

After Action Review



**MISSION CRITICAL
TEAM INSTITUTE**

Coleman Ruiz
Director of Performance
Co-Founder and Principal
Mission Critical Team@Institute
coleman@missioncti.com

In an interview in 2013, Nobel Prize winning psychologist, Daniel Kahneman (Thinking Fast and Slow) was asked, "What happens to experts when the rate of change exceeds the rate of learning?" His answer, "They cease being experts!" (Cline, 2017)

Typically, what we think happened (from our isolated perspective) in a given situation (Immersion Event) rarely happened exactly the way we remember. Moreover, unless we were standing in every person's shoes at the same time, can read everyone's mind, and have the same lens on life (structure of interpretation) as every other person, we're simply not going to experience the event in the same way. Theories of perception have shown that we're all trapped by some fairly consistent mental biases (Kahneman, 2011; Klein, 1998).

This paper is about the Mission Critical Team After Action Review (AAR) process. The AAR process is designed to short circuit subjective and personal judgement about what occurred during an objective event. Thus leveraging your immersion event for learning and progress. We're not judging any one person when doing an AAR. *We're reviewing the event or situation.* We're focused on objective performance and execution.

All Mission Critical Teams, whether it be Military (Morrison & Meliza, 1999), Medicine (Cronin & Andrews, 2009; Orlander, Barber, & Fincke, 2002), Law Enforcement (Donahue & Tuohy, 2006), Wildland Fire Fighting (DeGrosky, 2005), Urban Fire Fighting (Minei & Bisel, 2013), and NASA (Rogers & Milam, 2005) engage in some form of After Action Review.

-
- **Preparation:** *They understand how to prepare for a task, and can articulate their process (even better if you engage in the process of writing it down),*
 - **Craftsmanship:** *They display a consistent and disciplined approach (and even defining your approach) to mastering their craft,*
 - **Outcome Focused:** *They have the capacity to both define and produce a desired result,*
 - **Honesty:** *They have a process for honest self-assessment, or in the case of this guide, personal and team After Action Review (AAR).*
-

We know from both research and practice, that for almost every situation in life the single best predictor of achieving desired outcomes is a person's self-efficacy (Bandura, A., 1982). Different than self-confidence, self-efficacy is the extent to which a person believes they have the ability to produce a desired result (Biron, 2012). When selecting and assessing operators in one military special operations unit, four primary measures of selection were present: does the operator,

1. Understand how to **prepare for a task**?
2. Have a consistent and disciplined approach to **mastering the craft**?
3. Display the ability to produce a **desired outcome**?
4. Have the capacity for **honest self-assessment and AAR**?

The following collaboration is about the **process for self and team assessment**. And team assessments as a mechanism for specificity. Every team – and individual - should make time for both personal and team review of those things identified as critical variables to the job.

Purpose of the After Action Review (AAR):

“The After Action Review (AAR) is a process technique that uses a review of experience to avoid recurrent mistakes and reproduce success.” (DeGrosky, 2005)

No one has spare time anymore as the rate of change continues to increase. As a result, our collective time for reflection, either individually or as a group is diminishing. This lack of reflection is denying us the ability to understand and learn from our past experiences, while at the same time diminishing our ability to reconnect and reconstitute our teams after each mission. Which in turn acts to diminish the long-term sustainability of the team and the mission.

Understanding

The first reason for AAR is to **deconstruct / reconstruct a situation or event** from beginning to end. To learn what actually happened. To dissect what went well, what was in our control and out of our control, identify opportunities for growth, and evolve our operating principles for the future.

Learning

The AAR is a **time to turn what we've learned into progress**. Only through stressors (a situation), review and reflection (the AAR process), and properly contextualized (do we have this all accurate and headed in our desired direction), can we really turn our lessons into progress. We of course must then capture what we want to do more of, less of, and differently, and move forward intentionally. Consistent AAR processes will allow you to see the real motivations and behavioral trends of your team. Each iteration will allow us to learn a little more, do a little better, and run the process again-and-again, getting 1% better each time!

