The Science of Developing Training for SWAT

- Participant Guide -

Instructor: Rick Jacobs

1-Sep-2023

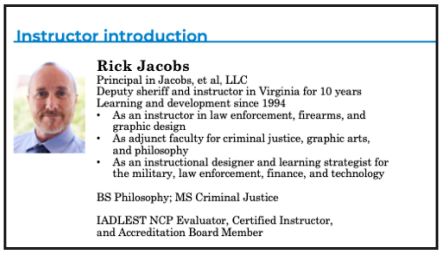
v20230815-Pr

Table of Contents

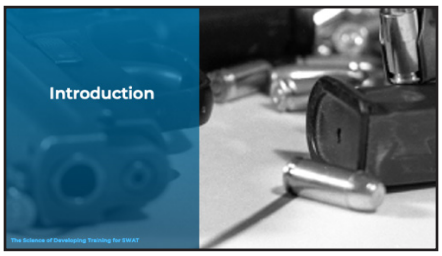
Introduction

Topic introduction

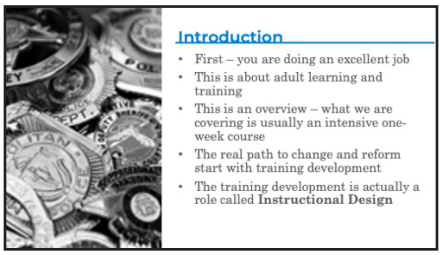
First, let me start by saying – you are all doing an amazing job. Millions of citizen contacts a year, thousands of SWAT actions a year, and the overwhelming majority of them done safely, without incident, or gaining any news. This is a testament to the quality of training that law enforcement instructors have provided for decades.



The purpose of this seminar is not to tell you that you have been doing things wrong nor to criticize how you have been developing training. As a matter of fact, you have been doing very well with what you have been trained to do. I would be willing to bet that most of you, by the fact that you are here instead of some of the sexier events you could be attending, is because you feel that there has got to be something more; you feel that you have pieces of a puzzle but no picture to put it together.



This is how we are going to approach this. This seminar will provide you an overview of the science that pertains to adult learning and training. Everyone here will recognize some part of what I am going to cover, everyone here will learn something new that they didn't know previously. Like me, everyone will discover that you intuitively did a lot of things right, but that you also did some stuff differently because you were just unaware.



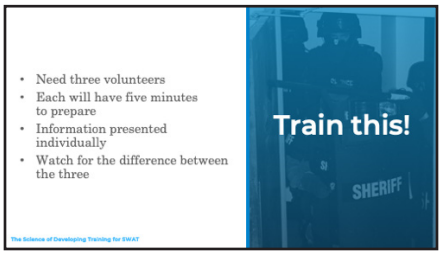
This seminar is about the science of learning, with some application. As the title infers, everything we will cover can apply to developing training for SWAT teams, which we all know has special considerations and issues. Most training science originates out of business and education practice, and academic research, but we all also know that law enforcement, especially SWAT, is very different from the controlled setting of academia, education, and the corporate world. They advocate for processes that just can't be done in law enforcement as it is in the civilian world, so this seminar will tell you what can be done and how to apply what works.

Caveat: what we will cover today is just an overview; a scratch of the surface. A course that would give you everything we cover today and prepare you to go back to your offices to start developing training would normally take about two full weeks. I have a course that is exceptionally intensive that takes one week and people are happily mentally worn out at the end of it. Each topic we are covering could be a full week course each, on its own.

What we will accomplish in four hours today will lay the groundwork, give you some vocabulary for processes you may already use, provide the leads you need for further research on your own, and give you the basic arguments to take back to your superiors to argue for change. It should

also give you a breath of fresh air – you are doing a lot of this already, you just didn't know the terms, the science, or the right steps.

I fully believe that change and reform in law enforcement doesn't start with training, it starts with training development. And that training development you are doing is actually a field called Instructional Design, in an industry called Learning and Development.



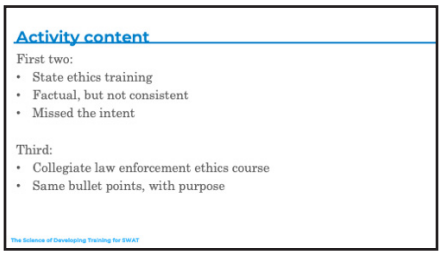
Activity: Train this

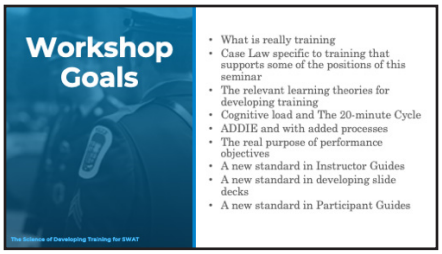
- Ask for three volunteers
- Ask them their backgrounds
- Ask them about their instructor background

Workshop goals

The goal of this seminar is to provide you with an overview of the science of training development, customized for the unique conditions of law enforcement and SWAT. We will cover:

- What is really training
- Case Law specific to training that supports some of the positions of this seminar
- The relevant learning theories for developing training
- Cognitive load and The 20-minute Cycle
- ADDIE and with added processes
- The real purpose of performance objectives
- A new standard in Instructor Guides
- A new standard in developing slide decks
- A new standard in Participant Guides





What training really is

Presentation

How often have you gone to something that was called training where you sat, listened, asked a few questions, and left? It was called training. You got training hours for it. But you feel like you just ticked a box of "training" with time allotted but got nothing out of it. Well, the sad and good news is, it wasn't training. You aren't crazy.

