supplies the instructor with valuable feedback. Eyes reveal confusion or understanding, excitement or boredom, confidence or insecurity. They tell the instructor when and how to adjust the pace and teaching technique to the needs of the moment. Students need to see your eyes too. They should not be hidden behind sunglasses while classroom teaching. Use sunglasses only in on-the-water instruction.

Attitude

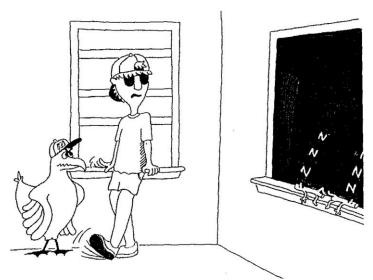
Your facial expressions, body language, tone of voice, general demeanor, behavior, and choice of words all add up to a reflection of your attitude. If it inspires your students, it works in your favor. If it turns them off or disillusions them, it works against you. Think often and carefully about all the subtle messages you send to others about yourself.

Mannerisms

Are behavioral excesses which are usually distracting. They include such nervous habits as pacing, jingling pocket change, tapping a pen, drumming fingers on a desk, or any other repetitive and unproductive behavior. None contribute to the message, and all are distracting to your students.

Mixed Signals

Are usually the results of carelessness, and send opposing messages and create confusion. If you were to say, "Watch your step," while pointing upwards, a student would not know which way to look, up or down. If you advise your students to step off the boat onto the dock, and you later leap off the boat, your students will notice the contradiction and be confused. Your words and example do not agree. Whether in the classroom or on the water, be sure all of your communication tools are sending a consistent, clear, unambiguous message.



See yourself as others may see you.

Is your appearance interfering with learning?

Lesson Format: Private versus Group Instruction

Private one-on-one instruction differs considerably from group instruction. Each has its advantages and disadvantages.

Group Instruction

In group instruction the students usually learn a good deal from each other by observing each other's boat handling. Frequently students compare experiences, share ideas and informally tutor each other during and after class. They meet new people and develop friendships. They often encourage and support one another through the trust which evolves naturally from teamwork. Additionally, group instruction is generally more cost and time effective, since the student/instructor ratio is higher.

The main disadvantage of group instruction is less individual attention. An instructor cannot possibly personally attend to everyone at once.

It is important for instructors to bear in mind that even when students are taught in groups, each individual still requires a certain degree of personal custom care. The prudent instructor is always conscious of the fact that a class is composed of individuals. So individual feedback and personal encouragement is far more useful to a student than a sweeping, "Good job, everyone." Because people learn differently and at different paces, varying amounts of personal attention may be necessary and should be expected. Nevertheless, personal attention should be allocated judiciously to avoid the appearance of playing favorites or neglecting the needs of the larger group.

Private Lessons

In private lessons the instructor is free to concentrate exclusively on one student. Both the lesson plan and its pace can be custom tailored to the individual. For some students, particularly those with time constraints or special learning needs, private lessons are the ideal way to learn.

Disadvantages to private lessons are the absence of other boats for visual comparison, and the missing positive social element of shared recreation.

In a private lesson the relationship between instructor and student is analogous to that of doctor and patient. A doctor examines a patient, makes a diagnosis, prescribes a course of treatment, then monitors and adjusts the therapy as the patient responds. Similarly, an instructor assesses a student's ability and learning style, makes a diagnosis as to what deficiencies need attention, prescribes and administers an appropriate lesson plan, then monitors and adjusts the dosage depending on response.

On-the-Water Communication

There are many impediments to communication when your students are in their boats so review on-the-water procedures and drills before going out.

Once on the water, the communication you can have with individual students will be extremely brief, probably something on the order of 4-10 seconds as they motor along. Frame all feedback in a "feedback sandwich" and deliver the information as quickly and clearly as you can. This will inevitably require that you use "information rich" dialogue.

To convey rich precise information, *prioritize* the things that each student needs to improve upon. Communicate how they can improve one or two items highest on the priority list, like sitting in the correct position or holding the throttle/shift lever correctly as they are some of the core areas of improvement.

Don't overload a student with multiple areas of improvement because they will only be able to process one or two suggestions at a time. Reserve some structured time after practice for an overall summary and more detailed commentary.

Being Heard

An instructor should be aware of obstructions or impediments to voice communication. Avoid competing with other loud sounds such as engine noise or an airplane passing overhead. Wait for a lull. Your message is more likely to be heard clearly and in its entirety.

Self-Assessment & Review

True or False

1.	You should arrive early to setup the teaching environment to minimize distractions and maximize student learning.
2.	You should provide bathroom and refreshment breaks at intervals of 21/2
3.	hours When giving directions, you should use indirect commands with inexperienced students.
4.	You should repeat important points to be sure students hear, understand and learn what you are trying to teach.
5.	
6.	You should continually monitor and check to be sure your students understand what you are trying to teach.
Μι	ultiple Choice (choose correct answer)
7.	Noises, sights, uncomfortable or badly arranged seating, boat traffic, poor ventilation, poor lighting, odors are examples of what type of distractions? a. environmental
	b. student
	c. instructor
8.	Inappropriate dress, unusual speech patterns, gestures or mannerisms, poor hygiene or grooming are examples of what type of distractions? a. environmental
	b. student
	c. instructor
9.	Personal discomfits such as illness, thrist, hunger, fear, nervousness, being cold or overheated are examples of what type of distractions? a. environmental
	b. student
	c. instructor

Scenarios

You are teaching a class of inexperienced students. From the list below, check which statements will improve on-water communication.

10	Review on-water procedures and drills before you go out.
11	Send students on the water with no instructions. You can tell them what to do later.
10	
12	Give a brief, clear description to help a student process information he or she needs to improve.
13	Try to give feedback using the "feedback sandwich."
14	Tell a student all the errors that he or she needs to correct, so the
	student can work on all errors at once.
15	Prioritize what a student needs to work on. Choose 1 or 2 highest on the priority list.
16	Communicate how to improve 1 or 2 items for a student to work on while practicing.
17	Give lengthy, detailed information about the errors you observe as a student passes by.
18	Meet with students after practice to summarize and provide detailed
40	information about their on-water practice.
19	Avoid competing with loud noises. Try to wait until there is a lull before communicating with students.

Answers:

- <u>1. T</u>
- <u>2. F</u>
- <u>3. F</u>
- <u>4. T</u>
- <u>5. F</u>
- 6. T
- <u>7. A</u>
- 8. C
- <u>9. B</u>
- <u>10. ✓</u> 11. 12. ✓ 13. ✓ 14. 15. ✓ 16. ✓ 17. 18. ✓ 19. ✓

4 - TEACHING STRATEGIES & TECHNIQUES

Read the Instructions & Guidelines module before beginning this module.

OBJECTIVES

After reading this module, you should be able to:

- Explain what a Syllabus is.
- Describe what a *Lesson Plan* is, and list 5 items which should be included in a lesson plan.
- Describe what preparation is needed before teaching your class.
- Explain the benefits of using predetermined procedures and a *Rendezvous Point*.
- Describe 4 interactive teaching techniques: Discovery Method, Challenge Technique, Pros & Cons Technique and Listing Technique.
- Explain how *Multi-SensoryTeaching Techniques* improve learning for students.
- List at least 5 *teaching techniques*. Identify if the technique is *interactive* or *non-interactive*.
- Describe the benefits of using Land Drills before practicing skills on the water.
- Explain why properly conducted *Demonstrations* enhance learning.
- Describe the benefits of short courses versus long courses when conducting Water Drills.
- Describe factors to consider when setting up and conducting Water Drills.