Reconstitution

The AAR is also the **time to put the team back together**. In a tough or unpleasant situation, there might have been some strong disagreements, misunderstood context, questions of a person's ability, or damaged morale. What did this person or that person do? And why? What did they see (or know) when they made a certain decision or took a certain action? After events with a positive result, there are instances of exceptional performance and operating methods you'll want to highlight, evolve, and enhance.

Experiencing a given situation (individually or as a team) - professionally or otherwise - and just moving on without an honest review and/or reflection **limits growth**. Our short-term memories won't ever embed any new knowledge other than our own biases.

The three primary purposes for the AAR:

- ***Understanding:*** *To deconstruct / reconstruct the situation or the event.*
 - ***Learning:*** *To take learnings and lessons, and turn them into progress (adjustments and improvements).*
 - ***Reconstitution:*** *To put the team back together.*
-

Principles of the AAR:

*“They say that only a small portion of personal communication is verbal, and that the rest of its posture, expression, gesture, those physical aspects of a man which antedate his ability to speak. Meyer constructs somehow a small safe world, **a place where anything can be said, anything can be understood.**” (MacDonald, 1996)*

What makes AAR so difficult? Fear. Leaders and more experienced folks on a team, if not brought up in a culture of AAR, fear being exposed for having done something incorrectly or having made a bad decision or for not knowing. Entry level and junior folks fear speaking-up because it might show inexperience. Folks that are “mid-career” fear everything. They fear showing a lack of experience, and fear exposing anything that would prevent their promotion or affect their image. Unfortunately, none of these fears, help make anyone or any team any better. They just mask reality. This means that you have to commit to a regular, honest, and deliberately constructed AAR process.

Principles of the AAR:

- **Status:** There is no rank in the AAR
 - **Objective:** Must maintain objectivity
 - **Impartial:** The AAR is not a courtroom
 - **Constructive:** Be Clear and Concise
-

Status

There is still an organizational structure but no rank. Experience, knowledge, and perspective still account for exactly what they are but nothing more and nothing less. Everyone has a say - from their perspective – and with respect to their level of expertise, role, and responsibility. Leaders must be clear about this and support this as the #1 rule in the AAR.

Objective

An AAR is an objective review of an event, situation, or collection of issues: its strong points and weak points, with specific focus on how to improve it and move forward. Remember that there is a difference between fault and responsibility as there will be situations where the environment creates a negative outcome that may not be an individual’s fault even though it is their responsibility. Maintain objectivity or you’ll lose your team’s investment in the process.

Impartial

You are not arguing to be right, keep it civil. All issues brought to the AAR are fair game for critique. While it is true that critique can sometimes be tough, that doesn’t mean you get to be jerk for no reason. If something is trending towards inappropriate, shelve the issue and move on. Don’t let a good AAR devolve into infighting and never review or attack a person. You’re engaging in thoughtful review regarding the facts and your view of the situation/event, all in an effort to determine what’s fundamentally true, accurate, and productive.

Constructive

Be constructive: trashing something without suggesting an improvement is unproductive. Give a person something from which they can work, and improve. Explain what you mean: It’s not enough to say “I like this” or “I don’t like this,” tell us WHY. We can’t fix the things that need fixing without specifics.

Managing the Three (3) Phase AAR:

“The thing about opinions. They’re all true.” - Anonymous

Clayton Christensen in [How Will You Measure Your Life](#) (Christensen, 2010) discusses how culture is the unique combination of a team’s *processes*, and the *priorities* in the organization. The team’s approach to AAR is about refining your processes. The AAR process is not some “feel good” event. Group debriefing has been used for thousands of years, from the Stoic Romans described in Homer’s The Iliad to the laconic Spartans to American Civil War soldiers to policemen, firefighters, and operators of today’s military special operations forces. The process is about *delinking the memory of the event* (which is almost never completely accurate for all sorts of reasons) *from our emotions of the event* (hippocampus stimulation) (Kesner & Hardy, 1983). Thus, in your case, the team, can move on to the next battle with fresh eyes, confidence, and new skills and tactics.

