Working Together

SMS BASICS Competency Management Systems

Ask The Trainer Adult Learning Theory

SAFETY DECK Standardizing Lists

LEGAL BITTS Trainer/Assessor Liability

Art of Towing Back On Deck

Bridging the Gaps Registered Apprenticeship

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Letter from the Editors

Captains Among Captains



"By Learning You Will Teach; By Teaching You Will Learn."

~ Latin Proverb

There was a well deserved celebration recently to commend and congratulate the first graduating class of Pacific Maritime Institute's (PMI) Workboat Academy Towing Officer Apprenticeship Training Program. PMI's program is a great example of "a rising tide floats all boats" – in this case the rising tide was a collaborative effort of industry, an educational facility, and strong leadership.

During a speech given by Captain John Kessler, the Chief Instructor at PMI, he resurrected the highly honored phrase "Captains Among Captains" when acknowledging individuals who contributed to the success of their program; one being our regular contributor to *Safe Voyage Magazine*, Captain Jeff Slesinger.

What are Captains Among Captains? According to Captain Kessler, "he or she is someone others look up to; whose opinion is always respected; and, someone who others aspire to become." It is something earned not given. Captain Kessler goes on to say that "none of us got to where we are today without someone else helping us." This doesn't mean the position is higher." In other words, it could be the new deckhand mentoring the seasoned Captain about entering and retrieving data easily on the computer. It is working with each other to make the job better, more efficient and at the end of the day, safer.

"Captains Among Captains" are leaders, coaches, trainers and above all mentors. In this issue we are focusing on how to grow your own mariners and the critical component of communicating the "how tos" within our industry. We have some excellent articles written by our "Captains Among Captains" who are willing to share their knowledge and expertise with the intent to make your job better, more efficient and at the end of the day, safer.

Enjoy and Safe Voyage,





Back On Deck

by Captain Jeff Slesinger Director–Safety & Training Western Towboat Company



Whether you're in upper management, a safety director, port captain or captain, it's easy to forget the real circumstances that the mariners under your direction deal with day to day. That concept was brought home to me when I found myself in Alaska working alongside the people I hire, train and dispatch.

Due to brutal winter weather, three of our tugs and barges had been delayed coming across the open waters of the Gulf of Alaska. All three were destined for the same port, and all three arrived within hours of each other. The weather had abated enough to allow the tugs to transit the Gulf, but conditions in the arrival port were still very winter-like. About three feet of wet snow covered the walkways and bollards on the dock, the temperature was hovering around 20 degrees, and the wind was blowing about 30 knots. Periodic snow flurries reduced visibility to a hundred yards or so, and any object exposed to wind-blown spray was covered with ice ranging from a light glaze to several inches.

"In a tactful way, they were telling me that I'd probably forgotten the real working conditions in which I routinely assigned them to work."

The convergence of all three tugs and tows would require extra shifting of the barges in and out of the single, unloading berth. I had flown up to Alaska to meet the fleet and to serve as an extra hand. I was prepared to function in whatever role needed filling - logistics planner, captain, docking pilot, line-handler or, if need be, cook. The tug crews quickly nixed the latter role. My limited repertoire of grilled cheese sandwiches and soup was well known. There was no way they were going to let me sit in the nice, warm galley and miss this opportunity to have a desk jockey get out and work in the miserable weather.

Although masked in the good natured banter going back and forth between the crew and me, they were sending a very clear message - "We want you

to appreciate our work firsthand." They knew that their jobs were not foreign to me - I'd spent years doing the very tasks they were about to take on - but they sensed that my memory had conveniently faded a bit as to some of the details. In a tactful way, they were telling me that I'd probably forgotten the real working conditions in which I routinely assigned them to work.

They were absolutely right.

My task was to serve as deckhand while we brought the first barge into its berth. I donned my winter gear, put on a hard hat and float coat, and ascended the barge "pigeon holes" (foot and handholds inset into the side of the barge). Once on the barge I grabbed the long-handled, rubber-headed sledge hammer we would need to clear ice.

At this particular port our company docks 420' barges that carry both rail cars and containers in overhead racks. I was assigned to assist in handling the first line deployed to the dock - the springline. In order to get to the appropriate barge cleat I had to go midships on the side of the barge opposite of where I had just boarded. The direct route to this location was about 150' away. But that pathway was obstructed.

This particular barge had a full load of rail cars. The strings of rail cars stretched fully from bow to stern and port to starboard. Depending on the type of rail car, the clearance between them was sometimes only inches. Certainly not enough to allow a man in winter gear to easily pass. Nor was crawling underneath the railcars an option, since each railcar was secured to the barge deck with a series of jacks, chains and ratchets.

I followed behind one of our more experienced deckhands. We made our way to the bow of the barge,

and walked across the barge's foredeck to the opposite side. We chose a path in front of the spray shield; it was clear of obstructions but the footing was slippery and handholds were clumsy. The foredeck was covered in rutted ice and the hand rails, normally a series of 3 horizontal pipes were now a solid wall of ice.