Instruction should focus on achieving clear, specific, measurable goals. Good teaching begins with a clear written plan with three distinct components:

- organization, usually differentiated by topic (e.g. *Boat Handling, Navigation, Boat Maintenance*, etc.), skill levels (e.g. *Basic, Intermediate, Advanced*), age groups (e.g. *pre-teens, teens, adults*), or other logical grouping which serves the target students needs. Curriculum design should include course scheduling the dates and hours of each class meeting its location and any course prerequisites (e.g. completion of a more fundamental course, necessary prior licenses or certifications, age requirements, swim check, etc.). Some teaching facilities, particularly larger ones or commercial operations, have an established fixed curriculum. But many smaller, seasonal, or less formal programs rely on their instructors to design the curriculum as part of their duties. For more on this subject see *Curriculum Development*.
- 2. **Syllabus** sometimes referred to as a course outline a listing of topics and activities to be covered in each course of the curriculum. A syllabus should not just list topics. It should indicate in what order they are taught. Ideally, each new topic or skill

- should build on the previous one in a carefully conceived and logical progression. Very brief courses (i.e. with only one class meeting) do not need a syllabus. All they need is a lesson plan.
- 3. Lesson Plan The time-honored rule of thumb is that two hours of lesson plan preparation should go into each hour of instruction. A lesson plan includes specifics on which topics and teaching techniques will be employed at each class gathering. A lesson plan typically includes a preliminary briefing followed by hands-on motor skills practice drills (Land and Water). Lesson plans need to be flexible. You may have to modify a lesson plan on very short notice depending on weather changes, class progress, safety concerns, or any other unforeseen factors. Always have a back-up plan in mind.

Teaching Strategies

Before class form your strategy. Strategy is the underpinning of your lesson plan. Teaching strategies establish the overall conditions under which effective teaching can take place. A well-conceived strategy serves to makes efficient use of valuable instruction time by creating an orderly, safe and predictable learning environment. Here are some common ingredients:

Preparation

A detailed written lesson plan should be prepared daily by the instructor. It should have clearly stated goals, topic sequence, teaching method, printed material needs, equipment requirements, props list, demonstration description, time allotments, and a method for evaluating results. Each lesson plan should serve a specific purpose within the course syllabus and the overall curriculum.

Before class all teaching materials, handouts, audio and visual aids and props should be checked carefully. Once a class begins, it should flow smoothly and without interruption. Awkward pauses to locate, organize, or repair teaching aids shatter student concentration, diminish confidence, and make it difficult to maintain control of the teaching environment.

Predetermined procedures create a sense of order and predictability. All students should be familiar with prescribed emergency procedures, so they know what to do if on-thewater communication becomes difficult or impossible.

Predetermined Procedures

These include prescribed routines for launching and hauling boats, where the class should gather on the water, what to do in case of a sudden squall or other emergency, etc.

Rendezvous Point

It is good practice to have a nearby "congregating spot" within sight of the launching area. This rendezvous point, perhaps marked with a pre-set buoy, provides a destination for early departing vessels to gather and hold position until any remaining boats and instructional staff can ioin them.

Never leave your students unattended! Accompany them to and from any practice area, providing general supervision, in case they need assistance.

Having a clearly established rendezvous point provides warm-up time for maneuvers before starting the water drill, keeps the students from scattering, and spares the instructors the time and trouble of having to round them back up.

Closure and Review

Allow some time at the end of each lesson for review, Q&A, and to provide some feedback to each student. One of the most teachable moments is immediately *after* a drill, while memories are fresh and curiosity is at its peak. Timely constructive criticism *(see Feedback Sandwich in Module 2)* focuses your students on specific areas where they are doing well and where there is room for improvement.

At the end of each class meeting, take a few moments to **record how the lesson worked.** Did it go as you expected? Would you change anything? Did anything noteworthy or of concern happen with one of your students? Your notes will come in handy with student final evaluations, and they can provide valuable input to the program director in making future improvements to the course or curriculum.

Teaching Techniques

Chalk Talk Tip

When possible, limit your briefings to just 10 minutes or so. Longer sessions risk exceeding your students' attention spans and their capacity to absorb new material.

Multi-Sensory Techniques

Passive "sit and listen" lectures appeal mainly to the auditory learners present, only 25% of a typical group. They can be very boring to the other 75%, who are visual and kinesthetic learners. Unless the instructor is a truly gifted or charismatic speaker, plain lecturing is a poor teaching technique. A trained instructor uses many communication techniques in classroom teaching besides simple speech.

Some instructors prefer to call shore side briefings *chalk talks*, because they illustrate their point on a board while they speak. Students retain more from chalk talks than from plain lectures because of the visual assistance of

the board. Visual aids, of course, appeal to the visual learners; and both auditory and visual learners learn better when they see and hear the same message together.

Better still, combining auditory, visual, and kinesthetic teaching techniques usually achieves the best results of all. Neither auditory nor visual techniques appeal to the kinesthetic learner as much as *doing*. Kinesthetic learners often fidget and lose concentration in a sedentary or passive learning environment. Veteran instructors know that active physical involvement coordinated with auditory and visual support works best for virtually every type of learner.

An instructor who simply lectures on how to tie a boat alongside a dock will get very poor learning results. An instructor who demonstrates, using an actual boat at a dock, while explaining how to tie the spring lines and the bow and stern lines will have far greater success. But the instructor who

DON'T FORGET
YOUR CHALK!

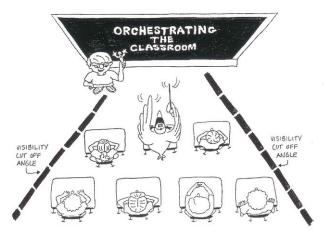
Illustrate your point whenever possible.

Diagrams and hands-on demonstrations are what hold the attention of the visual and kinesthetic learners.

takes it a step further, getting the students physically involved, hands-on, manipulating the lines will achieve the best results of all.

Illustrate Your Point

Get in the habit of drawing diagrams, writing outlines, or somehow illustrating your key points on a board, where they can visually reinforce your lesson and silently repeat it as often as your students glance at the board. Strategically pausing now and then to draw on a board also provides students with some helpful assimilation time and you with a moment to collect your thoughts.



Stand aside so everyone can see.

When giving chalk talks, avoid talking into the board. Pause to write or draw as needed; but then stand aside and turn to face your students when you speak. Block no one's view, and be sure everyone can hear you clearly. Be conscious of the visibility cut-off angle your body creates. When giving talks, demonstrations or any presentation, arrange student seating in a semi-circle or horseshoe large enough for everyone to see clearly.

Presentation Methods

Presentation Methods commonly involve a mix of interactive and non-interactive techniques:

Non-Interactive Techniques

- Lecture (auditory)
- Chalk talk (auditory & visual)
- DVD or video (auditory & visual)
- Powerpoint presentation (auditory & visual)

Interactive Techniques

- Discovery method
- Challenge Technique
- Listing Technique
- Pros & Cons Technique
- Student presentations

Interactive Teaching

Not every topic, however, lends itself easily to hands-on kinesthetic teaching techniques. Some topics involve concepts, rather than physical skills. They are the most challenging when teaching kinesthetic learners. Interactive teaching is quite often effective. The following are among the most common interactive teaching techniques.

Discovery Method

The Discovery Method is also known as the Socratic Method. It involves posing a series of easily answered questions which guide the class to a conclusion foreseen by the instructor. In response to the instructor's "loaded" questions the students participate in the process by volunteering answers. Each answer is a step toward a broader conclusion. This method works particularly well if the pace is quick and lively, the instructor illustrates each point on the board and the instructor actively involves and draws out responses from every student.

Examples

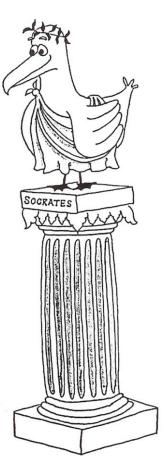


Keelboat

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The Discovery Method helps a student assimilate information by pressing the student to focus on the topic, think independently and actively respond. It also provides the instructor with valuable feedback on each student's level of understanding.

Teaching by guided discovery does not always draw out the desired responses right away. Sometimes the question must be repeated or rephrased. Reaching a desired conclusion sometimes can be unpredictably time consuming, so it may not always be a practical teaching technique when class time runs short.



When that is the case, a discovery/chalk-talk combination can help speed the lesson along. To save time, the instructor retreats to the speedier, self-pacing chalk-talk method of presenting the material, pausing only as time allows to challenge students with leading questions. By limiting interaction this way, the instructor gains more control over the pace. The trade-off is the risk of sacrificing some effectiveness. Maintaining as much active student participation as time and circumstances allow is the key to overall effectiveness in classroom teaching techniques.

Challenge Technique

The Challenge Technique is a slight variation on the Discovery Method. In the Challenge Technique the instructor also asks leading questions but calls on students at random without seeking volunteers.

Examples



Powerboat P. 61, Keelboat p. 62

In a shy, passive or reluctant group it presses every student to engage the topic and actively participate in the discussion. The class is likely to remain particularly alert, since no student knows who may be called on next for a response.