The three phase AAR process:

- **Phase 1:** Opening the Question/Issue(s).
 - **Phase 2:** Discussion, Analysis, and Review.
 - **Phase 3:** Decision/Execution Phase.
-

Phase 1: Opening the Question/Issue(s)

In the first phase you are putting the issue(s) on the table. No judgments are allowed here AT ALL. And remember, there is no rank in the AAR process and while we still need to respect experience but the “boss” doesn’t get the last word or the majority of input. In this phase, if your team priorities are clear, the issues may be obvious. You’re simply reviewing how you’re doing against priorities and/or action steps towards priorities. Or, you might have uncovered something that should be a priority that wasn’t, or a supposed priority that really isn’t.

Taking on the issues is a vote of a self-confidence and a vote that the team is on the same page. You’re acknowledging that you can get incrementally better (just 1% better at time). You’re giving yourself and the team the mechanism to deconstruct then reconstruct new tactics and perspectives (with specificity). Separate the ideas and issues from the people who hold them. Once an issue is on the table, it is not “so-and-so’s” issue. It is simply an objective issue to be addressed, as a team. Conduct personal mentoring and correcting in private. AAR is not for personal review and mentoring.

Phase 2: Discussion, Analysis, and Review

In the second phase you are digging into the issues. My recommendation is leadership doesn’t talk too much here but works to facilitate this conversation. You’re taking into account all events from beginning to end of situation, including environmental considerations and external factors (things you may not control).

As the senior leader, you’re looking for opportunities to *remove barriers to preparation and execution*. Where you can you pull something up to your level that you can quickly solve for your team so they can go out and produce? You really want to hear teammates discuss their process of

preparation, approach, and levels of problem solving. When summarizing this phase, use three broad categories of summary:

- **Sustain** ("we want to do more of this..."),
- **Improve** ("we want to do this less or differently..."), and
- **Environmental Considerations** (what were the conditions at the time of action – what did we know “at the time” - context is everything)

When coming to possible or potential solutions for things, **consider assigning a dissenter/devil’s advocate** (one person...the same person) to make three (3) central arguments FOR and three (3) central arguments against a given idea or strategy? The SAME person makes the arguments FOR and AGAINST. This forces objectivity and a thoughtful process. This protects everyone from themselves. Dissent by the devil's advocate shall not be taken personally since he/she has a specific and objective role. A job. Their thoughts are not opinion. They are a functional mechanism to induce additional thought and perspective into the process.

Phase 3, Decision/Execution Phase

In this phase, you specifically archive (write down) and assign next-steps to a responsible party. You also identify (ask the responsible party) potential obstacles in the way of getting to the next phase? Also, come to some agreement and/or process for follow-up (consistent follow-up). Don't let you team or yourself off the hook here. How will you know they are on track on whatever specific item you've assigned? When you close the session, remind everyone that you're moving into the action phase. After you break and move forward with some decisions agreed upon or made by the senior leader there are no side deals after-the-fact. The side deals done later after the AAR are a cancer and can tear the process apart and you'll lose all credibility.

Other subjective benefits are that you are training your people in real time. What behaviors do you expect to see and why? The entire team is learning together how to think collectively by understanding how each other thinks individually. Similarly, AARs train rookies and veterans together. You don't have to hold separate leadership training sessions. The AAR is training and functional course correction.

The process takes deliberate and intentional investment (and participation!) from senior leadership. In data about the most effective AAR processes, participants report that it is *friends and superiors that helped them most recover and progress* (Klinger, 2004).

The debriefing process provides the opportunity to put the pieces of the event together, figure out exactly what happened, make sense of the situation, answer what level of preparation, attitude, and effort did we bring, and provide a structured environment for perspective and support from peers and senior leaders.

Giving and Receiving Feedback

“Like all tools, the baloney detection kit can be misused, applied out of context, or even employed as a rote alternative to thinking. But applied judiciously, it can make all the difference in the world — not least in evaluating our own arguments before we present them to others.” – Carl Sagan (Sagan, 1999)

Guidelines for giving input (“Critique”)

It is hard to take suggestions, even when they are well intended, so don’t be offended if people initially have trouble accepting your offer or suggestion about something. They’ll likely think about it later. Remember, if we don’t challenge and work things out in AARs, we’re essentially stealing opportunities for improvement from the team. As long as a tactic or approach is legal, moral, and ethical, there are thousands of ways to skin-a-cat. There are few hard and fast rules, many methods, and few principles.

