Changing the Culture of Safety in the Fire Service

By Ronald J. Siarnicki and Richard Gist

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Educational Objectives

On completion of this course, students will:

1. Outline the components of “culture” as it applies to the fire service.
2. Discuss the relationship between attitude and behavior.
3. Identify the main components of the Theory of Planned Behavior and apply them to creating cultural change.
4. Conduct a basic “hot wash” following company-level operations.
5. Explain the implications of consistent and systematic After-Action Review (AAR) for promoting a culture of safety.

BY RONALD J. SIARMICKI AND RICHARD GIST

What if there were one simple thing you could do to help turn the corner toward the “culture of safety” we have all been seeking? What if that one simple thing were something you already do almost instinctively more often than not? What if the only thing it would take to make that difference were to do it every day for everything?

Too good to be true? There may not be instant miracles and patent panaceas for firefighter safety, but there is indeed something we can do that is pretty much that simple and could easily be the most major shift yet toward that culture of safety envisioned in Firefighter Life Safety Initiative 1: Define and advocate the need for a cultural change within the fire service relating to safety, incorporating leadership, management, supervision, accountability and personal responsibility.

Now, that reads like a very complex and seriously daunting objective—and it is! You are well within your wits if you wonder how getting there could be influenced by anything described as “simple.” But even very complicated things, when you break them down and analyze their pieces, are typically built from relatively simple components. So it is with notions like “cultural change.”

Culture is a difficult term to define. It centers on collective sets of values, beliefs, behaviors, incentives, and prohibitions. It involves things as diverse as economics, politics, religion, custom, and ritual. It is instilled through complex processes that typically include both formal instruction and subtle elements of socialization. There’s an entire academic discipline—cultural anthropology—that devotes its work to exploring how cultures can be defined, how they develop, how they change, and what differentiates one from another.

It’s probably fair to say that we do not have a “fire service culture” per se—at least, not any one unified culture we can call our own. We have many levels and variations. A number of observers seem to agree that there are regional cultures that differ in significant ways: The Northeastern fire service, for example, has some clear distinctions from the predominant culture of the Southwestern fire service, and both are distinct in certain ways from the fire service culture of the Pacific Northwest or the culture of the fire service in the Deep South or the Midwest. Many states talk of differing cultures from one area to another. Even neighboring departments boast or bemoan significant cultural differences, and in larger departments different cultures are said to reside at different stations or across different shifts.

Still, though, we have many values, beliefs, traditions, and even rituals that hold us together as a culture. Parts of our working apparel are so widely recognized that the outline of a helmet on an elevator key is sufficient to say whose it is to push. Even a primitive silhouette of a fire truck on a diamond sign communicates that a fire station is just ahead. An ax, a pike pole, a ladder, and a nozzle make a scramble so familiar that it needs no further description. Every October, the assembly of uniformed officers and honor guards at the National Memorial in Emmitsburg, Maryland, reminds us of the rituals we share and the shared tragedies that they represent.
We have proud traditions and deeply held beliefs. Their core will never change, nor should they change. We believe in honor, in courage, in valor, and in self-sacrifice. We believe in brotherhood and fraternity. But we are also known to take risks that may not need to be taken that produce consequences too dire to be left unquestioned, and we are known, even among ourselves, to often resist change and intervention.

**HOW DOES CULTURE COME TO BE?**

If culture is an amalgamation of values, beliefs, and behaviors that become engrained in people, communities, and organizations, how do these things arise, how are they transmitted from one generation to the next, and—most importantly—how can we change the parts that work against us? To get to that point, we must first understand how it is that people come to do the things they do.

The most tenacious aspects of culture are those driven by conformity. They are seen in behaviors and beliefs that are often described as norms. Norms are so fundamental that we don't think about them; we don't know how or when we learned them because they seem to have always been a part of our world and our movement within it. Since social norms are so deeply engrained, they're typically quite difficult to change.