"Once we arrived at the midships cleat the real work began clearing the cleat of ice and faking out the frozen 2 ½" diameter, 120' long mooring line."

Once on the other side of the barge we still had to make our way another 200' to the midships cleat. Like following a mountain guide, I placed my feet and hands exactly as the deckhand did while he deftly made his way between, under and

over rail cars. We stepped over, crawled under and squeezed through spaces that were just big enough for an average size man to pass.

Because the footing was so uneven, my gaze was constantly directed downward towards the deck. That technique turned out to be good for the feet but bad for the head. Twice, my head hit a tight lashing chain or the frame of a rail car. Fortunately, my hard hat took the brunt of those collisions.

Several times during the weave through this obstacle course my pant legs, jacket or the sledge hammer in my hand temporarily got hung up on the sharp edge of a rail car, jack or chain hook. Moving down the side of the barge was slow and highly irritating. It was like trying to pass through a swarm of kindergartners who constantly tugged at your leg, grabbed your arm or bopped you on the head to get your attention.

Once we arrived at the midships cleat the real work began - clearing the cleat of ice and faking out the frozen 2 ½" diameter, 120' long mooring line. There was a sense of urgency now as it had taken us fairly long to get to our station. We could just make out the outline of the dock in the snow flurries, indicating the mate and tug captain had brought us far down the approach line to the dock. It wouldn't be long before the radio call came to put up the spring line.

There was enough room for only one person to swing the rubberized sledge hammer to break ice. That task fell to me. I had the right tool but using it was awkward. There wasn't enough space to stand and get a full swing at the cleat so it turned into a hands and knee affair while "choking up" on the handle. The ice parted easily from the cleat but it left heavy chunks on deck that obstructed the cleat and the opening in the bulwarks. These had to be cleared by hand. Both of us set to work throwing ice chunks overboard.

The mooring line had been secured for sea by some long link chain and ³/₄" shackles. Of course now the shackles were frozen. These too had to be beaten and cleared of ice. Although the shackle pins had been greased, the viscosity of the grease resembled molasses in the cold temperatures. It took two of us to work the shackle pin back and forth until it had loosened up enough to continue with full turns.

Once the mooring line was freed from its shackles, we set about faking it down. The dock was clearly visible now, and it would be a matter of only a minute or two before the spring line would be called for. We worked as fast as we could to get the line ready but manhandling this frozen pretzel into some semblance of usable shape took too much time.

The hand held radio crackled "Is the spring line over yet?" The radio call to pass over the first line came while we were wrestling with the line. There we were, stopped and 10' off the dock. Despite the blustery wind, the captain and mate had done a masterful job at maneuvering the barge to be in a position to secure to the dock. The heaving line had been flung over from the beach and the monkey's fist rested patiently on the cap rail of the bulwark, waiting to be married to a larger working line. Unfortunately there would be no wedding. Our line wasn't ready and a big gust of wind began blowing the barge off the dock. In a few short seconds the heaving line stretched to its full length,

pulling on the monkey's fist until it popped over the cap rail and into the water. Our window of opportunity to secure the barge on this first approach had just closed.

The hand held radio crackled "Is the spring line over yet?" "No" I replied. The captain's response on the radio was civil but his frustration was palpable. We drifted sideways in the wind, away from the dock. The mate and captain conferred over the radio on the best method to maneuver in for a second approach. While they set to work working the barge into an approach position, the deckhand and I finished faking out the mooring line. Finally, we were ready.

Although the winter air was cold and biting I was sweating profusely due to all the physical effort it took to get over to the midships cleat, clear it of ice and ready the mooring line. The wind propelled frozen air felt good...for about 15 minutes. It would take another 30 minutes before we successfully completed our second approach. During that time the deckhand and I stood at our station. It wasn't long before the sweat inside my cheap gloves began to freeze and my damp, inner clothing quickly sucked the heat out my body. By the time we got back into position to deploy the mooring line, my fingers were numb and I was shivering. I was better off getting rid of the gloves, sticking my bare hands in my pockets and pulling them out when needed. We sent the line over at the appropriate time, checking and surging it as the mate and captain worked the barge in alongside the dock. Once we were all secured my fellow deckhand gave me a big bear paw slap on the back and said "Isn't this fun?"

I have to choose a different word to describe the events of that day - refreshing. The cold air of that day was more than physically invigorating - it cleaned out the cobwebs in my head. It revived my awareness of what it takes to work on deck. As a manager or supervisor it is easy to forget these working conditions when not regularly working on deck.



If you're a tug captain it's important not to forget how much time it takes to move around the barge in bulky winter and safety gear. There will be circumstances when it may sometimes make it prudent to hold off beginning a docking maneuver in order to allow the deck crew extra time to ready the lines. Extraordinary conditions may require extraordinary time to ensure that critical lines are ready. As a port captain don't forget the physical demands of being a deckhand - feel the fatigue in your arms from handling frozen lines, the backache from lifting while on your knees and the loss of agility caused by wearing winter safety gear. As a safety director, remember that price is not always the bottom line. The cheap rubber gloves with no lining may prove useless in sub-freezing temperatures. The less expensive mooring line material that readily absorbs water will freeze, lose its pliability and may not be functional in critical line-handling situations. And, in upper management, don't forget that the success of a company is dependent on skilled crewman carrying out critical tasks in dynamic and, at times, harsh working conditions.