- **Lead with the positive.** You’ll create a good rapport and support strong discussion if you begin by detailing some elements of the situation that worked for you.
- **Talk about the issue, not about a person.** Rather than discussing what so-and-so did well or needs to improve, talk about what/why the issue is going well or needs a new approach. In other words, rather than saying “So-and-so needs to improve his approach or tactic here...,” say, “I’m not seeing where/how we can consistently repeat that approach...from my view I need more information or help with that.”
- **Own your reactions.** Use “I” to talk about your reactions to a piece, rather than generalizing them. “I noticed.....”
- **Talk about where else you’ve seen a given situation.** “This has happened to me in the past...” “My experience (and be able to describe one) has been...”
- **Don’t try to argue someone else into sharing your perceptions.** This is not a courtroom. Let REAL differences of perception exist. You’ll want to investigate these! Find it interesting that people see things so differently. Critiquing is about getting true feedback from your peers, not convincing or making a case.
- **Airspace:** Don’t let the big talkers hog the floor. You’ll quickly get bored, even resentful that you can’t get a word in edgewise. And the critique will suffer from limited perspective. Learn to take your space. And if you’re a big talker, try to recognize it and make room for others.
- **Don’t succumb to groupthink.** Hold on to your own impressions and ideas and believe in them. If you’re really convinced by others’ opinions, fine, but even if everyone really likes a thing, and you don’t, own that, and say so. And change your mind if you’re convinced that there is new information that you’ve learned. Don’t hold onto old patterns when you have new information or are getting good results from a new approach.
- **Perspective Taking:** Realize that just because you do not like an approach to something doesn’t mean it’s bad. It just means it’s something you don’t like, or something with which you don’t have enough experience.
- **Be respectful** of others’ backgrounds and perspectives. Be aware that you may have an impact with your statements that you may not intend. You may not even be the intended audience for a piece of input or analysis. Don’t make things personal and don’t take things personal.

Guidelines for *receiving* feedback (“Receptivity”)

- **Listen first.** It’s tempting to jump in and try to give additional context or other reasons something happened the way it did. Stop. Listen until it’s uncomfortable and then go longer. You want the objective, uncolored, unbiased perspective. You don’t have to take all the input, but listen to all of the input. If you interrupt, you’ll miss out on fresh reactions. Learn to just listen (and take some notes), and then let everything you’ve heard simmer for a while.
- **Take notes:** This insures that valuable feedback doesn’t get lost! It also allows you to track questions, or intrusive thoughts, to enable you to wait until the end of the critique to respond.
- **Pause:** Create some space between the stimulus of the feedback, and your initial response.
- **Assess:** know that feedback and input is not always correct. AAR isn’t about right and wrong, it’s about exercising the process.
- **Respect those other points of view.** You may not agree with what people say about a situation. That’s OK. You don’t have to. If they’re missing something crucial it may be a healthy challenge for you to make things clearer in your communication or actions. This is exactly what the process is for!
- **Experiment with change:** Exercise the muscle of trying to implement other perspectives on a given situation. Unless of course you have suddenly become the all-knowing! Experience is good but stagnant experience leads a team to failure!

Performance Feedback Method		
	Debriefing	AAR
Participation	Participants are passive recipients of information	Participants are active participants in a discussion
Primary Focus	Errors Committed	Sequence and Context of Events
Direction of Communication	One Way transmission from leader to participants	Dialogue among the team
Atmosphere	Defensive	Learning Focused
Instructional Style	Directive	Facilitated and Empowered
Sources of Information: Why	Event leader and Staff	Anyone involved in event
Sources of Information: What?	Subjective assessment	Objective indicators

(Morrison & Meliza, 1999)

Lexicon

After Action Review: is a process technique that uses a review of experience to avoid recurrent mistakes and reproduce success (DeGrosky, 2005).