For example, the odds are that nobody ever told you exactly how to behave in an elevator. There aren't written rules about it. Still, you know exactly what to do—walk in; turn to face the door; look up, down, or forward. If you know someone, you will probably say hello, but any conversation that follows is usually kept to short, quiet, low-key exchanges.

Let's now try an experiment: Step into the elevator and wait for the doors to close. This time, though, don't turn around. Instead, stand facing the crowd and ask how everyone is doing. Tell them a little bit about yourself; maybe share a few things about your views on current events and politics. You could even follow up with a brief display of talent such as singing, dancing, or telling a few jokes. Security will be waiting for you somewhere before you get to the top floor.

Conformity to social norms is not the same as obedience or compliance. Obedience is following an order or an instruction because it comes from a source that has the power to enforce it. Obedience carries the possibility of coercion—sometimes it is implied, sometimes it is explicit, but it always lurks somewhere in the interaction. It's like that "big stick" that Theodore Roosevelt spoke of carrying. The bigger the stick, the more complete and consistent the obedience it is likely to evoke.

But obedience comes with a cost, and that cost can eat away at an organization's more important goals. Competent adults tend to resent coercion. It makes us feel like children; not surprisingly, we push back in ways that can even be somewhat childish. It may change our overt behavior but only when we might get caught and not because we think the change was right or necessary. When no one is watching, we're likely to do whatever it is we're not supposed to be doing, if only for spite. It's a short-term fix at best, and one with a long-term cost. Culture isn't a short-term thing.

Compliance represents a more sophisticated route to behavior change. Compliance comes when the legitimacy of and rationale for behavioral prescriptions are accepted and the authority to prescribe the changes is acknowledged. People are most apt to comply when they accept that a rule or an instruction exists for a reason they see as worthwhile or even beneficial. They also are more likely to comply when they see the source of the instruction as a legitimate authority acting in a legitimate capacity to attain a legitimate objective. This is a much more stable equation but one that waxes and wanes with the perceived legitimacy of information and information sources—in other words, compliance rises and falls as people and ideas come in and out of favor around the firehouse table. We all know how quickly such things can change.

Conformity takes over only when an idea becomes so basic, so fundamental, and so widely practiced that it seems almost absurd to question it. It has to be a part of what everybody does every day. You'd think that safety would be something we have reached that stature in a high-risk enterprise such as ours. But culture is a very dynamic balance that often involves competing norms.

The very essence of firefighting pits personal safety against perceived need. Every tribute to firefighters begins with willingness to risk one's life to protect another. We laud those who have made the ultimate sacrifice and reserve our most solemn rituals—the ones that most define for us who we are as a culture—to recognize their passing. For generations, senior firefighters have regaled the new kids with tales of close calls and risks survived. Terms like "courage" and "valor" are implicitly connected to peril and risk. Despite the lip service we give to risk appraisal and measured reactions, the terms typically used to describe "cautious" and "analytical" aren't nearly as flattering to the ego and are sometimes downright harsh. It's the classic example of a mixed message.

**ATTITUDE VS. BEHAVIOR**

We've spent a lot of time and given a lot of effort to changing firefighters' attitudes toward safety. There are good indicators at many levels suggesting that we've had some success in progressively changing the dominant attitude of the industry. But changing attitude is only a part of the process—what really matters is changing behavior.

It's neither difficult nor uncommon to hold attitudes that are inconsistent with what we actually do, especially in areas related to health and safety. One need only consider how many firefighters still doff the high-tech self-contained breathing apparatus provided to protect their respiratory systems from the harmful effects of various by-products of combustion, only to light a cigarette and suck the toxic colloidal ash of a decidedly noxious plant directly into their bronchial trees. How many times have we ordered a burger and fries even though we know that saturated fats have an ugly impact on our cardiovascular health and firmly believe that cardiovascular health is important? Culture isn't determined by what we say; it's displayed in what we do.