The Challenge Technique has the potential to be misused as a way to "catch" someone who was not paying attention. Calling on students by saying their names first, then asking a question will draw their attention and avoid embarrassing those who may have been momentarily distracted.

Listing Technique

The Listing Technique is another variation on the Discovery Method. It is most suitable for teaching topics with a series of related elements.

Example:

"What items do you think ought to be included on a pre-departure checklist?"

Each student is invited to provide an answer. The instructor lists the responses on the board. As the list grows, it serves as a constant visual reinforcement, imprinting the information in the students' visual memory. The technique helps maintain the class' attention, because the students are active contributors to a visible product.

Pros and Cons Technique

The Pros and Cons Technique is a further variation on the Listing Technique. It is useful for topics where the intent is to emphasize or clarify advantages, differences and limitations.

Example:

"Compared to planing hulls, can you think of any performance advantages or limitations of displacement hulls?"

The instructor makes two side-by-side lists of student responses on the board, one for advantages, one for disadvantages. The two lists visually reinforce the students' auditory input. The side-by-side display encourages visual comparison, and the interaction helps keep kinesthetic learners engaged.

The Purpose/Value Statement

It is helpful when introducing a new topic to begin by stating its purpose and value to the students. The purpose/value statement is a teaching tool. It is a brief opening remark designed to capture the students' attention. Students are more likely to pay attention if they perceive some useful benefit.

Briefly ask and answer the questions:

- "What is this for?"
- "What good is it?"

Example:

What is this life jacket for?

To keep you afloat in the water.

What is its value?

To keep you from drowning.



Correlational Connections

Students sometimes struggle to understand new material until they gain a point of reference – a similarity with something they already understand. When introducing a new topic, your students will often catch on faster if you start with an analogy – comparing the new idea with something familiar to them.

Example:

"A channel is like an underwater ditch. It provides a safe, deeper water pathway through surrounding shallower water."

The words *ditch* and *pathway* are common everyday words which help students visualize the meaning of the new technical term *channel*. Educators call these comparisons *correlational connections*.

Land Drills

Major lessons and conceptual material are often best taught on land or dockside, where the teaching environment can be better controlled. On the water, with boats in motion, there is little opportunity for sustained discussion, and there are often too many distractions and impediments to hearing - such as wind and engine noise.

Be sure to explain to your students the concept of a land drill and its purpose.

Though students may have a strong theoretical understanding of a skill introduced in the classroom, they still need a hands-on dry run, or 'walk-through', before attempting a complex skill in real time. Conceptually, beginners need to learn to stand before they can walk. And they need to walk before they can run.

A land drill provides the physical practice needed to develop spatial skills. Rehearsing a water drill as realistically as possible on land or dockside, helps strengthen students' understanding, ability, and confidence.

The best time to practice a new or complex skill is in a **land drill** before students get underway on the water. Land drills are simply down-tempo rehearsals of water drills and do not literally have to be performed on land.

Examples



Powerboat P. 63, Keelboat P. 64

Providing a land drill will allow you to have a controlled atmosphere in which:

- A complex skill or activity can be broken down into smaller segments and practiced at the desired pace.
- Students can begin to develop a spatial/physical understanding of the skill through simulated practice.
- Students can practice without avoidance behavior or fear.

Using existing local conditions can improve the value of a land drill. For example, make sure that a land drill for docking puts the bow into the wind. Whenever possible provide props or other devices that simulate the real situation to make a land drill more effective. Patiently help your students gain confidence in each component step. Then, when they are ready, join the steps sequentially into the complex skill.

Make sure that each student takes an active and equal role in your drill and practices the skill. Leaving anyone out of the drill decreases the kinesthetic value of your lesson. Every student must participate in a land drill for it to be effective!

A few possible land drill ideas:

- Person in the water rescue
- Leaving from and returning to a dock
- Turning the boat

Demonstrations

"Show them exactly what you mean" is wise advice for any instructor. A real time demonstration of a skill sets a visual standard of performance for students to imitate. Most people are visual learners, so students often imitate what they see rather than do what they are told. So it is important to conduct all demonstrations properly, "by the book." There should be no difference or conflict between what you say and what you do.

Do not cut corners or take any liberties when demonstrating standard procedures. It may only instill bad habits you will have to correct later.

Water Drills

After building student confidence and knowledge through a land drill, the next step in your lesson plan is to move to the water for actual practice of a skill in the controlled atmosphere of a **water drill**. Diagram a water drill on shore – perhaps as part of the land drill. This is the best time to answer questions and clear up any confusion about how the drill is to be conducted.

Remember to provide specific supervision until students are comfortable and capable of executing skills in the water drill.

The water drill is intended to provide full tempo, real time practice in merging the individual component steps into the more complex skill.

Laying Out Courses for Water Drills

When devising a course configuration, tailor it to the overall lesson plan of the day. Select the more controlled drills in the beginning and then move to the more complex ones.

This allows students to consolidate skills and achieve some level of success before moving on. In general, compact drill courses, whose turning marks are close together, are more motivating for students than longer courses.

Examples



Powerboat P. 65, Keelboat P. 66

Short courses:

- Provide instructors with better group control.
- Provide opportunities for more frequent positive reinforcement by allowing the students to reach each destination more often in the available time.
- Provide more practice in turning maneuvers. Repetition is an important ingredient in learning.
- Concentrate boats into a smaller area. Close proximity allows better communication from the instructor's boat as well as better visual comparison between boats. In close quarters students silently learn from one another by watching and comparing results.

Water Drill Prep Tip

Set your water drill course before class begins, so you don't waste time tossing buoys into the water during valuable water drill time. A pre-set course can be made 'perfect' before the students arrive on the practice site, and it can provide a rendezvous point for the class to gather.

Set your drill course well upwind of a lee shore or downwind obstructions. Expect steering errors from new helmsmen and occasional time spent drifting. Beginners often wander farther downwind than you had intended, so plan ahead; and take precautions in where and how you lay out the course.

Station the instructor's boat at a turning mark so you can give feedback to each student. Vary the direction students go around the buoys while doing the drills, so they aren't always doing port or starboard roundings.

Remember that your students are somewhat like a school of fish. If you can get a few to start a water drill, the rest should follow. Also your boat will hopefully work like a magnet so you can often lead them into a drill.

Being Seen

Visual communication techniques, such as gestures and hand signals, are best used when the student can easily see them without distraction from the central task. When an instructor is positioned behind a student, visual signals may go unnoticed. When being seen is necessary for effective communication, the instructor should move into the student's field of view.

When teaching from another boat, the instructor should position the boat ahead and slightly to one side of the student's vessel. From that position the student can see hand signals or gestures with a simple glance rather than a head turn.

Being seen and heard together, of course, is the most effective way to communicate on the water. Gestures amplify a spoken message by repeating it visually, and gestures provide backup for any words lost in wind or engine noise.

When To Stop Talking

While some instructors may offer too little feedback to their students, others talk too much. An instructor who talks too much at the wrong time is more of a distraction and a pest than a help.

One such time for an instructor to be sparing with words is during *overload*. A student experiences *overload* when there is too much happening too quickly for the student to assimilate any more input. While backing into a tight slip with a strong crosswind and current, for example, is not the best moment for a barrage of feedback. When a student is fully occupied with the demands of the moment, feedback probably will not be heard or remembered. Unless there is danger, wait for such a hectic situation to stabilize before beginning instructive feedback.

Self-Assessment & Review

Please choose your area for more specific area question.





Powerboat P. 77

5 - TEACHING MOTOR SKILLS

Read the Instructions & Guidelines module before beginning this module.

OBJECTIVES

After reading this module, you should be able to:

- Identify and explain the 3 steps in learning *Motor Skills: Cognitive*, *Mechanical* and *Adaptive Judgment*.
- Describe how you can reassure students who are in the Cognitive Phase of learning and are apprehensive.
- Explain the 3 steps in the *Mechanical Phase* of learning.
- Describe *Motor Memory*.
- Describe the 3 *Phases of Learning: Learning, Consolidation, Automatic.*
- Explain the difference between a *Learning Error* and a *Performance Error*.