You participate in an event where the authority disseminates a great deal of information. They list training objectives that say you will "know," "identify," or will "apply" your new information, but there is no

assessment at the end of it. You did not attend training; you attended a presentation.

They may list training objectives. They may even provide an assessment, but then tell you the assessment doesn't actually count for anything. It isn't training. It is a presentation that has been wrapped in a thin blanket of naiveté of what training entails. Unless your performance is measured and there is a risk of not getting credit for participating, it is not training.

Training implies skills acquired, better performance. If performance is not measured, then there is no accountability. Without accountability, there is nothing establishing whether knowledge transfer or performance competency was accomplished.

Practice

You participate in an event where the authority provides a lot of information and demonstrates a task, gives you background and explanation, and then coaches you through performing that task repeatedly. They list performance objectives that say you will be able to "know," "identify," or will "discuss" the topic of the event, but there is no assessment at the end of it.

As they are coaching you, they may tell you they are assessing your performance, but then tell you the assessment doesn't actually count for anything. It isn't training. It is practicing a task for improvement or for honing a new or expected skill. Unless your performance is measured and there is a risk of not getting credit for participating, it is not training.

Practice is essential to training, but unless there is an assessment of that performance with a pass/fail component to it and it counts as credit for something, it isn't training. Training requires demonstration, practice, performance, and assessment of performance. When practicing, you are performing a task repeatedly, but the expectation is improvement, not new or changing behaviors.

Education

Education alone is not training. Education measures knowledge transfer. You may have to perform to a certain level, but you aren't performing a task or developing skills, you are learning, processing information, and developing knowledge.

You participate in an event where the authority disseminates a great deal of information. They list training objectives that say you will "know," facts you will "identify," or information you will "apply." They have an assessment that measures the knowledge transfer and, if you fail, you will not get credit for participating in the event. You did not attend training, you were educated.

If you aren't actually performing a task in the event, you are not training. You are learning, you are gaining new knowledge or changing your mind about past knowledge, and there is knowledge transfer, but you haven't been trained to do anything.

Training

Training is task-oriented with an expected performance outcome. All training requires knowledge transfer (education), but not all education includes performing a task. In other words, education is the theory of something, and training is the practical application of the theory.

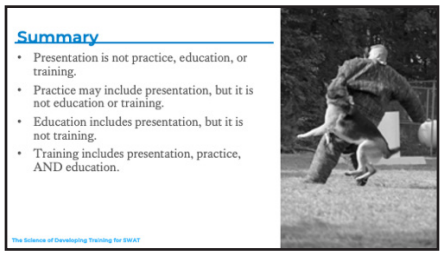
Say that you participate in an event where the authority disseminates a great deal of information. They list training objectives that say you will "know," facts you will "identify," or information you will "apply." Then they demonstrate how to do a given task and have you practice the task. They have an assessment that measures the knowledge transfer AND the performance of doing the task and, if you fail, you will not get credit for participating in the event. You have now gone through training.

This really is the only definition of training. This is creating new or changing current behaviors.

There is nothing wrong with a simple presentation or with informative education, but the expectation of the results needs to align with the type of event that is being provided. If there is no task performed or evaluated, then it shouldn't be called training.

As instructors, knowing the "what" you are building is important. Until we can get a change in the semantics of what we are doing as instructors, we are going to continue to see anything delivered as training. This makes our job harder and blurs too greatly what we are delivering our constituents – law enforcement and the public at large.

Summary



Each type has its place and purpose. These differentiations aren't meant to diminish the usefulness of each. There are many times where a presentation is sufficient – this seminar is one of them. They each have value in their own right. Identifying what you are actually delivering can help you set the boundaries and expectations of what you need to create, as well as set expectations to those who are expecting a certain result from your development and delivery.

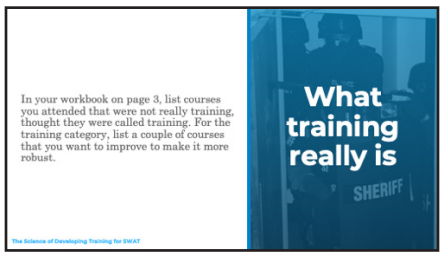
To recap:

- A presentation only disseminates knowledge.
- Practice only rehearses a task performance.

- Education disseminates knowledge and then assesses knowledge transfer.
- Training disseminates knowledge AND develops task performance, then assesses knowledge transfer AND performance proficiency.
- Presentation is not practice, education, or training.
- Practice may include presentation, but it is not education or training.
- Education includes presentation, but it is not training.
- Training includes presentation, practice, AND education.

