

Preparing for Crisis with Tactical Decision Games, After Action Reviews and Critical Question Mapping

By Fred Leland

Followers of this blog and those I have worked with know the workshops I run utilize tactical decision games, in the form of pen and paper exercises, tabletops and force on force free play exercises involving the use of Simmunitions. Also in these workshops we stress the importance of identifying lessons learned utilizing the after action review process. These training methods all stem from creating and nurturing both the individual and organizational cognitive and physical skills necessary to observe, orient, decide and act while according with an adversary(s). In short these types of exercises build strategic and tactical thinking skills and tactical physical skills. These types of exercises build strength of character and hence confidence in our individual tactical decisions in accord with the overall strategic intent of the organization.

“Autonomy, mastery and purpose” as Daniel Pink states, are the pillars to opening up insights, innovative thinking, and creative solutions to problems to effectively run organizations. These individual abilities are developed through robust interaction with others, others from your field or profession, as well as others from a vast array of disciplines. The cross disciplinary effect and insight gained from stepping outside your current way of thinking is very powerful. The problems we seek to solve and the rate at which they are solved increases by creating and nurturing individual thinkers and doers who are willing to collaborate with others while seeking solutions. This, all in an effort to learn, unlearn and relearn, hone and adapt our procedures and methods so we tackle problems in the most adaptive and effective ways.

Learning, unlearning and relearning is an important, yet often forgotten factor in the world of law enforcement. This is important for us because we often times respond to novel and uncertain situations with rote, by-the-book tactics. Novel and uncertain situations are all too common in police work when emotional people are involved, and this tends to focus our minds on only one way of solving problems. This checklist approach often times stifles initiative and the ability to adapt as we cops search for the answers in our heads that stay in line with our written procedures. This can both put officers in jeopardy and have a drastic impact on our effectiveness by creating friction in our decision making cycle, individually and organizationally. In short we are caught up in searching for the right way of doing things when in reality there is no one right way, no one solution to the host of problems we are tasked with solving. This also holds true when it comes to training methodologies.

Most institutional training had a mechanical, check-the-block feel, was focused on throughput, and was often governed by inputs (hours, ammo, etc.) rather than outcomes or results. Training methodology, combined with too many rules, stifled initiative while officers in training were *waiting to be told what to do*. Program outlines were developed that compensated for instructor inadequacies by providing them a script. This may have prevented failure in some, but it prevented excellence in many. Training methods often not in harmony with human nature and how we make decisions. Training rarely required real problem solving and initiative and training programs misapplied stress: too much at the beginning, too little at the end. There was little room for experimentation or mistakes in training with much of the program focused

on meeting minimum standards and avoiding failure, not on excellence. Faulty assumptions about how humans make decisions were not factored into training and students could succeed without understanding the *why behind decisions*. We spent way too much time telling people what to think instead of teaching them how to think. I would like to discuss an easy to do, fast and robust approach to solving problems called critical question mapping.

While attending the Boyd and Beyond Conference in Quantico October 14th and 15th I learned about an innovative process to solving problems called Critical Question Mapping (CQM). CQM method of problem solving is a methodology, I believe, law enforcement can utilize in enhancing their planning, strategies and tactics especially in those critical incidents that involve multi-person, multi-agency and multi-jurisdictional approach. The CQM method is utilized in the *preparation phase*, in training, by answering critical questions needed to solve a strategic or tactical problem, and in after action reviews to learn how to better respond in future scenarios

Critical Question Mapping methodology was developed by Dr. Terence (Terry) Barnhart who is a consultant, researcher, and facilitator at the drug company Pfizer. His work originally focused on creating environments in which scientists could flourish, but now extends to leadership, strategy and now even the Marine Corps is starting to use some of his work. Like the teams we work with, police, fire, school and town administrators and so on, his corporate teams are made up of people who rarely interact and have different goals and demands. Bringing them together in the conventional ways just wasn't creating the performance improvements needed, to support this effort, he had to create new methodology, like Critical Question Mapping, in order to create insight, facilitate learning and accomplishment, and build shared purpose to rapidly increase the performance of a group. He has taught and applied insights in this work, regularly doubling or better, the performance of teams as wide ranging as Pfizer's Alzheimer's disease research unit to elements of the Marine Corps Expeditionary Warfare School, from a candy and food manufacturer's product development team, to R&D within the world's largest consumer product company.