Students may learn the theory and principles of boat handling in the classroom, but on the water is where they learn to apply them. That's where motor skills come in. A learner's motor skills are used in performing the physical part of a learned behavior, such as maneuvering a boat with precision or cleating a dockline. The mind-body learning connection is not complete until the student can smoothly and reliably accomplish specific physical tasks.

There is a simple and effective recipe for teaching a new skill. It is a three step process.

- 1. **Cognitive**: The learner first needs to *understand* the skill, its importance, and its intended result.
- 2. **Mechanics**: The learner then needs to learn how to physically perform the skill correctly.
- 3. Adaptive Judgment: Finally, the learner needs to develop the good *judgment* to know what adjustments to make to perform the skill successfully even when the circumstances change.

The Cognitive Phase

The instructor's goal in the cognitive phase is to convey a clear conceptual understanding of the skill and the intended outcome.

Initial briefings are best done in a classroom setting (when available) rather than outdoors because there are fewer distractions. A classroom also permits better use of visual aids, books, handouts, models, vessel demonstrations, teaching aids, a white board and A/V equipment.

In the cognitive phase the instructor provides a clear and concise *purpose/value statement*, then defines the skill, and explains how it is used in everyday circumstances. This shore side briefing is also the time to describe how that day's hands-on learning exercise will be conducted.

Example:

"Parking" a boat at a buoy is called mooring. Mooring is an essential and routine maneuver in boating. But, because it involves a number of elements, we need to practice it.

Boats come alongside moorings safely and gently like this [demonstrate]. They don't T-bone them like this [demonstrate]. Coming alongside allows some extra glide room for error. T-boning allows *none* [gesture]. So, let's first take a bird's eye view of our mooring buoy [draw while talking] and form a strategy for approaching it....

It is important to isolate and address one skill at a time and not jump ahead to future skills or topics. Focus strictly on the skill about to be practiced. Too much information at once risks putting the student into 'overload'. Like a sponge, once it is saturated, nothing more can be absorbed. Stick to one thing (or as few as possible) at a time. Return to the cognitive phase each time a new skill is introduced.

Be sure that students fully understand what is expected of them before they start. Live, real time drills, with plenty of repetitions, is the principal methodology for teaching new boating skills. If the lesson plans of the day calls for touch-and-go docking, for example, describe exactly what you expect with visual aids. Encourage questions, but defer details and demonstrations for the next (mechanical) phase of the learning process. Focus entirely on overview in the cognitive phase.

Many beginners are apprehensive when learning a new skill, so positive reinforcement is essential. Anxiety is a distraction which erodes concentration and impedes learning. Put beginners' fears and anxieties to rest early - in the cognitive phase – with a calm, upbeat, non-judgmental demeanor.

Reassure students that:

- "Learning new skills takes time and practice."
 - o Implication: You are patient. You are there to help.
- "Mistakes are normal in the beginning. They are a valuable part of the learning process."
 - Implication: Relax. No need to stress out over errors. Errors are opportunities to learn.
- "You are in no danger. It is safe."
 - o *Implication*: You are in charge and looking out for them.
- "Boating is only recreation. It is not life or death! Learning should be part of the fun."
 - o *Implication*: You have perspective and a sense of humor. They are in good hands.

When the students are clear on the skill to be performed, their anxieties are put to rest, and you have gained their trust; it is time for the hands-on mechanical phase.

The Mechanical Phase

There are 3 steps the instructor should follow in the mechanical phase:

- 1. Demonstration
- 2. Step by Step Breakdown
- 3. Practice

Demonstrate Exactly What You Want

Start with a visual model for your students to follow. Provide a real-time demonstration of exactly what you want to see the students do. Use multi-sensory techniques (show, tell, and do). Either perform the skill yourself, or have an assistant perform it while you provide commentary. Be sure everyone can see and hear clearly. Do not be shy about using gestures, props, and body language to convey your point. Visual learners will soon drift if all you do is stand still and talk.

Because it is their first impression, it is essential that this initial demonstration be performed correctly. Many learners will imitate exactly what they see you do. This is the performance standard which will stick permanently in their minds, so take pains to be textbook correct. It will be very hard to later 'undo' any errors from their memories.

Break It Down For Them

If the skill involves a series of sequential steps, break it down for the learner into its simplest individual elements. Repeat the skill again slowly. Demonstrate one step at a time, in the correct sequence, with commentary.

Examples



Powerboat P. 67, Keelboat P. 68

This sort of down-tempo slow motion demonstration can be employed for nearly any motor skill. Pausing with each step is both an opportunity to show proper technique and to point out possible trouble spots and pitfalls to avoid.

Examples



Powerboat P. 69, Keelboat P. 70

Immediately after the demonstration, have your students repeat each step for themselves. The idea is to have them learn each step separately and then put them all together to perform a more complex skill. Watch carefully, encourage constantly, and correct faults immediately. Do not allow bad habits to form. They will be much harder to correct later.

Close supervision is critical at this early stage of learning, so do not try to coach too many students at once. Remember the coaches' old saying: *A mistake undetected is a mistake uncorrected.* If possible, get help from another instructor or a qualified assistant for larger groups. With a smaller instructor/student ratio, your students are more likely to get all the individual attention they need, and the lesson can flow smoothly with minimal waiting time.

Budget Sufficient Time

If you are rushing the clock, your students may not have the time they need time to fully absorb the key elements. Time invested at this phase of learning will pay off down the road. After every student has shown satisfactory proficiency in the component steps of the overall skill, it is time to begin practice in real time.

Teaching Tips

Bear in mind that a significant percentage of your students are likely to have a learning disability of one kind or another. The way you teach can help to keep them up to speed with the mainstream group. Certain teaching techniques, which benefit mainstream learners as well as those with learning differences, can be incorporated easily and seamlessly into the lesson. Catch phrases, rhymes, alliteration, analogies and acronyms, for example, are more memorable to all learners than a plain dry recital of facts:

- The old saying red, right, returning, for example helps to remind us all to look for red navigational aids to starboard when entering a channel from seaward.
- Red port wine reminds everyone that the red running light is located on the port side of a vessel.

Perceptual differences can also affect learning. About 5% of the general population, for example, is colorblind to some extent. Red and greens are especially troublesome to many. So, when referring to a green running light, do not just tell your class where it is. Do not just point to where it is. Have the students touch it. Have them turn it on and off. That one small kinesthetic teaching technique can make all the difference to a variety of learning disabled students. Combine visual, auditory and

Practice Makes Perfect

There is no adequate substitute for plenty of real time practice with regular fault correction. Create a drill which requires frequent repetition of the target skill.

Starting with a learner's first attempt, a remarkable physical and mental process begins to take place which gradually leads to improved performance. Repeated actions establish neuro-chemical pathways which improve over time. The more a skill is performed the more efficient the mind-body connection becomes. Repetitions increase learning and actually reorganize the brain to perform better. A good lesson plan for teaching new motor skills should include exercises and drills with plenty of physical repetitions.

Example:

If you want to improve a learner's speed and reliability in tying a bowline or cleating a dockline, for example, create a drill where they do it over and over until it comes easily and quickly.

To keep the drill interesting, modify it after a while. Challenge your students to tie a bowline or cleat a line blindfolded. Then modify it again after they have mastered that. Challenge them to a time limit – say, perhaps, five seconds. Once they are successful, challenge them to do both. Do it blindfolded in less than five seconds. Or, try it from different positions (such as behind the back or above one's head) to improve spatial coordination.

Games and novelties such as this make learning fun and keep the learner motivated, emotionally engaged and focused. More importantly, sometimes skills well learned in play such as this may come in handy later on in a real life emergency – when handling line swiftly and reliably may be a matter of life and death.

The well-used *neuro-chemical pathways*, established by repetition exercises, over time make routine skills "automatic" in the mind of the learner. This is often called *motor memory*.

Skilled car drivers rarely consciously think about, or even look at, the pedals or steering wheel. They watch the road and think about where they want the car to go. Pedal work and steering are unconscious and almost automatic.

Tennis players don't look at the racket they hold. They focus on the incoming ball. Any necessary footwork and swinging the racquet are nearly unconscious. Similarly, the rudimentary boat handling skills which, you – an instructor - take for granted, require very little conscious effort on your part because of your long history of experience in doing it.

But for a novice, performing the very same rudimentary skills demands a much higher level of concentration. One of the goals of skill repetition drills is to make the skill automatic. Skill mastery frees up the conscious mind for other, more important, functions – such as keeping a lookout for hazards or navigating a crowded channel.