I have years of seagoing experience, and I hold the expertise of professional mariners in high regard. Yet, if I don't periodically get down on deck, or in the wheelhouse or engine room I lose the feel for the work. And that loss becomes a barrier to understanding and appreciating what I'm asking our mariners to carry out in the execution of their duties.

Many of us who serve as marine managers and supervisors came ashore after many years at sea. Even though we've brought that seagoing experience to land jobs, we should always find a means to get our feet wet once in a while and remember just how cold that water can be.

SMS Basics

Compentency Management Systems



by Dione Lee President - QSE Solutions

A Competency Management System standardizes position specific tasks by knowledge area in order to ensure quality performance, safety, and regulatory compliance. When developing an in-house Competency Management System, you can plug-in to your existing quality, safety and/ or environmental management system(s) by updating policies and procedures already in place for designing, implementing, maintaining and continually improving your system.

A well developed and implemented competency based management system should produce the following benefits:

- Provide a framework in which to grow your own sustainable workforce
- Provide a comprehensive career pathway for advancement
- Define clear expectations by clarifying roles, responsibilities and job performance criteria
- Bridge gaps between shoreside and vessel personnel
- Increase quality and safety performance
- Capture the knowledge and expertise of an aging workforce
- Identify and address skill gaps
- Promote cross training and transferability between positions
- Establish operational consistency and standardization
- Promote team building and leadership
- Identify critical skill sets by task
- Provide a snap shot of employees' competency for crewing and other management decisions
- Focus on the human element
- Integrate fragmented requirements (licensing, training, and performance criteria)
- Provide structured learning opportunities and tools onboard the vessel

Dione has over 20 years experirence working with the maritime industry, partnering with individuals and organizations to implement quality, safety, environmental and competencey management systems. She has developed and fine tuned a unique approach for bringing positive and sustainable change within organizational operating environments. To learn more visit us at www.qsesolutions.com.

com'pe·ten·cy

n The ability to perform a task based on specified qualifications / criteria.

Legal Bitts

Liability Exposure of Maritime Trainers and Assessors

By Thomas G. Waller

Mariners have, over the course of history, been observed and mentored, assessed and trained in the workings of ships. For millennia, competence and proficiency were key to advancement, and perhaps survival, at sea. In the twentieth century, the U.S. Coast Guard moved away from practical assessment. It chose, instead, to link sea service with competence and examination with proficiency. If a mariner met sea-service requirements and passed a written test, a license or seaman's document was deemed earned. Only recently, after a century of technical approaches to safety issues, have the U.S. and international maritime communities resurrected the missing human factor in assessing mariners. Competence and skills testing have returned and now complement written exams and sea service requirements. Predicates to advancement now include "assessment," "competence," "familiarization training," "practical examination" and "proficiency." Human factors have returned to the judgment of mariners.

Training and assessment are delivered, of course, with their own human factors. What happens when a trainer or assessor mistakenly instructs, wrongly trains or improperly assesses? Does the trainer or assessor face liability months or years later when a student or applicant is injured or property is damaged or the environment harmed? What is the exposure? Are there practical means to reduce or alleviate potential liability while continuing the requisite training and assessment?

TRAINERS AND ASSESSORS. A Designated Examiner is defined by Coast Guard regulation as "a person trained or instructed in techniques of training or assessment." Qualified Instructors are persons "trained or instructed in instructional techniques." Practical Demonstrations are activities performed under the direct observation of a designated examiner for the purpose of establishing proficiency and practical skills. All of the terms have built-in potential for oversight and mistake.

Instructors, trainers, examiners and assessors come in multitudes of forms and structure. Captains mentor and train mates. Mates observe captains. Captains and mates train and instruct seamen. Senior mates counsel and instruct newer officers or deck crews. Office personnel (e.g., Port Captains) join vessels at sea to train and assess personnel for regulatory and operational safety. Independent firms specializing in maritime training offer seminars to companies and individuals. The Coast Guard relies on all of this training and assessment in its evaluation of applicants. The system has proven effective, but not without subjectivity, idiosyncrasy and potential for error.



VICARIOUS LIABILITY. Personal liability for individual wrongs, including civil negligence, is a fundamental tenet of our socio-legal habitat. Vicarious liability is, in turn, legal responsibility by virtue of a legal relationship. It allows the negligence of a wrongdoer to be imputed to another person or entity who otherwise has no direct participation in the wrongdoing. Vicarious liability descends from the maxim respondeat superior, or "let the master answer."