Appreciative Inquiry: Advocates collective inquiry into the best of what is, in order to imagine what could be, followed by collective design of a desired future state that is compelling (Bushe, 2013).

Briefing: an act or instance of giving precise instructions or essential information.

Closure: A feeling of resolution, or conclusion, at the end of an event.

Collaborative Inquiry: In this context, it refers to a process where researchers partner with communities of practice to collaboratively resolve an emergent question (Miles, Huberman, & Saldaña, 2013)

Critique: evaluate (a theory or practice) in a detailed and analytical way.

Debriefing: To interrogate (a soldier, astronaut, diplomat, etc.) on return from a mission in order to assess the conduct and results of the mission.

Error: An act of commission (doing something wrong) or omission (failing to do the right thing) that leads to an undesirable outcome or significant potential for such an outcome.

Facilitation: The act of guiding a group, within a socially secure environment, to engage in a collaborative dialogue where everyone is involved in reviewing past performance with the shared intent of improving future performance.

Generative Learning Theory: That learning must combine existing knowledge with new ideas through experimentation and open-mindedness.

Hindsight Bias: The tendency for people to regard past events as expected or obvious, even when, in real time, the events perplexed those involved.

Immersive: MCT's operate in constrained spatial and temporal environments that require the individual and the team to be fully immersed in the experience until its conclusion. This means that traditional theories of both decision making and contingency planning are degraded. Teams in this environment must rely more on the capacity of the team to navigate ambiguous environments, than attempts to develop contingency plans and/or predict the future.

New Normal: describes how something which was previously abnormal has become commonplace.

Normalization of Deviance: A gradual shift in what is regarded as normal after repeated exposures to "deviant behavior" especially in the context of risk management. Weak signals get ignored and danger signs are reinterpreted as normal (Vaughan, 1996).

Receptivity: The quality of being receptive; ability or readiness to receive or take in (Simpson, Weiner, & Oxford University Press., 1989)

Tacit Knowledge: is the kind of knowledge that is difficult to transfer to another person by means of writing it down or verbalizing it, such as bike riding or swimming.

Transfer of Learning: The use of principles or concepts learned in one context to another context in which they remain applicable.

References

- Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist*, 37(2), 122-147
- Bushe, G. (Ed.) (2013) *The Encyclopedia of Management Theory*.
- Christensen, C. M. J. h. b. r. (2010). How will you measure your life. 88(7/8), 46-51.
- Cline, P. (2017). *Mission Critical Teams: Towards a University Assisted, Mission Critical Team Instructor Cadre Development Program*. Dissertation for Doctorate in Education. University of Pennsylvania Graduate School of Education.
- Cronin, G., & Andrews, S. J. E. N. (2009). After action reviews: a new model for learning. 17(3), 32.
- DeGrosky, M. T. (2005). Improving after action review (AAR) practice: The Association.
- Donahue, A. K., & Tuohy, R. V. (2006). Lessons We don't learn a study of the lessons of disasters, why we repeat them, and how we can learn them.
- Kahneman, D. (2011). *Thinking, fast and slow* (1st ed.). New York: Farrar, Straus and Giroux.
- Kesner, R. P., & Hardy, J. D. J. B. b. r. (1983). Long-term memory for contextual attributes: dissociation of amygdala and hippocampus. 8(2), 139-149.
- Klein, G. (1998). *Sources of power : how people make decisions*. Cambridge, Mass.: MIT Press.
- Klinger, D. (2004). Environment and organization: Reviving a perspective on the police. 593(1), 119-136.
- Miles, M. B., Huberman, A. M., & Saldaña, J. (2013). *Qualitative data analysis: A methods sourcebook*: SAGE Publications, Incorporated.
- Minei, E., & Bisel, R. J. S. G. R. (2013). Negotiating the meaning of team expertise: A firefighter team's epistemic denial. 44(1), 7-32.
- Morrison, J. E., & Meliza, L. L. (1999). Foundations of the after action review process. Retrieved from Orlander, J. D., Barber, T. W., & Fincke, B. G. J. A. M. (2002). The morbidity and mortality conference: the delicate nature of learning from error. 77(10), 1001-1006.
- Rogers, E. W., & Milam, J. (2005). Pausing for learning: Applying the after action review process at the NASA Goddard Space Flight Center. Paper presented at the Aerospace Conference, 2005 IEEE.
- Sagan, C. (1999). *The Demon-Haunted World*: Library Services Branch.
- Simpson, J. A., Weiner, E. S. C., & Oxford University Press. (1989). *The Oxford English dictionary* (2nd / ed.). Oxford University Press,: Clarendon Press ; New York :.
- Vaughan, D. (1996). *The Challenger launch decision : risky technology, culture, and deviance at NASA*. Chicago: University of Chicago Press.