On the other hand, changing behavior is a powerful factor in changing attitudes. Quitting smoking has a much
greater impact on your attitude toward cigarettes than learning the risks of tobacco smoke has on your propensity to light them. Taking up a serious program of diet and exercise will have a much greater impact on your attitude toward activity and nutrition than efforts to change your attitudes will have on dashes through the drive-through and journeys to the gym. When we make a significant and lasting change in what we do, we tend to change our attitudes to match our actions. Persistent attitudes backed by consistent actions are the bedrock of what we call culture.

Too many times, we tend to oversimplify the complex route from attitude to behavior, acting as if people move in a single, bounding leap from information to action. Azjen's "Theory of Planned Behavior," among the most widely employed models regarding the relationship between attitudes and behavior, includes a series of factors that influence your path from attitude change to behavior change:

- Your beliefs about whether the behavior can actually produce the desired outcome (behavioral belief).
- The value, positive or negative, that you place on performing the behavior and attaining the outcome (attitude toward the behavior).
- Your perceptions about the behavior's normative stature among persons significant to you (normative beliefs).
- Your perceptions about social pressures to perform or not perform the behavior (subjective norms).
- The perceived difficulty of performing the behavior (behavioral control).
- Your beliefs regarding factors that promote or inhibit performing the behavior (control beliefs).

These factors together influence your behavioral intention—your readiness to perform the behavior. Still, the behavior itself can only be displayed if you have both the capacity (strength, tools, and setting) and the capability (knowledge, skill, and ability) to carry it out when needed. This theory has been tested in research directed toward promoting behavioral intention regarding firefighter safety, but truly meaningful change in an area as wide-ranging as the cultural value placed on personal safety is unlikely to come about by trying to change the many, many shifting dimensions of what we believe. We have to start changing what we do.

**BIG CHANGES START WITH SMALL BITES**

B.F. Skinner was one of the most influential behavioral scientists of all time. His work on the most basic elements of behavior changed the way we think about learning and reinforcement. He was among the first to explore what it takes to move incrementally, through planned series of small changes, to create lasting patterns of complex behavior change. He and his colleagues stumbled onto this while creating a diversion for themselves during a period of boredom in their laboratory—they decided they would try to teach pigeons to bowl.

Pigeons aren't the brightest creatures. You can't directly teach them something complicated like bowling—they just don't get it. You can dress them in personalized shirts and take them to the lanes on Saturday morning, but it won't motivate them in the slightest. You have to start with something they already do (a baseline behavior) and shape that behavior bit by bit into the change you ultimately want to see.

To get a pigeon to bowl, you first need to break down the behavior we call bowling into component elements: In this case, we need for the pigeon to put its beak on the floor, face the ball, give it a whack with its beak, and impart to it sufficient force and direction to knock down some pins at the other end of the lane. Fortunately, pigeons peck at the ground as a matter of course—that's our baseline behavior.

So here's how we shape that into bowling behavior:

- First, we skip a few feedings to provide some motivation. Then, the first time the pigeon pecks at the ground, we ring a bell to grab its attention and provide a pellet of food. After a surprisingly few rounds of this, our pigeon will be digging a rut in the lane with its beak.
- At that point, we change our pattern a bit: We now provide the pellet only if the pigeon puts its beak on the floor and faces the ball.
- When that is established, we provide the pellet only when the pigeon puts its beak down, faces the ball, and moves toward it.
- Next, the pellet only comes when the pigeon puts down its beak, faces the ball, moves toward it, and gives it at least a tap.
- From there, it becomes a pattern of refinements—only when the ball moves at least six inches, only when it makes it halfway down the lane, only when it reaches the pins, only when at least one pin falls.

Ultimately, the truly competitive may try to move toward reinforcement only for strikes and certain complex spares, but there's only so much a pigeon can master. But the point is clear, and it carries over well into many other things: Start with something people already do and shape that incrementally into the behavior you need.