In repetitive drills, such as touch and go docking, it is good practice to rotate helmsmen every few repetitions. Students learn more, learn better, and learn faster when given brief breaks where they can watch a fellow student perform the same task. Observing others provides a learner with valuable opportunities for reflection, consolidation, and analysis. Students benefit the most from more than one turn at the helm, so be sure to provide enough time.

An interesting pattern normally develops when learners acquire a new skill. They pass through three distinct phases:

- 1. The Learning Phase
- 2. The Consolidation Phase
- 3. The Automatic Phase

Learning Phase

The Learning Phase when the learner first attempts to perform the correct steps of a new skill. First attempts are often awkward. This is where fault correction and encouragement are critical.

Teaching Tip

The errors a student typically makes while learning are either ones of learning or performance.

- A learning error is a fault based on a misunderstanding of the correct way to perform a skill. Fault correction may require a review or repetition of the original lesson.
- A performance error stems simply from a fault in the skill's execution. Correction of a performance error can usually be accomplished with a simple feeback sandwich.

Consolidation Phase

When the learner begins to reliably repeat the drill sequence in a smoother more coordinated way.

Motivated learners can become so absorbed in the challenge at this phase that their concentration and awareness level reaches a peak. They become less dependent on the instructor' feedback, and to some extent they are self-teaching. By experimenting and observing the result, learners begin to self-correct and even to self-reinforce.

In this phase learning takes place mostly kinesthetically and visually. The student receives instant steady feedback simply by feeling and observing the consequences of his/her actions. Repetitions build important channels of kinesthetic memory so that complex skills can gradually be performed more smoothly and with less awkwardness or hesitation.

This is a good time for the instructor to silently observe without interrupting. Allow this important process to take place little more than occasional encouragement.

The Automatic Phase

This is when things obviously start to click. The student not only understands what is required but also performs the skill smoothly and reliably. The learner develops self-confidence and becomes receptive to new information. This signals 'mission accomplished' and paves the way to introducing the next skill in the lesson plan learning sequence.

Adaptive Judgment

A learner who grasps the underlying principles of a skill is able to think and reason rather than simply to recall and repeat. This comes in handy when circumstances change. Then the learner must reevaluate the situation and make modifications to a fixed routine in order to achieve the same result.

Example:

If, for example, a student learns a skill such as docking a boat in a prevailing wind, the same student may well find it difficult to do the same thing if the wind shifts to a different direction. This is where adaptive judgment comes to the rescue.

An accomplished boat handler would recognize the problem, size up the situation; make the necessary adjustments to compensate for the leeway caused by the crosswind, and reverse into the slip successfully.

The difference is experience. Experience (practice) under a wide variety of circumstance helps to improves adaptive judgment. Learners have a better chance of making the right adjustments and succeeding at a task if they have faced the same circumstances before.

In a prescheduled course, instructors do not much opportunity to select the environmental conditions under which they teach a skill. The date and time are fixed. They also do not always have the opportunity to repeat a drill another day under different circumstances.

But it is possible to mix up the practice drills to provide a wider range of experience in the same lesson. One way to do this is to vary the routine. After basic skills are consolidated challenge the students to perform the same maneuvers – such as docking – with approaches from upwind, downwind, and in crosswind from both sides.

The wider the range of training drill conditions (different wind, current, and sea states) you can provide, the better equipped your students will be later on.

Self-Assessment & Review

Please choose your area for more specific area question.







Keelboat P. 92

6 - LEADERSHIP

Read the Instructions & Guidelines module before beginning this module.

Objectives

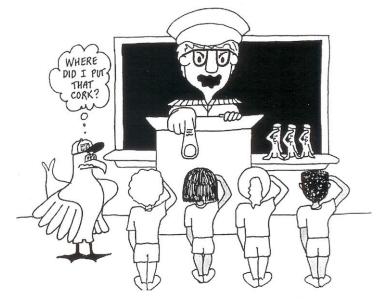
After reading this module, you should be able to:

- Describe the 3 Leadership Styles: Cooperative, Authoritarian and Wimp.
- Identify an instance when you would use *Authoritarian Leardership*.
- Identify at least 3 responsibilities of a leader.

Leadership Styles

Authoritarian Style

The Authoritarian Style is characterized by an autocratic and firm attitude. This style is often necessary in situations where the safety of students and boats is at risk. But avoid unnecessary or exaggerated use of this style. You may be perceived as a "Dictator." The *Dictator* is a domineering personality who insists on making all the decisions and giving orders. The Dictator rarely listens to students or involves them in any decision making regarding their instruction.



The Authoritarian Style



The Wimp Style shows no leadership control at all.

Wimp Style

At the other end of the leadership scale is the Wimp Style. The Wimp is weak and submissive and has difficulty making even minor decisions. The Wimp is a pushover who yields too easily in order to avoid conflict. He may be perceived as spineless for failing to take firm charge when the situation warrants.

Cooperative Style

The Cooperative Style of leadership is characterized by teamwork. It is a delicate balance of solid independent leadership and thoughtful student consultation. The Cooperative instructor neither dictates nor wimps out. The Cooperative instructor encourages student involvement in decision making, listens carefully and fairly, and maintains control without needlessly asserting authority over the students. The Cooperative instructor favors positive leadership skills rather than arrogance or autonomy.

In general, US Sailing/US Powerboating instructors to use the Cooperative Style. Nevertheless, they also should be able to shift quickly to the Authoritarian Style when it is the most effective way to safeguard their students' safety. The challenge for instructors is knowing *when* the Authoritarian Style is justified and necessary, and *how* to avoid overusing it.

Goal Setting

Part of good leadership and teaching is establishing clear and attainable goals. Goals need to be stated at the outset to help initiate student motivation.

Goal setting should involve both long and short term goals. Short term goals are stepping stones toward higher achievement. Short term goals are important to motivation. They provide intermediate opportunities for success. They serve as encouraging reminders to students that they are making daily progress toward the more difficult long term goals.



Setting goals and marking progress provide inspiration and encouragement.

Taking Charge

Students want and need to know what they should be doing. They look to their leader, the instructor, for direction. Students soon lose patience and confidence in leadership which appears confused or uncertain.

Organize yourself *before* class. Have a well-defined plan of what you want from a class and then communicate it clearly.

When it is time for decisive action, give direct orders, not suggestions or requests. Direct orders need not be arrogant or abrasive; they simply need to be specific and unambiguous. When it is appropriate to use the Authoritarian style of leadership, use a command voice. Speak simply, clearly, unequivocally and with a firm command tone. Look your students squarely in the eye when issuing orders.

Follow the four W's.

1. **W**ho

3. When

2. What

4. Where

Example:

"Dale, get a couple of life jackets from the locker and meet me at the dock in ten minutes."

You cannot expect specific results if your orders are vague and unspecific. "Somebody get a bucket," for example, does not address anyone in particular, so it may get no response at all.

Listening Skills

Because teaching is a two-way communication process, where teacher and student provide feedback to one another, listening well is vital. An instructor should listen well, interrupt only to clarify, and pause to think carefully before responding.

When a student asks a question in a classroom setting, good active listening involves repeating the question for the benefit of the other students who may not have heard, then, after answering, asking if the response fully answers the question. Conscientiously responding to student questions and concerns builds trust and strengthens respect.

Good active listening also sometimes requires discerning the "real message" buried in the words. A student who offers frequent weak excuses, for example, may be masking a totally different hidden concern. Excuses are often indicators of avoidance behavior.

Team Building

Team building involves building bonds between members of a group. In group instruction it is an important responsibility. The instructor is the group leader and catalyst for student relations. Good morale and a cooperative spirit among classmates can greatly enhance the teaching environment and learning outcome. Break the ice early among new students. Make introductions right away so that no one feels they are among strangers. Have them engage in activities which require interaction and cooperation.

Much of the team building process takes place naturally as new students get to know one another. The instructor should be a facilitator not a focal point in the process. Gradually, as familiarity and trust develop, communication, teamwork and morale grow. An instructor should monitor group morale and employ team building exercises as often as needed to

keep the learning experience fun and productive.