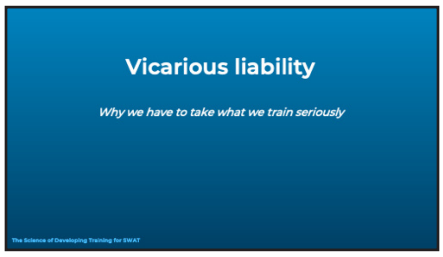
Activity: What training really *is*

In your workbook on page 3, list courses you attended that were not really training, thought they were called training. For the training category, list a couple of courses that you want to improve to make it more robust.



Why this is important: the case law

While we should have an attitude of responsibility to our participants and ensure they get the absolute best and detailed training possible, torte law has clearly stated that we have a civil responsibility as well.

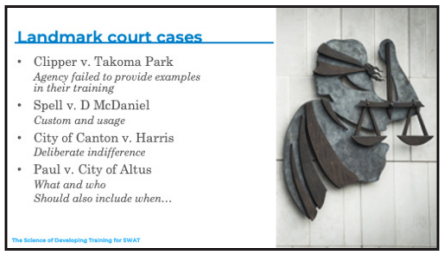


This civil responsibility is called "vicarious liability." It means that you personally, as well as your agency, can be held liable for anything your participants do, if what you trained them to do violates someone else's right to life, liberty, and pursuit of happiness.

Court cases establishing vicarious liability

Clipper v. Takoma Park [1]

Takoma Park, MD, police were held accountable for an instructor that had not provided examples in their training, at least documented any examples. There was nothing to prove the claims of the detective.



The case was related to a bank robbery that occurred in 1971. Three men entered a bank and robbed it. They were confronted by police as they left the bank, and a shootout ensued. One was shot, one was captured, and the third escaped.

The robber who escaped was described as an older male. This description fit the father-in-law of the robber who had been shot. Det. Starkey

arrested the father-in-law, Clipper, and held him for six days. He was released when it was determined he was not the robber.

The point in contention was whether Det. Starkey had a duty to seek exculpatory evidence, which included two alibis (one being a police officer) who were with Clipper at the time of the robbery. The court determined that the agency (namely the lieutenant) should have been aware that there was no probable cause for arresting Clipper, since he could have been easily eliminated as a suspect by eyewitness identification and the alibis.

But Starkey was not held accountable, Takoma Park PD was through vicarious liability:

> *"Starkey stated that he had received no training materials giving typical examples of arrests properly based on probable cause and that he applied the practices and policies in Clipper's case that were "applied… to every case that I worked on."*
> - 876 F. 2d 17 - Clipper v. Takoma Park, Maryland

This quote, and the inability of Takoma Park to prove otherwise, was crucial in protecting Starkey from the $300,000 award to Clipper.

Spell v. D McDaniel [2]

This case represents vicarious liability for "non-specific policy," or policy that is established by custom or behavior. This case establishes that the idea "What I am going to teach isn't really how it is," can create a standard of liability as if there was actual written policy. This means that "custom and culture" is just as important as stated policy and procedure. What's more, this means that the custom and culture of your classroom creates vicarious liability for you, as well. Unfortunately, it means you have to be careful about what you joke about, because if it is taken out of context or someone takes seriously something you were "just joking about," they can claim it was actually part of your training.

In Spell v. D. McDaniel, Spell was arrested for DUI. He was drunk and high on drugs at the time of his arrest. Spell claimed that while he was being processed and tested for intoxication, he had enraged McDaniel to the point where McDaniel severely assaulted him. He was beaten and kneed in the groin so hard, a testicle ruptured and had to be removed.

Spell sued both McDaniel and the City of Fayetteville. McDaniel denied the assault, but a jury found him liable for the assault and thus making the city liable also. Upon the loss of the assault liability, the city attempted to separate their liability by claiming McDaniel was not following policy and his actions were outside of policy.

The city lost their attempt to separate themselves from liability. The court concluded that:

Official policy is not the only basis for imposing liability-custom and usage may also serve.

> *"Custom and usage" includes persistent and widespread practices by agents and employees that occur with enough duration and frequency which warrants actual or constructive knowledge by the leaders without correction so that they have become customary among employees.*

> *"There are two basic theories for imposing organizational liability in the more typical situation where fault and causation cannot be laid to a municipal policy "itself unconstitutional." The first theory applies directly to this topic, the second does not. The first "locates fault in deficient programs of police training and supervision which are claimed to have resulted in constitutional violations by untrained or mis-trained police officers."*

> *"The way in which a municipal police force is trained, including the design and implementation of training programs and the follow-up supervision of trainees, is necessarily a matter of 'policy' within the meaning of [liability]. To the extent a particular training policy is fairly attributable to a municipality, it is 'official municipal policy.' To the extent such an official municipal policy has deficiencies resulting from municipal fault that then cause specific constitutional violations by deficiently trained police officers, the municipality is liable..."*

This means that even if you have a policy of training people to not break rules or violate the rights of others, if you know people are doing so and you are not attempting to stop it or hold them accountable, you are making it an acceptable custom and practice, which implies unofficial policy.