Generally, a person or entity (e.g., maritime operator) may be vicariously liable, and thus legally responsible, for damage to property or injury to another if the wrongdoer was an employee acting in the course and scope of employment. A corporation, for instance, can act only through its officers and employees and, as such, an act or omission of the officer or employee is, by operation of law, the act or omission of the employer/ corporation.

Where vicarious liability applies, it allows an injured person or property owner to sue either a.) the employee directly, b.) the employer vicariously, or c.) both. If an employee is sued, it is no defense that he or she was acting within the course and scope of employment. As a practical matter, however, in the maritime setting, injured personnel or property owners do not generally pursue recovery from individuals so long as vicarious liability is available and an active, viable company was involved in the activity.

EMPLOYER LIABILITY FOR ACTS OF ITS OWN EMPLOYEES. The

liability of a maritime employer for the wrongful acts of its employees in the regular course of their work is near-certain. If a deckhand is injured, for example, as the result of improper or insufficient supervision, training or instruction, the employer will most likely be found liable. By way of example, a licensed mate or Port Captain giving faulty training or instruction on line-handling, breaking tow or abandoning ship exposes the company to liability for resulting injury or property damage. The in-house supervisor/trainer (e.g., shore-side employee) remains personally liable, as well, to his injured co-worker for any improper training, assessment or supervision.



LIABILITY OF INDEPENDENT CONTRACTOR. Analyzing the potential liability of independent contractors is, in the context of observation, training and assessment, more complex. Independent contractors may be involved in the training and assessment of mariners on myriad levels. The contractor may offer verbal instruction to supervisors or, instead, directly to shipboard personnel. The seminars may be formal or informal and might occur at sea, dockside or in a company office. Written materials may or may not accompany the verbal instruction or training. Paperwork, if given, might simply involve hand-outs with generalized outlines or, conversely, comprehensive written training materials with specific guidelines. Testing may be offered. Certifications might be issued to successful applicants. The contractor may, or may not, offer its services for a fee, perhaps giving complimentary training and instruction as a means of marketing its written materials.

Like a maritime employer, an outside contractor may offer faulty instruction, training or assessment. The flaws may result in bodily injury, damage to property or environmental harm. If a claim is made, the operator/employer may deny responsibility for the injury or damage if it views the root cause as attributable to training or instruction given by the independent contractor. Liability, however, is not so easily conveyed.

Practically speaking, the independent contractor will be the primary target for liability only if it retains full control over the actual work performance. Control over the workplace -- and the work itself -- is rarely applicable to independent contractors; the employer usually maintains control over the vessel and the work environment. More importantly, an employer generally cannot delegate to a trainer or assessor the duty to provide a reasonably safe place to work for employees. (The Occupational Safety and Health Act of 1970 requires, in fact, that employers covered under the Act furnish employment and a place of employment free from recognized hazards that might cause death or serious physical harm to employees.)

The trainer or assessor, after his/her work is complete, does not and cannot control the conditions of the workplace. For example, a trainer might instruct a mariner on proper seamanship, but if equipment or machinery fails resulting in injury, the root cause of injury would not practically be attributable to any training. More importantly, the instruction and training offered by independent contractors, of necessity, must ultimately be approved or rejected by the employer. The approval or rejection must occur before any such practice or procedure is implemented. If accepted and thereafter implemented, the practice or procedure is naturally controlled and supervised, as a matter of fact and of law, by the captain, officers or shore-side supervisors. Simply put, the independent contractor is a broad step removed from any incident/ injury due to the assent and control exercised by the employer/operator.

Distinctions could be made if an injury occurs during the actual training and instruction provided by the independent contractor -- with the contractor present and in control of the training -- but with the contractor removed from the vessel, the employer/operator almost certainly remains primarily liable to persons or entities adversely affected.

INSURANCE. Injury and property damage may reasonably be expected to occur occasionally as the result of faulty training, instruction or assessment. Thus, maritime employers almost universally have in place liability insurances designed to protect against injury and property damage. (Environmental harms are less frequently or comprehensively covered.) Independent contractors may face similar liability exposures, though less frequently, but should have in place insurances commensurate with the exposed risk.

LIABILITY CONTROL. As implied in the foregoing comments, each class of participant in the training/assessment process can take steps to control and/or limit liability. The employer can do so by investing the time and money necessary to create and continue fully developed safety programs, including training and assessment for its own employee trainers/mentors and hiring competent and well regarded third party or independent contractors to assist. The employee trainer/mentor can control or limit liability by making sure he/she is fully informed, operates within the guidelines of the employer's programs, and does not offer advice inconsistent with industry standards. The third party or independent contractor can control/limit liability by making sure the employer renews and approves everything being offered and the training is consistent both with the employer's own safety programs and with industry standards.

As noted, the employer will routinely maintain the comprehensive insurance programs necessary to address

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> Capt. Jonathan E. Kjaerulff President Fremont Maritime Services / India Tango Marine Fire Training Program

To order your copy, go on-line to www. qsepublishing.com. You can pay by major credit card through Paypal. bodily injury and property damage risks which may arise out of training/assessment programs, has the direct responsibility for its personnel and its actions, so legally tends to be the first line in the remote event a claim develops.