Other Considerations as a Leader

Maintaining Control & Discipline. Controlling student misbehavior is not ordinarily an issue when teaching adults, yet it is nearly an everyday occurrence when teaching children. *Safety, fun and learning* are unalterable components of an instructor's mission; no individual student's behavior should be allowed to deprive the rest of the class from reaching these goals.



The learning environment must be fun and safe to be effective.

Here are some measures to consider in controlling student behavior:

- **1.** Prevent behavior by taking prevention steps, such as:
 - Define rules of behavior
 - Have a structured learning environment
 - Keep students busy
- **2.** Refocus attention (redirection)

- **3.** Ignore behavior (extinction)
- **4.** Increase responsibility for the student
- 5. Punish student
- **6.** Suspend student
- **7.** Expel student from course

Sexual Harassment and Abuse

In today's world everyone must be aware of certain sensitivities whether they be to gender, ethnic origin, disability, age, sexual orientation, etc. Instructors must be aware of all these concerns whether they are dealing with adults or children. They must be aware of, or become aware of, what is considered an appropriate interaction with a student.

Self-Assessment & Review

Multiple Choice (choose correct answer)

1.	Which type of leadership style is described when an instructor has difficulty making decisions and doesn't take charge? a. authoritarian
	b. whip
	c. cooperative
2.	Which type of leadership style is described when an instructor is rigid, makes all the decisions, gives orders, and doesn't involve students in decisions? a. authoritarian
	b. wimp
	c. cooperative
3.	Which type of leadership style is described when an instructor promotes teamwork between his students and himself, but can readily shift to authority and decision making when students' safety is involved? a. authoritarian
	b. wimp
	c. cooperative
4.	Which of the following are responsibilities of a leader/instructor? a. sets long term and short term learning goals
	b. lets students make all of the decisions
	c. takes charge and maintains the mission of safety, fun and learning
	d. lets students develop their own groups & provides no teambuilding
	e. provides feedback only if a student asks for it
	f. ignores unsafe situations or behaviors
	g. communicates a well-defined plan for the class
	h. facilitates group morale and teambuilding
	i. provides clear, direct orders when situations require decisive action
	j. ensure that safety, fun and learning are part of a course
Ar	swers: <u>1. B</u> <u>2. A</u> <u>3. C</u> <u>4. A, C, G, H, I, J</u>

Discovery Method - Powerboat

Question 1: "What point on a boat does the boat appear to turn

around?"

Answer 1:"Pivot point"

Question 2: "What happens to the bow and stern when making a

turn?"

Answer 2: "The bow rotates inward of the direction of the turn and

the stern swings away from the turn."

Question 3: "What point should you steer when making a turn?"

Answer 3: "The boat's pivot point"

Question 4: "What appears to happen to the pivot point when backing

the boat?"

Answer 4: "It appears to move aft."

Question 5: "How does this affect the bow when making a backing

turn?"

Answer 5: It causes the bow to swing outward in a wider arc than the

stern."

Back

Discovery Method - Keelboat

Question 1: "What causes the boat to lose speed?"

Answer 1: "The sails are luffing or pulled in too tight."

Question 2: "If they are luffing, how would you get your boat

speed back?"

Answer 2: "Pull them in."

Question 3: If the sails are still luffing, what should you do?"

Answer 3: "Turn the boat away from the wind."

Back

Challenge Technique – Powerboat

"Susie, which way should you move the gearshift lever to back down?"



Challenge Technique – Keelboat

"Susie, which way should you move the tiller to jibe?"



Land Drills - Powerboat

An effective 'land' drill for a pivot turn, for example, actually can be conducted onboard with a boat secured to the dock – or free floating with the engine shut off.



Land Drills - Keelboat

An effective 'land' drill using the tiller, for example, can be conducted onboard a boat secured to the dock -- or free floating.

Back

Water Drills - Powerboat

A controlled water drill example: Crosswind Figure-8 Drill

A complex water drill example: Backing on a Slalom Course



Water Drills - Keelboat

A controlled water drill example: Crosswind Figure-8 Drill

A complex water drill example: Right-of-Way Drill (with boats sailing in opposing directions)



Break it Down for them - Powerboat

A pivot turn is a multi-step skill. It involves a specific sequence of actions such as turning the wheel, shifting between forward and reverse gear, and using the throttle. As you perform the maneuver, describe each element, its timing, and explain why you are doing it that way. Pause for a moment at the conclusion of each step to let it sink in.



Break it Down for them – Keelboat

Tacking the jib is a multi-step skill. It involves a series of actions, such as turning the boat into the wind, releasing the jib, the turning the boat away from the wind, and trimming the jib on the new tack with the leeward winch. As you demonstrate the maneuver, describe each element, its timing, and explain why you are doing it that way. Pause for a moment at the conclusion of each step to let it sink in.

Back

Break it Down for them I Down-tempo – Powerboat

A common error in learning the pivot turn with an outboard motor is turning the wheel before shifting to neutral. Remind the student, "The sequence of steps is important. Be sure to shift to neutral before turning the wheel."



Break it Down for them I Down-tempo – Keelboat

A common error in tacking the jib is to release the jib sheet too early. Remind the student, "The sequence of steps is important. Be sure to release the jib as the boat is turning into the wind, but not before the jib luffs."



Self-Assessment & Review Module 2 - Powerboat

True or False

 3. 4. 5. 	 Positive reinforcement encourages student learning. Once a behavior or skill is learned, you do not have to reinforce it again You must positively reinforce a skill every time it is demonstrated. Self-reinforcement occurs when a student is motivated and reinforced internally. Negative experiences can lead to fear and avoidance behavior.
6.	You should "praise in public; reprimand in private."
Μι	ultiple Choice (choose correct answer)
7.	When students have pride of accomplishment, enhanced self-worth, fun and excitement, what type of rewards are these? a. intrinsic rewards
	b. extrinsic rewards
	c. positive rewards
	d. extinction rewards
8.	What type of rewards are keepsakes, mementos, prizes and certificates? a. tangible intrinsic rewards
	b. positive intrinsic rewards
	c. tangible extrinsic rewards
	d. intangible extrinsic rewards
9.	What type of rewards are praise, compliments, encouragment and approval? a. tangible intrinsic rewards
	b. positive intrinsic rewards
	c. tangible extrinsic rewards
	d. intangible extrinsic rewards

Number the Correct Sequence for the Feedback Sandwich (1,2,3)
10 State or describe a student's error.
Explain how to correct the problem and offer encouragement.
Praise what the student did correctly.
Scenario Using the Feedback Sandwich
In the following scenarios, provide feedback using the three steps of the Feedback Sandwich.
11. A student is turning the steering wheel in the wrong direction when in reverse.
1
2
3
12. When making a pivot turn, a student shifts from forward to reverse too quickly
1
2
3
13. A student approaches a dock using too high speed.
1
2

14. You notice one of your students avoids taking the wheel and controls during practice. What would you do to change the situation and encourage the student to participate?

- 1. Your boat speed and amount of turn are just what they should be.
 - 2. But you've turning the steering wheel in the wrong direction.
 - 3. If you turn the wheel in the same direction you want the stern to turn, you'll get it right every time.

Self-Assessment & Review Module 2 - Keelboat

2. 3. 4.	 Positive reinforcement encourages student learning. Once a behavior or skill is learned, you do not have to reinforce it again You must positively reinforce a skill every time it is demonstrated. Self-reinforcement occurs when a student is motivated and reinforced internally. Negative experiences can lead to fear and avoidance behavior. You should "praise in public; reprimand in private."
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	b. positive intrinsic rewards
	c. tangible extrinsic rewards
	d. intangible extrinsic rewards
9.	What type of rewards are praise, compliments, encouragment and approval? a. tangible intrinsic rewards
	b. positive intrinsic rewards
	c. tangible extrinsic rewards
	d. intangible extrinsic rewards

Number the Correct Sequence for the Feedback Sandwich (1,2,3) 10. ____ State or describe a student's error. _____ Explain how to correct the problem and offer encouragement. Praise what the student did correctly. Scenario Using the Feedback Sandwich In the following scenarios, provide feedback using the three steps of the Feedback Sandwich. 11. A student turns the tiller the wrong way, nearly hitting a rubber buoy. 1. 12. While tacking, a student releases the jib sheet too late. 13. A student approaches a dock using too high speed.

14. You notice one of your students avoids taking the tiller during practice. What would you do to change the situation and encourage the student to participate?