**FROM CIRCLES TO PYRAMIDS AND BACK AGAIN**

Ten years of systematic investigations have identified maintenance of effective command and control as among the most critical factors in preventing firefighter line-of-duty deaths. The development of the contemporary Incident Management System (IMS) has given the American fire service a critical tool to ensure that every event we encounter, from the most basic and routine to the most complex and demanding, can be managed using a consistent template. That template can expand to accommodate the needs of major, rapidly escalating events and contract to provide safe and effective oversight of even the most ordinary situation or circumstance.

Consistent use of this system, every day for everything, is a vital part of making IMS successful as a safety tool. If the first thing you do when arriving at any scene is to execute the basics of the IMS model—establish command,
broadcast your assessment, assign your resources, project your resource needs—then the behavior to which you will default when you face difficult and dangerous situations will be the same as that you use every day.

The difference this can make in the course and outcome of an event has been demonstrated time and again. The more we move toward consistent application of IMS, the safer our operations become. IMS allows those responsible for safety and execution to concentrate on those features of the evolving event that make it unique and to turn their decisions into effective actions quickly, reliably, and efficiently. But IMS provides an answer to only part of the problem.

How can we just as consistently capture and capitalize on that information that comes to us only from the direct experience of putting the wet stuff on the red stuff? How can we move from the hierarchical structure and interaction patterns of IMS back to the lateral discussions that characterize the firehouse table without leaving critical learning opportunities on the fireground? How do we take what was experienced at the end of a nozzle in the heat of the battle and turn it into something learnable and usable by everybody in the organization? How can we ensure that we did it in that relatively infrequent, high-demand event can have a positive influence on the routine stuff we do every day? Conversely, how can we make sure that the stuff we’re doing routinely, day in and day out, is keeping us prepared for “the Big One”? And how can we ensure that safety is a central part of those ongoing discussions?

A big part of what facilitated the integration of IMS in the fire service is found in its similarity to things the best commanders did almost by instinct. The evolution of the IMS model came about over a number of years as fire service leaders distilled those “best practices” into systematic principles that could be taught, learned, and applied consistently by officers at all levels of rank and experience. What we need now is a process to help us do the same thing with all our practices and protocols.

**AFTER-ACTION REVIEW: EVERYDAY FOR EVERYTHING**

The military’s system of After-Action Review (AAR) may be the best model yet for helping the fire service take this next step. Like IMS, it provides a template that’s devilishly simple and easily adaptable. Like IMS, it can expand and contract to meet the needs of any event. Like IMS, it is useful for any encounter, large or small, exceptional or routine. And, like IMS, its utility for the Big One is built on its daily use throughout the organization.

AAR is grounded in the basic premise that organizationally relevant learning is driven by individual learning and improvement that can then be transferred throughout the organization. According to that premise, development takes root best where assessment and learning are grounded in what the military calls “local value”—its direct impact for the individuals doing the learning and what they are engaged in doing right here, right now. Organizational progress comes from gathering, validating, and disseminating local lessons from all levels of the organization regarding every aspect of its missions.

A good operating summary of the AAR can be found in just a few basic questions to be asked in any operating unit, whether a soldier or two handling a logistical function or a reconnaissance group coming back from patrol; whether it’s a mission that has been fully completed or a component evolution that will be executed many more times to follow:

1. **What was the intent?** What were we trying to accomplish by whatever it is we just did? Objectives should be simple and clear and should be stated in measurable behavioral terms. After all, if you can’t tell me precisely what it was you were trying to do, how can you tell me whether you actually got it done?

2. **What happened when we took to the objective?** What exactly transpired? Who did what and with which and to whom, for what reasons? What results did we achieve? Were they consistent with our objectives? Memory fades and, more importantly, memories change shape with time and discussion—therefore, it’s critical to ask these questions as immediately as possible.