Tom Waller is an attorney with Bauer Moynihan & Johnson LLP in Seattle.



Mariner's Forum

Guarding Against Complacency

By Pat McCombs Lead Tankerman– K-Sea Transportation Pacific Division

One of the most important aspects of being a tankermen is guarding against complacency. When constantly performing a task over and over you become "competent." However, you always have the inherit danger of becoming self-satisfied and unaware of the potential dangers you felt when you first started your job.

I have found that having a plan from start to finish before one drop of petroleum is placed on the barge is one of the most important safeguards of avoiding danger and complacency. Having a plan is more than what tanks will be loaded or discharged. Having a plan will include valve alignment, connections, hoses and pumps to be used, draft considerations, safety, and the ability to visualize and think about the consequences of your actions.

Remember, we must always do the utmost to control the things that can be controlled (including ourselves) and not lose sight of the concentration and single minded approach that is essential to safe and successful cargo operations.



By Lee & Lee

Tith the new U.S. Coast Guard Medical and Physical Evaluation Guidelines in place, it is essential that mariner's, especially deck, engineering, and radio officers become and stay healthy to perform their duties.

Physical Ability Guidelines that are evaluated include:

- Heavy lifting
- Agility
- Hearing

Existing Medical Conditions that require further review by the Coast Guard and supplemental medical data include:

- Asthma •
- Skin diseases
- Back pain

5 Simple Steps to Improve Your Health Right Now

- 1. Wash your hands thoroughly and frequently throughout the day, especially before eating
- 2. Take advantage of your Dental Plan: visit the dentist for preventive check-ups
- 3. Breathe deeply and slowly throughout the day: inhaling through your nose and exhaling through your mouth
- 4. Eat slowly, chewing carefully
- 5. Drink more water

If you have a healthy and hearty dish you would like to share, please submit your recipe to office@qsepublishing.com. Thank you.

Carrot Fries

1 pound of carrots, cleaned and peeled 1 Tablespoon of vegetable or olive oil Salt and pepper to taste

- 1. Preheat the oven to 425° F. Grease a cookie sheet with oil and set aside.
- 2. Cut the carrots into thin strips.
- 3. Toss carrots with oil and salt in a mixing bowl until well coated.
- 4. Spread evenly on cookie sheet.
- 5. Cook until tender (approx. 20 minutes)

Recipe from The Galley Chef - A Healthy Guide for Hearty Eats Onboard the Vessel

"The first wealth is health."

- Ralph Waldo Emerson





Standardizing Lists by George Clark

Culture: It's how we have always done things; It was good enough for my father, so it's good enough for me; It is just the way it is.

Over the course of a couple careers, I have gotten to experience a few different cultures including shipping, aviation and politics. Leave the last one alone, it is just an ugly thing better left uncommented on.

Shipping or going to sea has centuries of tradition, often unhampered by progress or constructive criticism. Our terminology and our customs have been pretty much set in stone, at least until the advent of Safety Management Systems and Bridge Resource Management and a few other programs that have way too many acronyms. Still, there is an air of "we know how to do things better because, well, we have been doing them for a long time".



Only recently have simulators really started to be an acceptable tool for mariner training and the evaluation of personnel. Now, when a mariner has a problem at sea, he can be taken into a simulator and the situation can be reenacted so that he can learn from it and be trained to handle it better in the future.

The next step is something we can also take from our aviation friends; the use of checklists on a routine daily, watch by watch basis. They use them to brief a flight, perform the pre flight inspection, start the airplane, prepare for takeoff, climb, perform a mission, descend, land, shut down and debrief.

We use them to some extent now for things like Declarations of Inspection, Security, Voyage Planning and Captain/Pilot briefings but they really need to become part of our everyday lives at sea.

- A standard watch relief checklist would ensure that all hazards, traffic, degraded equipment conditions, navigation issues get turned over to the oncoming watch.
- ☑ Start up and shut down of equipment would get done the same way every time without the opportunity for personal improvisation or shortcuts that cause problems when steps are omitted or purposefully not completed.
- \blacksquare Maintenance items would all be done with a record of their completion.
- ☑ In an emergency like a fire or loss of propulsion, the crew would have reminders of all the items that need to be done.

- A checklist is especially useful when someone might be getting roused from sleep to respond immediately.
- Crew coordination would be enhanced because of the standardized means of transferring information every watch.
- ☑ Tank levels would not be missed because someone forgot to mention them.
- \blacksquare Fuel transfers could be managed rather than responded to.

Finally, assumptions could be cut out of the equation. If something does not get briefed, the oncoming watch would know to ask about it.

Checklists are tools that organize, focus, and keep the important items in mind so that the job at hand can be done correctly every time. They help to reduce human error and keep procedures and policies at the forefront of the operator and the responder.