This also means that if instructors ignore parts of the training, dismiss some parts of training as unimportant, or express disagreement with how something is trained, it could make the agency and even that specific instructor liable for the actions of the participants they trained, or more accurately failed to train.

City of Canton v. Harris [3]

City of Canton v. Harris is considered the landmark case that established "failure to train." While there had been plenty of other cases based on failure to train, this case went all the way to the Supreme Court and established the precedent that a municipality is required to provide training on all things that are not considered reasonable expectations of common knowledge.

Essentially, Harris made a lot of claims about police misconduct, but ultimately, it came down to one factor - she had an emotional and physical issue that was not immediately addressed. It was accepted by SCOTUS that a municipality can be held liable for a lack of training if it is clear the lack of training demonstrated a deliberate indifference to their citizens.

Harris demonstrated some unusual effects and had been asked several times if she was having a medical emergency. When she denied she was having a medical emergency, she was ultimately left on the floor. When she was released, she was taken to a hospital where she was diagnosed as actually having some medical issues.

It was found that the supervisors had not been trained to identify issues that needed medical attention, which the court felt was deliberate indifference. The city was found liable, but the supervisors were not because of the agencies failure to train personnel and the expectation that agency leaders should have known training was needed.

Paul v. City of Altus [4]

Paul was a passenger in a car that was pulled over by law enforcement. Paul is a quadriplegic and was ordered to exit the vehicle, even after telling police that he was unable to. He claims that a police officer pulled him through the window by his neck, threw him to the ground, and handcuffed him while the officer had his knee on his neck. Paul claims that he urinated himself and went unconscious, but then asked to be taken to a hospital. At the hospital, x-rays showed that his neck was fractured and his hip was strained.

For the court case, the agency provided written policy, written by CLEET, that stated that officers should not put their knee on the necks of those being handcuffed "for obvious medical reasons." However, the officer's sergeant wrote in his report that the officer arrested Paul using techniques "as he was trained."

The court found that since there was a discrepancy in what was trained versus policy, they could not hold the officer accountable, but the agency was still accountable.

The precedent set here is that training must be documented at two levels: what was trained and who was trained. I would add that when they were trained is just as essential, as we saw in the case with Eric Garner in NYC.

Activity next page

Activity: Analyze liability

These scenarios do not have answers. We are going to discuss them according to your agency's policy, procedure, and we will analyze whether you, as an instructor, would be held liable.

Scenario 1

You are in a class where you and a co-instructor are training a defensive tactics course. Part of the course is watching videos of police combating resisting individuals.

As you are watching the videos, your co-instructor is doing a play-by-play of the scenarios and making funny comments about the tactics. He says things like "Kick'em in the nuts!" and "I would have just gone Jimmy Snuka Superfly on him!"

Several months after the course, someone who had been in that class is facing a civil suit for using a tactic that is against policy. The agency is also a defendant and you have been subpoenaed. Turns out he did something similar to your co-instructor's commentary.

Do you need to be concerned about the outcome of this case?

Scenario 2

You have been training a particular course for several years now and you were very diligent in maintaining and updating it through those years. It is a topic you are passionate about.

You have had hundreds of participants over the years. One of your participants is going to court for a civil action for something related to your course. This participant took your course quite a while ago and the information has changed since they were in your course.

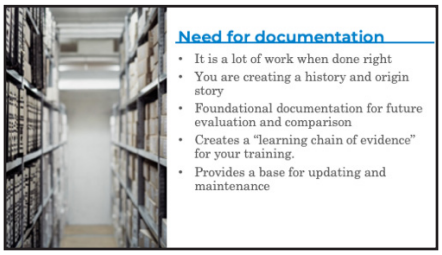
What do you need to know to help define where liability rests with this impending court case?

Scenario 3

You are providing training to large cities and to small jurisdictions. You find out that the training you are providing has very different applications depending on the size of the agency. The small jurisdictions do not have specific policy on the material you are training, whereas the larger agencies have large sections of policy dedicated to this topic.

Are you equally liable for the use of your material depending on the jurisdiction's standards of policy?

The need to document history of why you are training what you are training



We are currently seeing a remarkable trend in our communities – people becoming FTOs, instructors, and leaders with less experience than in previous generations of law enforcement. This is one of the reasons why the old adage of "based on my background, training, and experience" is wearing thin. We are losing centuries of institutional knowledge by early retirement, attrition, and just people not wanting to deal with the crap anymore.

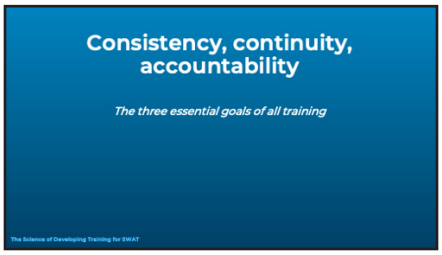
The old way of developing training only drew a line to our own thoughts and perspectives. By following a specific process, we draw a line to objective observation, research, and lessons learned - you take yourself out of the mix. Your expertise informs the training instead of being the sole source of training.