3. **What did we learn from this?** What do we know about the situation, its demands, and our objectives that we didn’t know before? If we achieved our objectives, what did we do that was critical to our success? If we didn’t fulfill our total objective, what was left undone? What got in the way of our objectives? What risks did we encounter, and how did we try to address those risks? What would we have needed to know to have done better? What if the things we learned could improve our outcomes going forward and minimize risks to our health and safety?

4. **What should we do now?** If we have to turn around and do this all again, how would we do it differently to improve our result? If someone else has to do this same thing, what advice would we have for them going into it? If there are aspects left unaccomplished, what needs to be done about that? Most importantly, how might we do what we needed to do more safely and manage the risks we encountered with better awareness and greater success? The driving consideration here is to put the learning to work—now.

5. **Whom should we tell about this?** Who else needs to know about what we’ve done and learned? What are the critical things we need to tell them? How are we going to get that information “into the pipeline”? How can what we’ve learned here affect overall organizational performance? Even the smallest lessons can have meaningful impacts—how do we use the organization’s overall AAR system to ensure that no lesson is lost?

The concepts for pulling this information together are pretty straightforward, too. There’s the unit level “hot wash” in which these questions are sometimes run through
even as the action is still going on. There are, of course, larger and more structured formal reviews to accommodate bigger missions with more “moving parts”; these reviews follow more formal patterns for aggregating, analyzing, and disseminating findings and recommendations. But the crux of it all is the consistency with which those short, straightforward reviews are conducted where the rubber is meeting the road—in large incidents and small encounters, day in and day out, everywhere in the organization. Even quality management gurus like Peter Senge have described it as “arguably one of the most successful organizational learning methods yet developed.”

If the truth be known, the best company officers and battalion chiefs use something pretty much like this every day and have been doing so for years. They come back from a call, even a routine one; pour a cup of coffee; and ask questions that sound a lot like those in an AAR at the kitchen table. Where we fall down, as we do in so many areas, is in making the process expected, consistent, and reliable throughout our organizations—and in ensuring that the communications channels are in place and working to gather those “local value” lessons together, glean important information from them, and regularly feed it back to the places where our rubber meets our roads.

### MAKING IT WORK

**FOR YOUR ORGANIZATION**

So why isn’t everybody doing this? It’s made headway in places you might not expect. Harley Davidson, for example, used the approach to prepare for new product launches in its Kansas City manufacturing facility. Shell uses such an approach in its oil exploration business. Wine retailer Geerlings and Wade reportedly uses it in its warehouse operations. It seems that it would be an ideal match for how we do things in our business, too.

A big part of what holds us back may come from our aversion to criticizing our own actions or, worse yet, standing to criticism from others. Our customers usually see our actions as benevolent if not downright heroic. And, in all but the most extreme cases, we can typically claim success—after all, all fires eventually go out, and all bleeding eventually stops. But a fire does its damage in the interval between ignition and extinguishment, so what happens during that interval and how much time is consumed in doing it make a real difference to that person whose home, property, and memories are being converted to colloidal ash and scattered to the winds through the thermal column. The process of putting out a fire wreaks its own havoc on the structure, even beyond what the fire itself consumed—sometimes it can be a toss-up to determine whether more damage arose from the process of combustion or the process of suppression, especially from the homeowner’s view of what’s left. And if the bleeding stops only as a result of gross desagulnation, odds are that the outcome wasn’t the one that we and the patient were seeking. How well, how quickly, how efficiently, and how effectively we do the stuff that puts the brakes on the problem before us are the essence of whatever difference we truly make.

Still, when something goes clearly, inescapably awry—even if all the king’s horses and all the king’s men couldn’t have made it come out differently—we suddenly go into a hardcore, take-no-prisoners, “critique” mode. We take it apart, look at how we did things, dig into anything that might have made a difference, and strive to ensure that we don’t repeat whatever it was that got us into trouble. We convene blue ribbon panels; we commission elaborate recreations and simulations; and we publish detailed, “no-holds-barred” reports. Experts of various sorts hit the trade show circuit to explain how things should have been done differently. All too often, we offer up symbolic human sacrifices from among those surviving to atone for those who were lost. But all the while, we know in our hearts and in our guts that there is simply no amount of ex post facto exorcism that can undo stuff that’s already happened.