It is interesting that we always have time to do something right the second time (if given the chance) when we could have saved so much time, effort, and energy if we had done it right the first time. A checklist can help us get it done right the first time.

Workboat Book

"Healthy and Hearty Eats Onboard the Vessel"



The Galley Chef was developed to provide mariners with the basic tools to safely create simple and nourishing meals onboard the vessel. Topics include: the importance of eating right and food quality; organization; storage; safe food handling and sanitation; personal hygiene; and, serving techniques. In addition, cooks from various workboats share some of their favorite recipes and ideas, including Premier Chef Captain Chris Starkenburg. Captain Starkenburg has and will delight crewmember palates with his delicious, yet easy recipes and meal planning suggestions for cooking onboard the vessel.

Whether you are an experienced cook or just starting off, you will enjoy reading, referencing and trying out the great recipes in this helpful book.



To order your copy of The Galley Chef, go on-line to www.qsepublishing.com. You can pay by major credit card through Paypal and you don't need an account.

Ask the Trainer

Adult Learning Theory

by Captain Jill Russell



What is Adult Learning Theory?

"We're ready; throw everything you've got at us!" The captain stood there looking defiantly at me as he issued the challenge. As tempted as I was to concoct an impossibly complex scenario, I prefer to begin my fire fighting response audits with a baseline assessment of the crew's knowledge and skill. So, in response I asked: "How about if we just start with your crew pulling out some equipment for me? Let's start with the portable fire pump." Disappointed, the captain pulled out his VHF and was about to call the mate, when I interrupted him and asked if the cook would know how to operate the pump. "He better, he was standing right there last time the mate ran it", replied the captain. The mate and the cook brought out the pump. As the mate began to set it up, the captain told him to stop and then said to the cook, "Go ahead, run it". The poor cook stood there, blank faced and then proceeded to fumble around until it was clear to all of us that he had no idea how to even begin to hook up the hoses, let alone start it.

How could this happen? As the captain said, the cook was standing right there the last time the mate ran the pump. But does that count as training? The mate said that he was just happy to have the time to pull the pump out and "show the guys how to operate it". Clearly, whether it was a demonstration or a more formal instruction exercise, it was not effective as a training session. Let's take a look as to why.

Unfortunately, the reality of today's vessel operations is such that we are all pressed for time, and any training we have the luxury of conducting onboard needs to be to the point and highly effective. By taking into account a few simple principles of adult learning into your training sessions, you can improve the onboard attitude about attending training sessions, increase crew retention of the training topic, and perhaps most importantly, lessen the amount of time you need to spend in the effective delivery of the lesson.

There are several principles of adult learning that are incorporated into every successful onboard training program:

- 1. Adults have life experience.
- 2. Adults are willing to learn if they see the benefits of acquiring new information.
- 3. Adults learn in a climate that minimizes anxiety.
- 4. There are several variations in adult learning styles.

Let's take a look at each of these:

Adults Have Life Experience

You have spent a lifetime accumulating the knowledge and skills that you use everyday on your ship. If you ordered a new type of line, you probably would not appreciate the salesman telling you how to tie a bowline.

Safe Voyage[®] Safety Meetings



The Safe Voyage® Safety Meetings were developed to meet regulatory training requirements by mariners for mariners. Each topic includes guidlines to facilitate discussion onboard the vessel and includes a place to add your company logo.

Over 24 Topics to Choose From Including:

Situational Awareness Survival Suits Security Rounds Bridge Transits Back Safety Line Handling Vessel Access Fall Overboard Prevention PPE Hazard Communication Oil Transfer

To order your customized version of Safe Voyage® Safety Meeting, contact us at office@gsesolutions.com

Confined Space Awareness

You want to know how strong the line is, whether it floats or not, etc. Your trainees also have experience and knowledge. The more you can tie together your crewmembers' current knowledge and the new knowledge they are about to acquire, the deeper and more permanent their learning will be.

Adults Are Willing To Learn If They See The Benefits Of Acquiring New Information.

Crewmembers will learn best when the training topic is relevant to their ability to perform their job more effectively. Each training topic should start with a "What's In It For Me?", also known as a WIIFM. "Because the Company says so" tends not to be as motivating as saying "wearing safety goggles during pressure washing the deck will prevent paint chips from impaling your eyeball".

Adults Learn In A Climate That Minimizes Anxiety.

Adults have understandable anxiety about looking bad in front of their peers. It is your responsibility to ensure that their learning environment is positive and your crews are comfortable participating in the training. If you embarrass a crewmember for asking a "stupid" question or for making a mistake, you run the risk of shutting them down to the point where they will not participate in the training and miss the objective of the session.

There Are Several Variations In Adult Learning Styles.

There are three primary adult learning styles:

- 1. Visual learning by looking, seeing, viewing, watching;
- 2. Auditory learning by listening, hearing, speaking; and,
- 3. Tactile/Kinesthetic learning by experiencing, moving, doing.

