Implementation

How I do it Daved van Stralen, MD, FAAP

General Tips

"What I teach today must explain yesterday or be used tomorrow. It could be called *the 72 hour rule*. People come back to me later, sometimes the same day, sometimes as long as 15 years later, and describe something I had taught them and how it helped. The material they describe works its way permanently into what I teach.

Teaching methods of thinking and problem solving to those without public safety or military experience has some difficulty. How to think and solve problems in uncertainty is difficult in civilian education. This material grows slowly and the novice may not see its importance. However, senior students or recently graduated students have advised me to continue teaching this material slowly and not leave anything out. New material that does not seem to make sense will make sense later after new lessons. New material also builds on previous material and the experience of the student. It does take more time as they do not learn the material in their didactic education. This is the challenge of teaching a new culture to those who do not see themselves as being in a new culture.

When physicians begin working with paramedics they have asked me how to teach paramedics. I recommended that the physician learn from the paramedics. Soon enough the paramedics would be learning from the physician."

Application

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The Individual

I teach the importance of the individual. The student in life will encounter a specific situation and must identify the principles involved, the inductive process of decision making. The student's perceptions place the situation or problem within a context from that individual's point of view. Others nearby, with differing perceptions, will place the situation in a different context. This produces different *mindful* sets that initiate separate sequences of behaviors in each person around the problem.

The individual as *actor* responds from immediately available knowledge, rapidly recalled concepts, and personal experience within the limits of working memory. The individual makes midcourse corrections using feedback information from the situation back to the individual. This is the inductive approach.

The individual as *observer* who will not be as heavily engaged in the situation relies more on concepts and principles (deductive approach) and have less feedback information from the situation. This is an easier method to teach but becomes useless in the dynamic action of an ever-changing situation.

Information

For effective communication I have found the people appreciate the dynamic nature of communication when I point out they first *identify* the situation, then *interpret* its meaning followed by *translation* to others. Translation is important as various member of the team will understands the circumstances differently. For example, a hazardous material specialist will view a fire differently than a firefighter affecting a rescue who both see it differently from a Battalion Chief directing operations.

Identification

Context helps with the significance of the weak cue or signal Pattern recognition fits here

Interpretation

Does the person understand the circumstances and its significance? What is its significance to the specialty of the person?

Translation

There are numerous other specialists around, how do you make it important to them?

The Indeterminant Problem

Threat

Education, training, and experience can reduce the effects of immediate threat and bring attention to potential threats.

Self-efficacy, the belief that one can influence outcome, can increase the potential that one will engage the threat

Uncertainty

Use of OODA Loop Decision Making will generate information

When you do not know the situation or what will work, focus on the objective.

Time dependence

Setting priorities toward safety and control rather than which aspect is easiest to treat.

The Fear Response, we are unable to stop its onset but we can work with it *Fight response*

When you feel yourself becoming angry reassess your objectives and priorities.

When someone on your team is becoming angry deflect them; if they are of higher rank ask, "What can I do to help?" or "How can I help?" because anger from higher rank increases flight and freeze responses in the team. Do not take it as a sign of your inadequacy as you will never make yourself adequate enough to stop the anger.

In the fire department we made the angry bystander a part of the team by giving them a role of gauze to hold.

Flight response

Assign the person a straightforward task to keep them engaged.

Freeze response

The physicians I trained told me they could feel the freeze response coming on. They would always return to a task that was successful and do it again or check the item. The freeze sensation would then resolve spontaneously.

Decision Making

Use John Boyd's OODA Loop Decision Making

Have a concrete objective. If you cannot reach the objective, decompose it to one you can reach.

I never make the final decision for any student. There is always a point where it does not really matter what one decides. That is a good place to start learning to make decisions.

If the student made a decision I disagreed with I would discuss it in private. If I could not, we discussed it in public but would agree it was right then proceed from the situation to the learner's decision. The circuitous nature of the presentation was not noticed but the structure of the situation, problem, and decision would be listened to intently.

If the student makes an error they may not know how it happened or not want to talk about it. I can review it as, "the person or team made the right decision, it is one I would have made." This helps me see what they experienced as they made their decisions and carried them out.

Vulnerability

Transparency on my own sense of vulnerability and the use of collaboration and team formation work here

Building a relationship with members of the team to reduce isolation is important. When we opened an ICU the two of us found we both had difficulty working with the same staff members. We made a list of them and discussed each one, dividing them. Then we would each focus on our chosen member to keep them from feeling isolated.

Collaboration

Trust I would act on a person's information without checking it. They realized they were "it" and had no back up.

Team Formation I would assign tasks and not repeat the work.

Values Shift is difficult as some will use initiative and creativity in low tempo times.

Information Flow,

Objective - no jargon, slang, or clichés. Each word has one meaning

Articulate - use a logical order and let the words paint the picture.

Succinct – excess and confusing information is not added. Keep sets of data to about 4-5 chunks to fit into working memory. Redundancy makes minor findings seem more important than they are

Credibility: The Theory of Knowledge

The material must come from what the learner experiences.

Personal Leadership provides direction and enhances performance of the group. *Relationship*: The leader forms a relationship with each member of the team.

Nurture: education and training, monitors the performance of team members. During dynamic events may overpower the resources and attributes of a member and the leader can assist in an early phase through nonverbal cues. Guides the lessons learned.

Transformation: increase the self-efficacy and teach the limits of each team member. Contribute to our character and bonding with others.

Direction: The leader organizes the team to work toward a coherent direction and develop judgment.