Think how much more effective we could be if learning from our experiences was a systematic, organizationally driven, everyday effort in everything we do. Even more to the point, think how much better prepared we could be to deal with things that fall outside the envelope of our usual encounters. After all, the best way to prepare for the Big One is to make sure you’ve always got the basics handled—that way you can focus your attention on the things that make the Big One big.

The traditional system of critiquing the Big One is full of limitations. Darling and Parry noted several drawbacks of these retrospective review processes as compared to the AAR approach:

1. They are done once in the life of a project, generally well after any opportunity to modify the outcome has been exhausted.
2. The focus is usually on drafting recommendations to be implemented by someone other than those making the recommendations.
3. The report generally goes somewhere “up the chain” rather than back to where the work was done.
4. The process for conducting the reviews is usually an afterthought, not an integral part of the project built into it from the start.
5. These are usually lengthy sessions with mandated attendance, where everyone has to come, but few may see the “local value” for what they’re doing now.
6. Too often, these sessions are called when someone perceives failure or flaw or when unusual levels of stress and conflict are anticipated or experienced—the result is sessions that focus on dissecting past failures rather than building future success.

These distinctions are crucial elements in the effectiveness of the larger AAR process. Unlike the post mortem critique, the AAR is an expected part of all activities and events. It is planned into every project from the begin-
ning, to take place repeatedly throughout the effort so that improvements can be made at any step. It deals with the routine aspects as well as the exceptions, with the quality and reliability of basic performance as its central aim. It’s a planning and development tool instead of a way to fix flaws and apportion fault and blame. It’s designed to find good processes and make them stronger, not just to find weaknesses to correct. It’s easy to see how this could ultimately impact every aspect of readiness and execution.

Given the technology we hold today, it should be easier than ever before to put our experience to work in this sort of fashion. It’s becoming more important than ever, too. Everyone talks about how the emergency response business is changing, but the pace with which various forces are pulling us forward is much greater than the speed of change we have designed into our organizations. We can no longer depend on on-the-job training to ensure that every rookie learns the trade by following a seasoned veteran into the belly of the beast—things just don’t happen that way anymore. The fires aren’t as frequent, and the ones that get away from us do so with a vengeance, unlike the “bread and butter” fires of a generation or so ago. Those “seasoned veterans” are retiring in waves now, and with them leaves a ton of experience that never got written down or passed along as efficiently as it should have been. We have to capture the experience we gain systematically and make it work in the same way that the “peacetime army” had to learn to capture the experience of battle without waging war.

We have to be creating ways to ensure that our capacity to execute the basics of the things we do is constantly reinforced, constantly expanding, and constantly improving. We have to redefine ourselves as “learning organizations”—organizations that constantly transform themselves by systematically promoting the learning and growth of their members with respect to their missions. (6) We have to move beyond planning and response to treat each encounter as an opportunity to get better and grow stronger. And we have to make safety a consistent and valued plank in that learning process.

THE “TAKE AWAY” MESSAGE

Culture is the ever-changing product of our values, beliefs, traditions, rituals, and practices. No matter how we choose to describe those things, it is ultimately embedded, expressed, and transferred from one generation to the next in the context of the ways we choose to behave. We can talk as much as we like about changing our culture, but changing our behavior will always be the bottom line.

Here’s where you can start: Make that “hot wash” something you do every time you turn a wheel. Come back to the station, take a few minutes, and ask those basic questions. Make sure that safety gets discussed as you review your actions and identify the places you can improve. Turn those lessons into actions. Pass them on to others; ask others to share their lessons with you.