ABOUT THE MISSION CRITICAL TEAM INSTITUTE

Founded in 2018, after a three-year pilot at the Wharton School, University of Pennsylvania, the MCTI is a collaborative inquiry research and professional development program aimed at improving the success, survivability and sustainability of Mission Critical Teams, through invitational only collaborative inquiry programs and onsite engagements. We work with Instructor Cadres and Team Leadership to improve the human factor through exposure to current research and dialogue about current challenges and opportunities. In partnership with our current Mission Critical Team collaborative inquiry community we identify and support select organizations within Military Special Operations (within the 5 eyes), Tactical Law Enforcement, Urban and Wilderness Fire, Emergency and Trauma Medicine, NASA and other specific Aerospace organizations. Our effort includes:

- **Applied Collaborative Research Community:** To support our partners to develop more rigorous methods to solve current problems in a collaborative environment.
- **Instructor Cadre Development Programs:** Focused on sharing the theories and techniques related to the selection, teaching and learning of future Mission Critical Team Operators.
- **Custom Small Team Leadership Programs:** This program would be aimed at MCT operators who are entering positions of leadership.
- **Mission Critical Team Summit:** held once a year and aimed at bringing the entire collaborative community together once a year to explore emerging ideas, tools and techniques related to further develop the Human Factor.
- **Learning Observations and Review:** Onsite visits to our partners to observe and discuss current and future practice.

FOR MORE INFORMATION CONTACT:

Coleman Ruiz, Coleman@missioncti.com
Cofounder and Principal
Director of Performance, Mission Critical Team Institute (MCTI)

Dr. Preston B. Cline, Preston@missioncti.com
Cofounder and Principal
Director of Research, Mission Critical Team Institute (MCTI)

Contributors to this Paper

This paper was written in partnership with the MCTI collaborative Inquiry Network and will continue to evolve. Specifically, Each iteration will be further informed and modified in response to feedback from the MCTI collaborative inquiry network. Comments for Version 2 can be send to Coleman@missioncti.com

After Action Review

Preparation

- Physiology: Try to provide water, snacks and a reasonable temperature so they can engage?
- Timing: Are they too tired to engage? If so, when is the soonest you can schedule?
- Room Setup: Can everyone see everyone else?
- Security: No rank, no recording
- Are participants sharing air space
- Are leaders or gray beards crowding out other voices?

Engagement

Phase 1: Opening the Question/Issue(s)

- What was the Plan? Review of what we knew when entering the Immersion Event.
- What Actually Happened?
- What are the dominant issues that have emerged?

Phase 2: Discussion, Analysis, and Review

- What is the Delta, the actional items that need to be addressed?
- What was the process of preparation, approach, and levels of problem solving.
- Summarization:
 - Sustain ("we want to do more of this..."),
 - Improve ("we want to do this less or differently..."), and
 - Environmental Considerations (what were the conditions at the time of action – what did we know “at the time” - context is everything)

Phase 3, Decision/Execution Phase

- Archive (write down) and assign next-steps to a responsible party.
- Identify (ask the responsible party) potential obstacles in the way of getting to the next phase? Agree on a process for follow-up, including deadlines for specific action items.
- When you close the session, remind everyone that you're moving into the action phase.

Closure

- Leaders must commit to whatever decisions agreed upon, with no side deals after-the-fact.
- Some interpersonal conflict might need to be followed up on.
- Some individuals might require follow up for trauma or misunderstandings.