We create a trail - a learning chain of evidence - which should be defensible. However, there is one more step to documenting your history of developing a course. The first time you create training, you are creating Version 1 (v1 or, as I do, v20230825).

As you move along delivering this training, you will update it with new information, new processes, or updated material and content. A best practice is to review your training materials at least once a year to keep it current and relevant. Every time you make a substantive change to the training, you do not update the current materials, you make a copy of it, change the version number, add your updates to the new copy, and create a change log to track those changes over time. This way you are creating not only a chain of evidence for how your training was developed, but you are also creating a historical chain of evidence for how your training has evolved over time, something that will be very useful when you are called to testify in court for a former participant from years before.

Documentation also provides you an opportunity to evaluate your process and see gaps. As you move through your documentation, starting from the abstract moving to the concrete, you will notice that one item may not necessarily lead to the next. You may see there is a hole in the research, a question that needs to be answered, or, worse, you made an assumption in the performance of a task that was not appropriate for the course and now need to add more objectives and content in the latest version.

The need for consistency, continuity, and accountability



What does this mean for training development

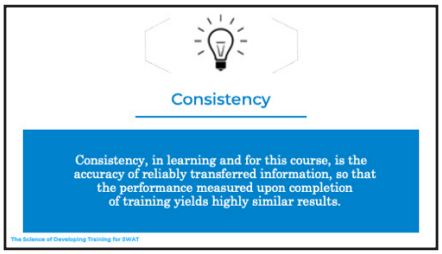
We have been holding personnel, instructors, and agencies accountable for decades, but that accountability has been on a shaky foundation as an industry. Increased litigation and criminal charges against law enforcement professionals have elevated the question of the efficacy of our training. Defunders claim that defunding law enforcement won't impinge on training because training "clearly isn't working."

We know that this isn't true - it works millions of times a day in interactions with citizenry. However, knowing the reality is one thing, proving it is quite another.

One thing that has hampered law enforcement accountability is the nature of how law enforcement trains. A lot of training is done, but it isn't consistent in who, what, and how it is delivered. There isn't continuity between iterations of training and training blocks. All of this has led to a difficulty in creating accountability despite holding people accountable.

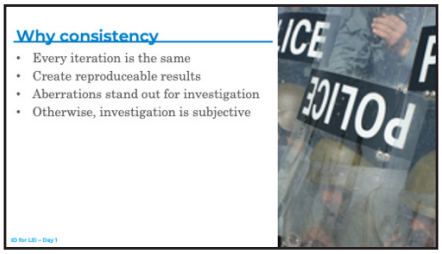
The days of "based on my experience and training" as an argument are coming to an end. The view of law enforcement has been corrupted by TV, movies, and pundits, but we don't have a lot of evidence to argue back. There is a need for more evidence of what is trained, and how it is trained. We can establish a "chain of evidence" of industry knowledge.

Why consistency?



Training without consistency is nothing more than checking a box.

Consistency, in learning and for this course, is the accuracy of reliably transferred information, so that the performance measured upon completion of training yields highly similar results.



This means that after every iteration of training, despite who delivered it, the bell curve of results should show a very high-level of learning transfer. This starts with the Instructor's Guide (IG).

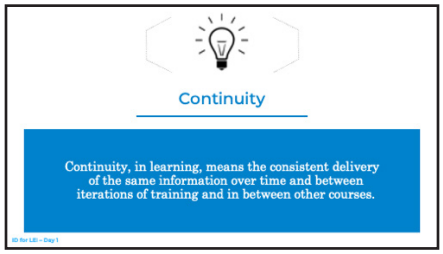
Consistency in training means that your results are reproducible - this is science and evidence. It means that no matter who teaches a course, to whomever the audience may be, the participants demonstrate an expected performance outcome. It also shows that all personnel were trained to the same consistency, so aberrations can be more successfully identified.

If there is a history of high success, with consistent results, and suddenly there is an aberration, it provides a more targeted examination. Was it the class? Was it the instructor? Or was it something else that can be investigated?

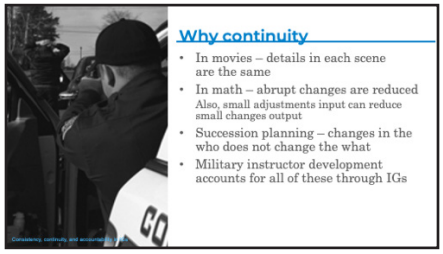
Without consistency these investigations are, at best, subjective evaluation and guesswork, at worst, blame and rejection.

Why continuity?

Continuity, in learning, means the consistent delivery of the same information over time and between iterations of training and in between other courses.



In movies, it means the details are the same in different scenes. In math it means that a function does not have abrupt changes in value and that small changes in output can be adjusted by small changes in inputs. In business and leadership, especially in law enforcement, it means a continuous chain of command or a plan of succession if there are changes in leadership.



All apply to learning. In different teaching environments or iterations of training, there are no big changes. Someone should be able to walk into a course taught at any time and find the instructor in the same place, at the same time, providing the same information, as other instructors at other times.