The capacity of AAR to enhance safety in our industry has already earned some empirical support. Allen et al investigated the impact of AARs on the safety climate among 67 firefighting crews, reporting that these reviews “constitute a specific venue through which managers can promote safety climate in high-risk environments” (5, 750). The importance of safety-oriented group norms and their relationship to the ongoing AAR process were also noted.

Where every encounter is an opportunity to learn and every opportunity to learn is systematically examined, the value the organization places on learning from its actions becomes unquestionably clear. The questions that are asked become, through the consistency of the behavior entailed in asking them, an ongoing expression of the cultural values of the organization. Where safety is a principal element of those queries, a culture of safety takes shape. That’s how it starts—and it starts with you.

REFERENCES


● RONALD J. SIARNICKI served with the Prince George’s County (MD) Fire/EMS Department, where he served 24 years in operations. He retired as chief of the department in 2001 to take the position of executive director of the National Fallen Firefighters Foundation. He has a master’s degree from the University of Maryland, University College, and is a certified fire officer IV. In addition, he serves with the United Communities Volunteer Fire Department in Stevensville, Maryland.

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COURSE EXAMINATION
1. Culture includes which of the following?
   a. Beliefs
   b. Rituals
   c. Traditions
   d. Each of these is a part of culture.

2. Culture is most directly expressed in
   a. Values
   b. Attitudes
   c. Behaviors
   d. Beliefs

3. Which of the statements below represents the most accurate description of the relationship between attitude and behavior?
   a. Changing a person's attitudes changes a person's behavior.
   b. People's actions reveal their attitudes.
   c. People's attitudes reliably predict their behavior.
   d. Changing a person's behavior typically alters their attitudes.

4. Which statement best reflects the culture of the fire service?
   a. Fire service cultures vary, but they have much in common.
   b. There is a reasonably uniform culture across American fire departments.
   c. There are many fire service cultures, and they differ in radical ways.
   d. Fire service culture cannot be described or defined.

5. Which statement best reflects cultural influences on safety in the American fire service?
   a. Beliefs about safety often compete with beliefs about risk and courage.
   b. Safety has become the dominant factor in determining fireground behavior.
   c. The impact of culture on safety has been relatively limited.
   d. Beliefs about safety are not a significant part of fire service culture.

6. Senge referred to organizations that practice ongoing refinement and review as
   a. Change agents.
   b. Growth industries.
   c. Cultures of analysis.
   d. Learning organizations.

7. Adoption of IMS in the fire service was facilitated by
   a. The relationship of its structure to existing best practices.
   b. Early agreement on its principles and components
   c. Imposition of national standards as a first step in the process
   d. Extensive research on its implementation.

8. To be optimally effective, both IMS and AAR must be
   a. Studied extensively at all levels of the organization
   b. Used every day for everything
   c. Rigidly applied and uniformly critiqued
   d. None of these factors is critical

9. The “hot wash” element of AAR is intended to be employed
   a. At the company level
   b. Immediately after every incident or encounter
   c. As an informal discussion or review
   d. All of these statements are correct

10. A formal AAR following more complex operations is comprised of
    a. An independent review of operations from the command level
    b. External analysis of command and operations
    c. Assembly of company and sector level “hot wash” information
    d. Formal AARs are not conducted

11. Limitations of traditional critique approaches include
    a. Perceived lack of “local value”
    b. Focus on failures or flaws
    c. Timing “after the fact” inhibiting immediate application
    d. All of these limitations apply.

12. The most powerful contribution that AAR can make is likely to come from
    a. Promoting more frequent and intensive formal reviews
    b. Generating more research studies and published reports
    c. Making safety and performance improvement a matter of daily conversation
    d. Instituting a system of checks and balances.

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13. Social norms are characteristic behaviors that underlie the concept of
   a. Obedience.
   b. Compliance.
   c. Conformity.
   d. Propinquity.