Back

Answers:

- 1. T
- 2. F
- 3. F
- <u>4. T</u>
- <u>5. T</u>
- <u>6. T</u>
- 7. A
- 8. C
- 9. D
- 10. 2, 3, 1
- 11. 1. You are holding the tiller correctly.
 - 2. But you are turning it the wrong way.
 - 3. If you move the tiller "toward trouble" you will turn in the correct direction and you'll get it right every time.

Self-Assessment & Review Module 4 - Powerboat

1	It is not necessary to use a lesson plan.
2	You should begin with a purpose/value statement to introduce a new
3	topic. You should use correlational connections (comparing new material with information previously learned) to help students learn new material.
4	A syllabus is an outline which lists topics and activities in a course.
5	You should not change or modify your lesson plan.
6	progress or other factors
7	You should not allow time for closure and review after each lesson.
3	You should record how your lesson worked and students progressed.
9	Complex skills may be broken down and practiced more slowly during land drills.
10	You do not need to write key points on a board or make diagrams for
11	your students. Land drills are not simulated practice and do not provide spatial / physical understanding of skills.
12	19. 1. y 3. 2. 3. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.
Multiple (Choice (choose correct answer)
	an instructor asks leading questions but calls on students randomly to get ers to the questions, which of the following teaching techniques is she
•	a. discovery method
	b. listing technique
	c. pros & cons technique
	d. challenge technique
by stu	an instructor asks a question, then writes down the answers volunteered udents, which of the following teaching techniques is he using? a. discovery method
	b. listing technique
	c. pros & cons technique
	d. challenge technique

15. When an instructor poses a series of questions designed to lead students to "discover" a conclusion, which of the following teaching techniques is she using?
a. discovery method
b. listing technique
c. pros & cons technique
d. challenge technique
16. When an instructor asks a question and records the students' answers in two columns listing advantages and disadvantages, which of the following teachin techniques is he using? a. discovery method
b. listing technique
c. pros & cons technique
d. challenge technique
17. Which of the following are interactive teaching techniques? a. lectures
b. discovery method
c. pros & cons technique
d. videos
e. listing technique
f. challenge technique
g. student's own presentation

18. Which of the following should be part of your a. clearly stated goals	lesson plan? i. teaching methods		
b. curriculum	j. season calendar		
c. materials needed	k. demonstration description		
d. schedule for the week	I. time allotments		
e. topic sequence	m. broken equipment list		
f. props list	n. audio-visual aids		
g. list of all staff	o. evaluation methods		
h. required equipment	p. injury list		
Questions to Think About & Ask Yourself			
19. You are preparing a 5-minute classroom pred docking, including tying off and knowing you	•		
What will be your purpose/value statement?			
What specific things will you do to make the (auditory, visual and kinesthetic) and interacti			
20. You are preparing a 10-minute dockside den aboard your boat, which will include proper estate registration.	-		
What will be your purpose/value statement?			

	What specific things will you do to make the demonstration multi-sensory (auditory, visual and kinesthetic) and interactive? Add your suggestions below:				
	How would you position the boat to maximize student learning during the demonstration? What would you do to minimize environmental distractions?				
21.	You are preparing a lesson on using a spring line when docking between two boats. Keep in mind that some students confuse the difference between forward and aft (after) spring lines, and which ones should be used.				
	What will be your purpose/value statement?				
	What correlational connections will you use?				
22.	You are preparing a lesson on how to leave and return to a slip.				
	What will be your purpose/value statement?				
	What <i>correlational connections</i> will you use?				

- 23. When conducting water drills, think about the following:
 - Diagram and clearly explain the drill.
 - Check to be sure your students understand what they will be doing on the water.
 - Tailor the drill to the lesson you are teaching.
 - Select more controlled drills in the beginning.
 - Add more advanced drills as students progress.
 - Use short courses (2 to 4 minutes between buoys).
 - Set courses upwind of a lee shore and downwind of obstructions.
 - Station your boat at a mark to provide maximum feedback.

What else should you consider when preparing for and conducting water drills? Add your suggestions below:

		Back		
Answers:				
<u>1. F</u>	<u>5. F</u>	<u>9. T</u>	<u>13. D</u>	<u>17. B, C, E, F</u>
<u>2. T</u>	<u>6. T</u>	<u>10. F</u>	<u>14. B</u>	<u>18. A, C, E, F,</u>
<u>3. T</u>	<u>7. F</u>	<u>11. F</u>	<u>15. A</u>	<u>H, I, K, L, N</u>
<u>4. T</u>	<u>8. T</u>	<u>12. F</u>	<u>16. C</u>	

Self-Assessment & Review Module 4 - Keelboat

1	_ It is not necessary to use a lesson plan.
2	You should begin with a purpose/value statement to introduce a new
0	topic.
3	 You should use correlational connections (comparing new material with information previously learned) to help students learn new material.
4	· · · · · · · · · · · · · · · · · · ·
5. <u> </u>	You should not change or modify your lesson plan.
6	You should have a backup lesson plan in case of weather changes, class progress, or other factors.
7	You should not allow time for closure and review after each lesson.
8	_ You should record how your lesson worked and students progressed.
9	
10	land drills.
10	value atualanta
11	Land drills are not simulated practice and do not provide spatial / physical understanding of skills.
12	
Multiple	Choice (choose correct answer)
	n an instructor asks leading questions but calls on students randomly to get vers to the questions, which of the following teaching techniques is she
	_ a. discovery method
	_ b. listing technique
	_ c. pros & cons technique
	_ d. challenge technique
by s	n an instructor asks a question, then writes down the answers volunteered tudents, which of the following teaching techniques is he using? _ a. discovery method
	_ b. listing technique
	_ c. pros & cons technique
	_ d. challenge technique

15. When an instructor poses a series of questions designed to lead students to "discover" a conclusion, which of the following teaching techniques is she using?
a. discovery method
b. listing technique
c. pros & cons technique
d. challenge technique
16. When an instructor asks a question and records the students' answers in two columns listing advantages and disadvantages, which of the following teaching techniques is he using? a. discovery method
b. listing technique
c. pros & cons technique
d. challenge technique
17. Which of the following are interactive teaching techniques? a. lectures
b. discovery method
c. pros & cons technique
d. videos
e. listing technique
f. challenge technique
g. student's own presentation

lesson plan'? i. teaching methods			
j. season calendar			
k. demonstration description			
I. time allotments			
m. broken equipment list			
n. audio-visual aids			
o. evaluation methods			
p. injury list			
have decided to focus on red and green lateral marks. What will be your purpose/value statement? What specific things will you do to make the presentation multi-sensory (auditory, visual and kinesthetic) and interactive? Add your suggestions below:			
nonstration on necessary items mergency equipment as well as a			

	What specific things will you do to make the demonstration multi-sensory (auditory, visual and kinesthetic) and interactive? Add your suggestions below:				
	How would you position the boat to maximize student learning during the demonstration? What would you do to minimize environmental distractions?				
21.	You are preparing a lesson on using a spring line when docking between two boats. Keep in mind that some students confuse the difference between forward and aft (after) spring lines, and which ones should be used.				
	What will be your purpose/value statement?				
	What <i>correlational connections</i> will you use?				
22.	You are preparing a lesson on how to leave and return to a slip.				
	What will be your purpose/value statement?				
	What correlational connections will you use?				

23. When conducting water drills, think about the following:

- Diagram and clearly explain the drill.
- Check to be sure your students understand what they will be doing on the water.
- Tailor the drill to the lesson you are teaching.
- Select more controlled drills in the beginning.
- Add more advanced drills as students progress.
- Use short courses (2 to 4 minutes between buoys).
- Set courses upwind of a lee shore and downwind of obstructions.
- Station your boat at a mark to provide maximum feedback.