Although we all incorporate all three learning styles, most people lean towards one type of preferred learning style. By combining learning styles you are able to capture the entire audience during your training session and therefore maximize your training time. For example, when you are practicing donning an immersion suit, you can reach all three learning styles by explaining proper techniques (auditory) while demonstrating those techniques at the same time (visual). Then have each crewmember don a suit while you again explain the proper technique (tactile/kinesthetic).

Your role as a trainer onboard your vessel is an important one, whether that training is formal or informal. By utilizing the basic adult learning principles listed above into your training, you will be maximizing your effectiveness and your time. Crewmembers will start to look at you as a mentor, not just their boss, and

possibly ask more questions to avoid costly mistakes during daily operations. Most importantly, should they find themselves on that foundering vessel in the middle of the night, they will be better prepared to deal with that emergency, keeping themselves and their shipmates safe.

If you have a training question or challenge that you would like Jill to address, please submit to: office@qsepublishing.com.

Captain Jill Russell has over 20 years experience in the maritime industry and is considered an expert in training and training techniques that work both ashore and onboard.



Bridging the Gaps

Registered Apprenticeship

By Anne Wetmore US DOL Office of Apprenticeship State Director

A pprenticeship is the oldest workforce development training model, used successfully for centuries to train workers to become masters of their trade, under the watchful guidance and training of a seasoned, skilled journey level worker or mentor, with the skills needed to carry on the expert work in that occupation for generations. Even though apprenticeship may be the oldest workforce training program, it is being looked at again, and used successfully as a new solution to many of our workforce training challenges faced today. Some of those challenges include the skills shortages, aging workforce, technology and regulation changes, the growing diversity of our labor pool, as well as the basic recruitment and retention issues. Employers, unions, training organizations and governmental agencies are grappling with these issues and realizing that the old way is becoming the newer, more successful way of doing things in workforce development. Many are turning back to the apprenticeship model. This is especially being seen in many industries that didn't previously use the apprenticeship model of training. Industries such as healthcare, information technology, education, transportation, energy, financial, and public sector just to name a few, are now finding that holistic training that apprenticeship provides, better meets the needs of both the employer and employee than other training programs; it's a better return on investment for training dollars spent.

Apprenticeship consists of paid on-the-job training, under the supervision of a journey level worker or

"Even though apprenticeship may be the oldest workforce training program, it is being looked at again, and used successfully as a new solution to many of our workforce training challenges faced today." mentor, supplemented by related instruction in a specific occupation. As the apprentice skills increase, their wages increase. Apprenticeship is competency based and industry driven. It is a voluntary system and is open to both employers that are open-shop, as well as employers and unions that are in a collective bargaining agreement, in partnership with a training provider and the government agency overseeing apprenticeship in that area.

Technical assistance and registration is overseen by the US Department of Labor or their State equivalent agency, to help in developing the registered apprenticeship and training program, according to industry needs and standards. The Office of Apprenticeship can further assist apprenticeship programs with locating additional resources through partnering with One-Stop Centers, Community and Technical Colleges, Workforce Development Councils, Community Based Organizations and local and national grant opportunities.

In the Maritime Industry, the most recently registered apprenticeship was developed and registered through partnerships of the Pacific Maritime Institute, five employers, and one local union based out of the Puget Sound area for the occupation of Officer in Charge of a Navigational Watch. This is the first in the nation for this occupation. The apprenticeship is open to additional participants. The program is registered

with the U.S. Department of Labor and was recently granted reciprocal recognition by the Washington State Apprenticeship and Training Council. This will allow the registered apprentices who qualify for Unemployment Insurance to have access to additional benefits while in classroom training. Gregg Trunnell of Pacific Maritime Institute is the contact for those interested in participating in this apprenticeship program.

Another apprenticeship program in the maritime industry is located on the East Coast with the Seafarers International Union and Employer Sponsors, in Piney Point, Maryland for the occupations of Able Seaman and Cook. They have been using registered apprenticeship since 2003, with about 1,000 apprentices having completed the program.

There are many ways expanding registered apprenticeship in the maritime industry can assist employers, employees, training providers and the local community and economy.

What makes apprenticeship so beneficial to employers?

RECRUITMENT. There is a system in place to train workers with low skills, who have the attitude, work ethic and desire to work in the maritime industry. Also partnerships with other governmental and community based organizations can help recruit and screen for the employer and refer the most likely to succeed in an apprenticeship.

TRAINING STRUCTURE IN PLACE. All parties know what is expected of them through registered apprenticeship, including the on-the-job training, classes required, as well as what the role of the apprentice and the mentor are. It is all spelled out in the apprenticeship agreement.

RETENTION. This career pathway allows employees to advance within the company, so loyalty is higher to staying there throughout their career. Also, mentoring helps the apprentice feel part of a team and culture in the maritime world quicker and better, so leaving is less likely to happen.

SAFETY AND TRAINING FOR CURRENT NEEDS OF INDUSTRY. Apprenticeship is a structured training system but it is flexible to meet the changing needs of the industry workforce. All aspects of the occupation requirements are learned in a safe, efficient and current way of doing things.