14. Obedience is most strongly associated with
   a. Persuasion.
   b. Rhetoric.
   c. Authority.
   d. Consensus.

15. Compliance is most strongly associated with
   a. Coercion.
   b. Standards.
   c. Social norms.
   d. Self-determination

16. Conformity is most characterized by
   a. Conscious decision to comply.
   b. Reflective evaluation on merits of rules.
   c. Consensus adoption of uniform policies.
   d. Compliance without questioning.

17. The principal limitation of obedience in organizations is that
   a. People are resistant to coercion.
   b. It may vary with changing attitudes toward authority.
   c. It is difficult to change patterns based in social norms.
   d. None of these statements apply.

18. The principal limitation of compliance in organizations is that
   a. People are resistant to coercion.
   b. It may vary with changing attitudes toward authority.
   c. It is difficult to change patterns based in social norms.
   d. None of these statements apply.

19. The principal limitation of conformity in organizations is that
   a. People are resistant to coercion.
   b. It may vary with changing attitudes toward authority.
   c. It is difficult to change patterns based in social norms.
   d. None of these statements apply.

20. The first factor affecting the influence of attitude on behavior involves
   a. Beliefs about outcome.
   b. Perceptions of norms.
   c. Social pressures.
   d. Factors that promote or inhibit behavior.

Notes
Changing the Culture of Safety in the Fire Service

PROGRAM COMPLETION INFORMATION
If you wish to purchase and complete this activity traditionally (mail or fax) rather than Online, you must provide the information requested below. Please be sure to select your answers carefully and complete the evaluation information. To receive credit, you must receive a score of 70% or better.

Complete online at: www.FireEngineeringUniversity.com

PERSONAL CERTIFICATION INFORMATION:

Please check the correct box for each question below.

1.  ❑ A  ❑ B  ❑ C  ❑ D
2.  ❑ A  ❑ B  ❑ C  ❑ D
3.  ❑ A  ❑ B  ❑ C  ❑ D
4.  ❑ A  ❑ B  ❑ C  ❑ D
5.  ❑ A  ❑ B  ❑ C  ❑ D
6.  ❑ A  ❑ B  ❑ C  ❑ D
7.  ❑ A  ❑ B  ❑ C  ❑ D
8.  ❑ A  ❑ B  ❑ C  ❑ D
9.  ❑ A  ❑ B  ❑ C  ❑ D
10. ❑ A  ❑ B  ❑ C  ❑ D
11. ❑ A  ❑ B  ❑ C  ❑ D
12. ❑ A  ❑ B  ❑ C  ❑ D
13. ❑ A  ❑ B  ❑ C  ❑ D
14. ❑ A  ❑ B  ❑ C  ❑ D
15. ❑ A  ❑ B  ❑ C  ❑ D
16. ❑ A  ❑ B  ❑ C  ❑ D
17. ❑ A  ❑ B  ❑ C  ❑ D
18. ❑ A  ❑ B  ❑ C  ❑ D
19. ❑ A  ❑ B  ❑ C  ❑ D
20. ❑ A  ❑ B  ❑ C  ❑ D

COURSE EVALUATION
Please evaluate this course by responding to the following statements, using a scale of Excellent = 5 to Poor = 1.

1.  To what extent were the course objectives accomplished overall?  5 4 3 2 1
2.  Please rate your personal mastery of the course objectives  5 4 3 2 1
3.  How would you rate the objectives and educational methods?  5 4 3 2 1
4.  How do you rate the author’s grasp of the topic?  5 4 3 2 1
5.  Please rate the instructor’s effectiveness.  5 4 3 2 1
6.  Was the overall administration of the course effective?  5 4 3 2 1
7.  Do you feel that the references were adequate?  Yes  No
8.  Would you participate in a similar program on a different topic?  Yes  No
9.  If any of the continuing education questions were unclear or ambiguous, please list them.

10.  Was there any subject matter you found confusing? Please describe.

11.  What additional continuing education topics would you like to see?
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