What else should you consider when preparing for and conducting water drills? Add your suggestions below:

		Back		
Answers:				
<u>1. F</u>	<u>5. F</u>	<u>9. T</u>	<u>13. D</u>	<u>17. B, C, E, F</u>
<u>2. T</u>	<u>6. T</u>	<u>10. F</u>	<u>14. B</u>	18. A, C, E, F,
<u>3. T</u>	<u>7. F</u>	<u>11. F</u>	<u>15. A</u>	<u>H, I, K, L, N</u>
<u>4. T</u>	<u>8. T</u>	<u>12. F</u>	<u>16. C</u>	

Self-Assessment & Review Module 5 - Powerboat

1.	When students are in the cognitive phase of skill development, instructors should focus on one skill at a time.
2.	On-the-water practice drills are an important activity during the cognitive
3.	phase of learning. Demonstration don't need to be performed correctly. Students will figure
4.	out their own best way to perform a skill. During the mechanical phase of skill development, instructors should use the 3 steps of 1) demonstration, 2) step by step breakdown, and 3) practice.
5.	It is not necessary to break down complex skills into sequential steps. Students will figure it out for themselves.
6.	During the early stages of learning, close supervision and correction of errors are critical.
7.	You can help all students learn by combining visual, auditory and kinesthetic techniques whenever possible.
8.	When teaching motor skills, you should include drills and exercises with many physical repetitions of the skill.
9.	It is unlikely you will have a student with a learning disability in your class.
	 .Which learning phase is a student in when he develops judgment skills and makes the necessary adjustments to perform the skill in a variety of different circumstances or changing conditions? a. cognitive
	b. mechanical
	c. adaptive judgment
11	. Which learning phase is a student in when she learns to physically perform the skill correctly? a. cognitive
	b. mechanical
	c. adaptive judgment
12	c. adaptive judgment . Which learning phase is a student in when he understands the skill and its importance and intended result? a. cognitive
12	. Which learning phase is a student in when he understands the skill and its importance and intended result?

What is the process called where through repetition, neuro-chemical pathways are formed and the brain remembers how to do a motor skill automatically? a. demonstration
b. multi-sensory
c. motor memory
During which learning phase should you focus on one skill at a time and add other topics at a later time? a. cognitive
b. mechanical
c. adaptive judgment
During which learning phase should you provide "textbook correct" demonstrations, break down complex skills into sequential steps, provide practice for each step of the skill and then combine the steps and practice the skill as a whole? a. cognitive
b. mechanical
c. adaptive judgment
During which learning phase should you try to provide practice in a wide variety of situations and circumstances? a. cognitive
b. mechanical
c. adaptive judgment
When a student performs a skill incorrectly and does not understand how to do it correctly, and the instructor has to re-teach the skill, what type of error is it? a. learning error
b. performance error
When a student understands how to perform a skill correctly, but makes a mistake and the instructor needs to provide appropriate feedback rather than re-teaching the skill, what type of error is this? a. learning error
b. performance error

19.	Learning a new skill requires a high degree of concentration. Some students may lose their concentration or find it stressful if they are on the helm for too long. What can you do to keep them learning without becoming overwhelmed?
20.	One of your students is having difficulty with performing an <u>astern slalom</u> . Errors include turning the helm in the wrong direction and using too much throttle. Do you think this is a learning error or a performance error? What are some of the things you can do to help this student?
21.	One of your students is having difficulty doing a pivot turn. Errors include confusion over which direction to turn the helm, and turning the helm while still in gear. Do you think this is a learning error or a performance error? What are some of the things you can do to help this student?
22.	One of your students is having difficulty with coming alongside a dock. Errors include: 1) approach angle is too great; 2) approach speed is too fast; 3) the turn to bring the boat parallel to the dock occurs too late.
	Which error would you work on first? next? last?
	What are some of the things you can do to help this student?

2 Volumes proporing a los	non on uning a apring line when dealing between two
boats. Keep in mind that	son on using a spring line when docking between two at some students confuse the difference between pring lines, and which ones should be used.
What specific things wil (show, tell and do) and	I you do to make the <i>cognitive phase</i> multi-sensory interactive?
	l you do to make the <i>mechanical phase</i> (<i>demonstration n,</i> and <i>practice</i>) multi-sensory and interactive?
4. You are preparing a les	son on how to leave and return to a slip.
What specific things wil (show, tell and do) and	I you do to make the <i>cognitive phase</i> multi-sensory interactive?
,	I you do to make the <i>mechanical phase</i> (<i>demonstration</i> , and <i>practice</i>) multi-sensory and interactive?

25. Your students are working on mastering and applying the skills they have learned. How can you improve their <i>adaptive judgment</i> in the following motor skills situations?			
Docking Practice (e.g., different wind and current conditions, different dock locations, etc.):			

Self-Assessment & Review Module 5 - Keelboat

1.	When students are in the cognitive phase of skill development,	
2.	instructors should focus on one skill at a time. On-the-water practice drills are an important activity during the cognitive	
3.	Demonstration don't need to be performed correctly. Students will figure	
4.	During the mechanical phase of skill development, instructors should use the 3 steps of 1) demonstration, 2) step by step breakdown, and 3)	
5.	It is not necessary to break down complex skills into sequential steps.	
6.	During the early stages of learning, close supervision and correction of	
7.	You can help all students learn by combining visual, auditory and	
8.	When teaching motor skills, you should include drills and exercises with	
9.	It is unlikely you will have a student with a learning disability in your class.	
Μι	ultiple Choice (choose correct answer)	
10	. Which learning phase is a student in when he develops judgment skills and makes the necessary adjustments to perform the skill in a variety of different circumstances or changing conditions? a. cognitive	
	b. mechanical	
	c. adaptive judgment	
11	. Which learning phase is a student in when she learns to physically perform the skill correctly? a. cognitive	
	b. mechanical	
	c. adaptive judgment	
12	.Which learning phase is a student in when he understands the skill and its importance and intended result? a. cognitive	
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	c. adaptive judgment	

13. What is the process called where through repetition, neuro-chemical pathways are formed and the brain remembers how to do a motor skill automatically? a. demonstration
b. multi-sensory
c. motor memory
14. During which learning phase should you focus on one skill at a time and add other topics at a later time? a. cognitive
b. mechanical
c. adaptive judgment
15. During which learning phase should you provide "textbook correct" demonstrations, break down complex skills into sequential steps, provide practice for each step of the skill and then combine the steps and practice the skill as a whole? a. cognitive
b. mechanical
c. adaptive judgment
16. During which learning phase should you try to provide practice in a wide variety of situations and circumstances? a. cognitive
b. mechanical
c. adaptive judgment
17. When a student performs a skill incorrectly and does not understand how to do it correctly, and the instructor has to re-teach the skill, what type of error is it? a. learning error
b. performance error
18. When a student understands how to perform a skill correctly, but makes a mistake and the instructor needs to provide appropriate feedback rather than re-teaching the skill, what type of error is this? a. learning error
b. performance error

19.	Learning a new skill requires a high degree of concentration. Some students may lose their concentration or find it stressful if they are on the helm for too long. What can you do to keep them learning without becoming overwhelmed?			
20.	One of your students is having difficulty with performing a jibe. Errors include over-steering and not controlling the mainsail. Do you think this is a learning error or a performance error? What are some of the things you can do to help this student?			
21.	One of your students is having difficulty steering with the tiller. Errors include confusion over which direction to move the tiller, and over-steering. Do you think this is a learning error or a performance error? What are some of the things you can do to help this student?			
22.	One of your students is having difficulty docking. Errors include: 1) approach angle is incorrect; 2) approach speed is too fast; 3) approach speed is too slow.			
	Which error would you work on first? next? last?			

	What are some of the things you can do to help this student?
	You are preparing a lesson on reefing. Keep in mind that some students confuse the order in which the main halyard and the reefing line are adjusted.
	What specific things will you do to make the <i>cognitive phase</i> multi-sensory (show, tell and do) and interactive?
	What specific things will you do to make the <i>mechanical phase (demonstration, step by step breakdown, and practice</i>) multi-sensory and interactive?
24.	You are preparing a lesson on how to leave and return to a mooring.
	What specific things will you do to make the <i>cognitive phase</i> multi-sensory (show, tell and do) and interactive?

	What specific things will you do to make the <i>mechanical phase (demonstration, step by step breakdown, and practice</i>) multi-sensory and interactive?			
25.	. Your students are working on mastering and applying the skills they have learned. How can you improve their <i>adaptive judgment</i> in the following motor skills situations?			
	Docking Practice (e.g., clocations, etc.):	lifferent wind and c	urrent conditions, different dock	
Returning to a Slip Practice:				
		Back		
An	swers:			
1. 2. 1 3. 1 4. 5. 1 6.	<u>T</u> E E <u>T</u> E	7. T 8. T 9. F 10. C 11. B 12. A	13. C 14. A 15. B 16. C 17. A	