FLEXIBLE ADVANCEMENT. Some apprentices may come into their training with skills already. These apprentices can be advanced and complete their apprenticeship quicker. Likewise, if an apprentice is slower, and needs to work longer to master a competency that is allowed also.

WAGES ADVANCE AS SKILLS ADVANCE. The employer only pays a percentage of what a skilled worker in that occupation would make to apprentice, because the apprentice's skills are only a percentage of the worker's skills. As the apprentice skills increase, their wages increase.

WORKFORCE DEVELOPMENT RESOURCES. The Apprenticeship System is a part of the Employment and Training Administration of the U.S. Department of Labor, which authorizes Workforce Development Act monies that fund many services to employers and employees. Whereas there is no set money given to apprenticeship programs in general for implementation, there are partnerships that can be developed, to help with recruitment, retention, and training with the various workforce partners.

What makes apprenticeship beneficial to employees?

PAYCHECK AND TRAINING ASSISTANCE. An apprentices is able "to earn while you learn" the industry specific skills needed today, while earning a paycheck to support their families. This is much better than taking out student loans and going to schools where it's hoped will lead to a good job one day. Additional resources may be available to help apprentices with some of their expenses.

CAREER PATHWAY. The apprentice enters their training with low skills and has a clearly, defined career pathway, where they are offered training on the job and through the classroom to continue advancing their career, obtaining higher skills and higher wages as they continue.

ADULT LEARNING STYLES, The different learning styles of adult learners are all utilized in apprenticeship training. Practical learning, along with theoretical learning in a more holistic way of training, benefits many adult learners.

MENTORING. The importance of the mentoring component for apprenticeship cannot be overemphasized. The mentor supervises, evaluates, counsels and helps the apprentice learn, and feel a part of the culture quicker. Many apprentices and mentors might be shy about asking for help or helping, if they didn't have some structure in place that makes it clear of their role as a mentor and or apprentice. That role includes reaching out to each other to help the apprentice move forward so everyone benefits.

Registered Apprenticeship also benefits the community and the economy, as the apprentices in training are earning an income, paying taxes, while supporting themselves and their families. The US DOL is strongly encouraging the expansion of apprenticeship as a talent development strategy in our country. Together we can help employers, employees, the community and our economy.

These are a few of the benefits of registered apprenticeship programs. There are additional occupations that could be trained using the apprenticeship model. Where there is a need for better recruitment, retention, passing on the knowledge of soon-to-be retirees, and training; registered apprenticeship may be an answer.

Currently, there is interest in developing apprenticeships within the engineering occupations in in the maritime industry.

For more information on registered apprenticeship you can contact Anne Wetmore, State Director, U.S, Department of Labor, Office of Apprenticeship Washington and Oregon States in Seattle WA. Wetmore.anne@dol.gov or 206-553-0076.

What's New

Escort Team Training

What happens when you bring together the best talent, expertise and training equipment in the business? The Ultimate Learning Opportunity.

The maritime industry is loaded with high caliber men and women, the "Top Guns" in their field of expertise. These very talented individuals help to move more goods through our ports safely and with less impact on the environment than any other mode of transportation available today.

There's no doubt that Pacific Maritime Institute is one of the premier maritime training schools in the United States. They have teamed up with QSE Solutions to provide the Ultimate Learning Opportunity for Escort Team Training.

A combination of Puget Sound Pilots, Alaska Tanker Company Masters, and Crowley Escort Vessel Captains will run through 14 Simulation Scenarios on two TRANSAS Full Mission Simulators to learn critical thinking and resource management skills.

How does Escort Team Training Work?

The goal of this training philosophy is the accelerated acquisition of higher-level decision-making skills to prevent human error induced accidents.

The basic philosophy for this course is Scenario Based Training (SBT), For SBT to be effective there must be a purpose for the passage and consequences if it is not completed as planned.

It is vital that the instructor communicate information in advance and the facilitator extract key information for continual improvement at the end of every training scenario.

In between, there is a weaving and integration of high-end communication techniques, technical information of the equipment and ship handling skills, regulatory requirements, and clearly defined roles and responsibilities. Information included in each scenario includes: pre-conferences, departure points, destination, vessel type and characteristics, roles of bridge team members, immediate traffic, environmental conditions and learning outcomes.

After each simulation scenario the participants are asked to assess their own performance and in particular consider and verbalize what influenced their decisions. Discussion is facilitated and supported with technical expertise and clear direction provided to encourage a change in the thought process, habits, and behaviors of the participants in training.

The PMI Escort Team Training provides an opportunity to practice critical skills in a realistic situation like moving a fully laden oil tanker with Pilot onboard and an escort tug tethered, heading Northbound approaching Rosario Strait and Lawson Reef, when... something happens, can't say what...but the Team handles it perfectly.

To find out more about PMI's Escort Training, contact Gregg Trunnell at gregg.trunnell@mates.org. For MITAGS' Escort Training, contact Bob Becker at rbecker@mitags.org.