Critical Question Mapping is based on Dr. Barnhart's research and his efforts in "*creating a robust method to align complex innovation problems.*"

The context:

1. Solving large, multi-dimensional problems is mentally challenging – Gaps and missteps can derail the solution
 - Like doing higher math while driving a car – It is just easier when you can write things down
2. Solutions to large, complex problems involve coordinating activity of many people in:
 - Developing solutions
 - Aligning solutions into a coherent system
 - Adopting solutions and delivering the system
3. Problem solving of any sort requires creativity
 - The more creative, the better the potential for breakthrough

The challenge

1. Identify a method which provides:
 - Robust structure to frame problems without gaps
 - Alignment and coordination between multiple people against a common problem solving goal
 - Greatest amount of creativity in the solving of a strategic problem

One of the problems in meeting the challenge of solving complex problems Dr. Barnhart observed was; *“when people think in statements, they lock into the implications of that statement.”* In other words we lock into to what we have been told or taught. We mentally lock into a certain way of doing things, following policy or procedure to a fault. This stifles initiative and adaptability. *“People’s ability to consider alternatives diminishes. Their ability to expand ideas diminishes.”* This should sound very familiar to law enforcement and security professionals who often times take it upon themselves acting alone, in solving crisis situations.

Dr. Barnhart’s research led him to understand in contrast to thinking in statements, here’s what to do and how to do it! *“When people think in questions, they open their orientation to see many options. They develop the ability to “debate enthusiastically, and build better, easier, more quickly developed options and structure strategic issues quickly and easily.”* People develop rapport and mutual trust, through the process and begin to *“collaborate on development and realization of solutions.”*

Developing Critical Question Maps

Dr. Barnhart describes critical question mapping as a five-step process:

1. Define a strategic problem or question for a team to resolve or answer.
2. The team brainstorms all of the questions they can think of that need to be answered in order to resolve the problem or question.
3. The team arranges the questions on a large map in causal order or flow.
4. The team reviews the completed map, removing overlaps and identifying gaps.
5. The team adds missing questions, removes redundant questions, and identifies issues for future brainstorming sessions

I mentioned above I learned about the CQM methodology on October 14 and 15 2011 while attending the Boyd and Beyond Conference where Terry Barnhart put the 67 people in attendance through an exercise testing the method. In my view from two days of using and learning about the process, it is a powerful methodology we in law enforcement and security can use in our efforts to prepare for the complex problems we deal with. I decided I would experiment with the CQM method in preparing for the full scale school violence response exercise Walpole would be conducting on October 28th. Below is a summary of my experience using CQM, preparing the town of Walpole for a large scale exercise, and implementing the school violence response plan.

CQM and Crisis Management

Over the last year I had the opportunity and privilege, with the help of many others (members of the Walpole police, school, fire departments, DPW, health department, local emergency planning committee and the Metropolitan Law Enforcement Council, preparing the town of Walpole for a large scale school violence emergency response drill. The exercise was designed to test the town's readiness in their abilities to respond to an ongoing deadly action or active shooter situation. The goals were to lockdown, unlock and evacuate approximately 1300 students, teachers and staff in accord with the school emergency response plan.

The process of preparation for crisis is an ongoing process that involves planning and training. In Walpole we are lucky enough to have folks who see the value in preparation. This preparation involved developing school plans and developing lockdown procedures, lockdown procedures that were taught and tested in small scale drills, much like fire drills. These drills had been conducted by the schools and the police department alone for a couple of years and we all decided it was time about a year and a half ago to test plan in a more realistic way to test our readiness as a town in our efforts to keep safe schools.

The complexity in implementing the exercise came in the form of arranging or rearranging schedules for meetings and tabletop exercises and establishing dates for tabletop exercise and the date for the drill. Even in a small town such as Walpole, those people and departments within and working for the town have jobs to do to keep the town's services available and the general day to day operations of the town running in a fluid way. We adapted and changed dates several times due to scheduling conflicts. Training time was scarce and little time or money was available for conducting full scale preparation as any of us in the public safety sector would like, so we took advantage of the little time we had for robust dialog when we could in person or through emails. It also took individuals taking advantage of white space in their days to take on roles in preparation.

We had not ever worked the emergency response plan in a collaborative way fully and the drill date was fast approaching October 28th as I went off to Quantico for the October 14 and 15 Boyd and Beyond conference and had the opportunity to hear and participate in Dr. Terry Barnhart's Critical Question Mapping methodology. I was a little nervous or apprehensive we may not be ready for the full scale exercise because it takes all these departments, all these individuals working autonomously yet collaboratively to effectively pull it off.