The mathematic expression of continuity applies for adjusting to unexpected changes. Small changes, such as a change in instructor, a change of venue, or the availability of certain resources, should be small changes that can be adjusted so the results are the same.

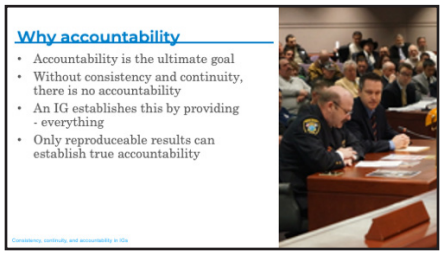
The succession explanation of continuity is by far the most common issue in law enforcement training - who is delivering the training. In my conversations with academy instructors and directors, the biggest problem with training is the ever-changing access to instructors. It could be the changing of instructors every two years (this seems to be the average). For some it is a dependence on volunteer instructors. Still others, it is a lack of access to skilled, capable, or knowledgeable instructors.

The military manages continuity issues through honing new instructors in a very calculated, intentional development process. Continuity in all these areas of law enforcement training starts with the Instructor Guide.

Why accountability?

Most people have a pretty good idea of what accountability is. However, as we have already done, we will provide a learning definition for accountability to establish the baseline.

Accountability is the result of consistency and continuity, and it provides the science and evidence to identify responsibility and justify consequences.



Accountability is ultimately the goal. While we want our personnel to be prepared, capable, and safe, ultimately it comes down to liability, exposure, and holding personnel accountable for their actions, behavior, and understanding.

Accountability cannot be established sufficiently if there is no consistency or continuity in training. The lack of consistency has led to a lot of injustice within the law enforcement rank and file - not only to personnel and agencies alike, but to the citizenry, as well.

If the courseware content in an IG contains everything an instructor and participant needs, then it will have consistency, continuity, and accountability. This includes all information and background, as well as instructor prompts, discussion questions with summaries, activities articulated with expected results (assessments are activities), instructor preparation notes, and specific instructions within the content to include timing, presentation, and resources.

You can only have accountability with reproducible results. The less information provided, the more randomness in each presentation and the more likely certain material will be included that will go unaccounted for.

What is the Science

The five learning theories that matter and the five learning myths that don't

Five real learning theories

There are, at last count, 32 bona fide learning theories. Out of the 32, only about five have any real relevance to developing training. Of those five, they work in concert and are essentially just common sense. If you find yourself passionate and fascinated with the world of instructional design, seek them out to read about them, study them, and pursue the knowledge. Anyone who claims to be in a learning industry role that is not constantly seeking to learn, should not be in their role at all.

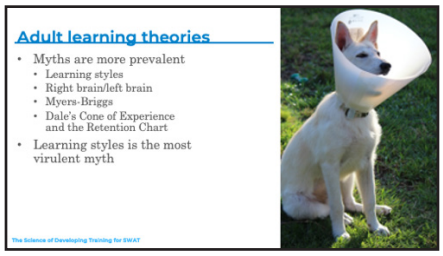
The five theories are:

- **Behaviorism** - we learn through environmental conditioning [5]
- **Cognitivism** - we learn through internal mental processing [6]
- **Constructivism** - we learn by incorporating new information with previously learned experience [7]
- **Humanism** - we learn when other needs are met [8]
- **Connectivism** - we learn through making connections and connecting to others [9]

However, to develop training that is effective, impactful, and meets the needs of your agency while maintaining consistency, continuity, and accountability, they really aren't as important to know intimately as people think or future hiring managers imply.

Additionally, there are things that people call learning theories which are actually learning myths. Unfortunately, there are more people who know the learning myths than there are people who know learning theories. Learning theories are based on science and typically come from the realm of research conducted within the field of education or psychology. Most learning myths come from an idea someone had or bad science.

Five learning myths



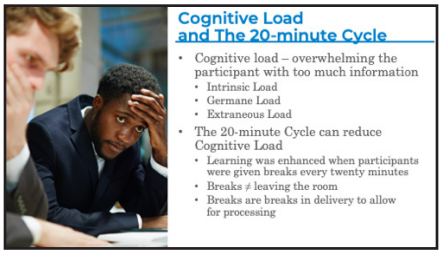
While there is an abundance of learning myths, here are the top five myths masquerading as theories:

- **Learning Styles** has been debunked - it is not science. Most research assumes the validity of Learning Styles, but when learning styles was specifically researched, none existed. It turns out that people may have a preference between auditory or visual learning, but they do not learn more effectively only in that way. Holistic learning is the key. [10] [11]
- **Herrmann (right brain/left brain)** is debunked - more recent research has shown that there is no specific locus for logic or creativity - we are whole-brained. Most research also assumes the validity and finds corroborating results. [12]
- **Myers-Briggs Type Indicator** (the INTJ, ENFP thing) is a non-scientific personality inventory that is interesting; but it should not be used as science or to sculpt learning. [13]
- There is a debate about **Multiple Intelligences** as well and there is a lot of contentious papers going back and forth. So far, from reading the research, there is no scientific support for MI other than the work that Gardner, the author and developer of MI, is performing. Essentially, he made it and he is busy proving it through his own research when few others accept it and independent research dismisses it. [14]
- **Dale's Cone of Experience and the Retention Chart** has been largely debunked, also. One clue to the lack of scientific relevance of this is that learning and experience are not neatly rolled into even percentages. There has been no real research on this and there are so many caveats and exceptions, it hardly stands as anything but a nice idea. [15]