The learning that took place at the conference was powerful; it always is at the Boyd and Beyond. The pools of folks who attend each year are at the top of their disciplines and come from many. Military, science, homeland security, the corporate world, university students studying strategy, historians and law enforcement are all represented. This is important to mention because, the learning that takes place at the conference is because of this interaction amongst various view points. The CQM methodology exercised this year through Dr. Barnhart's facilitation brought this interaction and hence creativity out very strongly in my mind as a powerful tool we can use, and here's why. In the exercise, all of us, from all of our disciplines, were asked to put up a robust set of questions that we would have to answer, to change the culture of a large organization. We all come from different organizations of different sizes and flavors, but here's the kicker. We could all participate. We could all provide insightful questions about the problem, and we could all talk, engage and interact with everyone else in

the room. There were no functional or organizational barriers to solving this big, difficult, strategic problem

I decided to use the CQM methodology in our effort to conduct a tabletop exercise on Monday October 24th four days prior to the exercise in preparation for Friday. This date was already planned as a training day, with 3 hours available on the schedule. There were 21 department heads who participated in the tabletop exercise from the various departments mentioned above.

The strategic problem *“Ongoing Deadly Action Taking Place on School Grounds”* and our goals for the exercise were established; *“collaboratively execute the school violence response plan, “lockdown the school, stop the ongoing threat, safely unlock and evacuate the school, and prepare for the aftermath.”* Now write your critical questions you need to have answered to solve this problem on the *post it notes* provided you need to reach our goals, and post them upon the wall somewhere for all to see, you have 20 minutes, begin. These were the only directions given, which is how the CQM method is done. The questions and answers come from those who are going to implement the plan, not from an instructor who acts as a facilitator only, helping to guide the process of learning.

The initial 20 minutes cops, DPW workers, school staff, fireman herded in their circles, jotted down their questions and posted them on the wall. When the 20 minutes ended we had numerous questions to explore but they were all separated by department. I asked one question, “do you all work alone in your efforts to solve this problem?” The answer was immediately “no we do not.” “How do we fix this in a way that helps us collaborate in our efforts?” was my next question. “You have 20 minutes to come up with this solution.” All immediately began to transfer their post it notes of questions in a centralized area, but something very interesting happened and happened very fast. The room got loud as conversations between departments began to take shape as they worked posting stickles on the wall as they shaped and reshaped the flow of the how they felt the exercise would unfold.

The interaction that took place was quite frankly exciting to observe as cops, teachers, DPW workers, and fireman all worked together in a unified way. Quite frankly I had never in my 26 years seen this happen so fast. Once they had a flow state posted, they all answered the questions. In all there were 68 critical questions posted and answered in about a two hour period. Comments such as “I think we are ready now.” This was a great way of learning and preparing for the exercise.” I feel confident now in the decisions we have to make.” “I feel like we can do this.” The next day I had a DPW worker seek me out at the station for two reasons one was he came up with a better traffic plan for the exercise than the one I had come up with in the plan, and it was better. The second comment was; *“we DPW guys thought you were crazy having us write questions on post it notes at first but, by the time we were through we were all saying...this was a great way of solving problems. We can use this idea for other projects we have.”*

The CQM methodology was powerful to see at work as individual questions through interaction among several town departments grew into collective knowledge and innovation as they solved the strategic problem of an active shooter on school grounds.

The key after the table top was to observe how successful the full scale exercise would be handled. We did conduct the exercise on Friday October 28th and the goals set by the group

were effectively reached, along with new lessons being learned. I was impressed with how everyone worked towards common goals, in accord with the intent of the exercise and did so in a fluid and cohesive way.

I believe the CQM methodology help to build confidence and mutual trust among the different departments and agencies represented and all believed it greatly helped them prepare for the full scale exercise in which they locked down, stopped the ongoing threat, unlocked and evacuated over 1300 people.

We used the CQM process during the after action review, post exercise to test its relevance. The CQM process of reviewing the questions asked, showed we did not only answer the questions but we also discovered more questions. The answers to these new questions will only help to better prepare us for dynamic crisis situations and keeping schools safe. CQM is clearly a highly adaptive process that has numerous uses and multiple approaches to solving complex problems.

Key attributes I contribute to creating and nurturing adaptability that leads to effectiveness in crisis situations is *“strength of character”* and a *“willingness to continually learn.”* These attributes are keys to developing adaptability and in questioning convictions with the intent of discovering a higher level of EXCELLENCE in performance individually and organizationally. We must pursue that purpose, so we continually evolve in our planning, strategy and tactics, so operations in unconventional crisis run smoother and more effectively. CQM is a methodology that will help us in accomplishing this goal.

Critical Question Mapping as Dr. Barnhart states we should *“drive strategy development through a question format (insist on it!).”* In my view this is great advice as any situation we respond to has numerous unanswered questions we must find the answers to if we are to solve the problems effectively and safely.