Learning Styles is, by far, the most prevalent and hardest myth to quash – mostly because most education degrees still include it in their curriculum and many states still require it as part of their licensing. You will see and hear them pop up constantly. Again, what research has actually proven is that learning is holistic. You cannot train to one sense or style without limiting understanding, retention, and performance. All learning and training is based on repetitive exposure to stimuli. Train to performance,

include everything that someone needs to perform well, then put them in situations where they have to make decisions and you have created a learning and training environment.

Cognitive load and the 20-minute Cycle



Cognitive load

Cognitive load is essentially when we overwhelm our participant's ability to remember. If we put too much cognitive pressure on a participant, learning stops. There are three types of cognitive load: [16]

Intrinsic Load

Intrinsic Load is the difficulty of what is being delivered. It refers to the complexity, the advanced nature of the material, or the inexperience of the participant. The way to reduce this load requires the ability to break information down into smaller, less complex parts and delivering these parts in such a way that the participant can grasp the information or the task. In Instructional Design, this is called "chunking."

An example would be putting a new recruit into handling a domestic violent in their first week of training: they don't know tactics, the law, defensive tactics, or anything yet that would enable them to resolve the incident. [17]

Germane Load

Germane Load is the part of memory we use to process new information and either modifies or creates new behaviors. Germane Load is what we want to accomplish through training and should be the target of our training development. We do this a lot already in law enforcement training by tying new information to previous knowledge and creating systems of development that are similar. We typically do this through scenario-based training and by putting LEOs into situations that are very different, but use the same skills – we call them tactics.

One thing that also supports Germane Load, but we do not do well in law enforcement training, is giving participants an opportunity to reflect on the new information. We give them new information, demonstrate it, and then immediately get them into performing. Providing opportunities for reflection helps build the Germane Load. This doesn't mean we sit in a circle a chant "Aoooohhmmm" while meditating, it means we allow them to discuss, debate, and game new information. [18]

Extraneous Load

Extraneous Load is anything that distracts from learning. This could be frequent, arbitrary breaks, devices that aren't being used for learning, or undeveloped activities that do not utilize everyone's attention. We actually see this most commonly with slide decks – too much text, too many moving parts, badly designed slide decks, etc.

By designing slide decks that do not distract from learning, yet provide an additional source of information, we can reduce Extraneous Load. This is exactly the reason I design my training materials the way I do – to reduce Extraneous Load and improve Germane Load. [19]

Breaks after 20 minutes

Providing breaks to participants is an essential part of learning. Research has shown that chunking training into three 20-minute chunks with five-minute breaks can significantly improve a participant's perception and their short-term and long-term retention of the training. This was compared with a control group who received the same training material, but in a one-hour block instead. [20]

However, most training in public safety is conducted with one break every two hours. Why do we do this?

Because that is how it has always been done. No other reason.

As it stands, when planning your training day, a full day of training is actually 7.5 hours. It is easier to break a 7.5-hour day into two chunks with a 15-minute break in between. You still do that: giving people a 15-minute break every two hours enables them to take care of themselves physically and mentally. In some cases, it is the law.

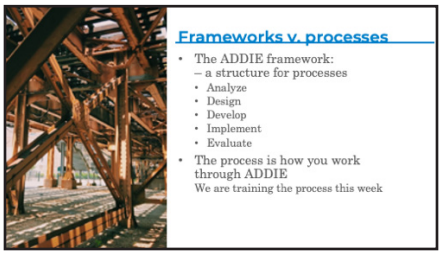
So how do we implement a break every 20 minutes? We all know that if you give people a 5-minute break, they will be back in 15. If you give them a 15-minute break, you might get them back in 30. So, the idea of giving a five-minute break every 20 minutes sounds like a classroom management nightmare.

The one thing the studies do not discuss is what constitutes a "break." A break doesn't necessarily mean they need to leave the room; it means there is a break in the instruction, as opposed to a full hour of continuous talk from the instructor. Participants just need a break from receiving the same stimuli for over 20 minutes.

We talked about Germane Load and how one tactic for improving that cognitive load is reflection. I stated reflection can be something as simple as a discussion. Every 20 minutes you can plan an activity, a discussion question, a group discussion, a debate on a tactic, or something as simple as providing a video of a real event for people to ponder and analyze in light of their new information. The break is simply a break in providing new information, not just sending them off to do what they want.

ADDIE

What is ADDIE



One of the primary terms you will hear in the instructional design world is "ADDIE." Developed for the military in 1975 by Florida State University, ADDIE is an acronym for Analyze, Design, Develop, Implement, and Evaluate. Many will call it a process, but it is more accurately a framework – something for a process to be built on.

To make it more confusing, ADDIE has several versions of "steps" for each "phase." What these "steps" look like depends on the organization, their priorities, and their methodology. You will find in the booklet I have handed out the steps and processes I have developed over the years, using the ADDIE framework.

One thing to note: this is a process, not the process. This is what I have developed after years of experimentation, research, and execution of instructional design projects for the military, for public safety, and for the private sector. I used this process to build this very presentation.

While ADDIE is a framework, there can be processes in each phase of ADDIE. Analysis, in ADDIE, dictates that it should occur before you begin designing your training. What processes you use for analysis is not dictated by ADDIE, it just implies that the process of analysis for training should come first. But, this framework is not linear, it is iterative. Which means that analysis should be occurring throughout the development, not just once on a specific thing.

There are other frameworks, there are an over-abundance of processes, steps within the processes, and project management styles. We won't talk about those here. For now, this course follows loosely the ADDIE framework in how training should be developed, and then we will add the process and steps that I have developed (which are available on my website for this presentation) that fit with each phase in the ADDIE framework.

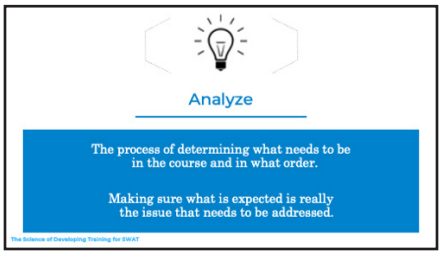
What does each phase mean

Analyze Phase

You cannot create training without analysis. It is akin to malpractice. There is an old joke about ADDIE - without analysis and design, all you have is DIE. Unfortunately, a lot of organizations conflate instructional design to course development, which is the process of building training materials - too many consider instructional design as graphic design for training. In addition, the E in ADDIE is often excluded either from a lack of will or ignorance, so all you actually get is DI.

Analysis is a large component of creating training. It includes the process of determining the scope of a project, what is entailed in completing the

project, and what it will take to accomplish the goals. Is it really a course, a job-aid, or a full curriculum of courses? For this course, we will assume that the results of the analysis will be one course, so we have to discover what needs to be in the course and in what order. This could be as simple as reading articles, research, and policy change. It can be as complicated as multi-subject performance task analyses (sometimes called a "Time and Motion Analysis or Survey") requiring a lot of time, logistics, and meta-analysis of who should be observed.

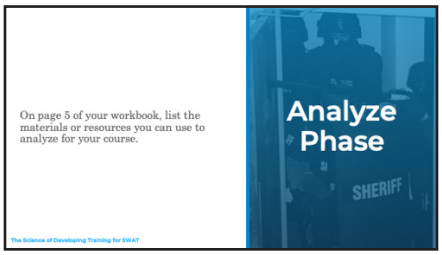


The biggest problem in Learning and Development is that most training is created without analysis. A lot of organizational instructors rely on their own experiences to develop training, in conjunction with performance objectives dictated by their superiors requesting the training. This typically comes in the form of "We need training to accomplish this thing" and that's it. An instructor may go so far as to research their topic, but unless they are reading all of the literature - the pros and the cons - they aren't analyzing anything, they are only supporting their own preconceived notions.

This is why analysis is so important, especially when it comes to liability issues and the validity of training. If you document the analysis you performed, then your training is not just your opinion, it is based on research, observation, analysis, and objective third-parties.

This is also why it is important to document what you analyze, what you found during your analysis, and the conclusions you drew from all of the analysis, in the form of a report. These reports establish that you did the work and that the entire course isn't based on your experience alone, but on your experience-informed analysis of the topic. You have now started moving the liability from you to a body of expertise drawn from professional research and analysis - the context part of training.

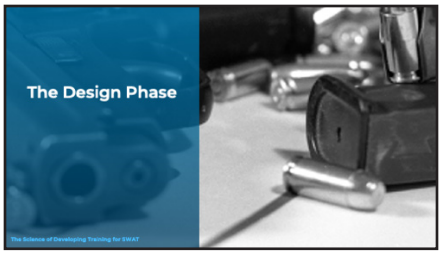
Your background, training, and experience informs your analysis in support of your training, instead of being the sole source of the training. True expertise lies in the ability to understand, interpret, and provide the best solution for a training need.



Activity: Analyze Phase

On page 5 of your workbook, list the materials or resources you can use to analyze for your course

Design Phase



The design phase is where you take all of the analysis you performed and then design the training that will be the result. Designing is not creating an outline: you still have not reached that point yet.

The Design phase includes creating the performance objectives identified during Analysis, then grouping and ordering the conclusions from your

analysis using a method called scaffolding. Scaffolding comes from the constructivist learning theory which stipulates that learning works best if you build on previous material. Your conclusions should inform you of what are the most basic information or skills required to move your participants to the most granular information or fine skills they need to meet task competency. Remember, educating is part of training, but not necessarily vice versa - people need to know the basics and concrete before they can grasp the complex and abstract.

Designing becomes the process of creating performance objectives that stipulate the expected training outcomes, ordering the information you have discovered into specific groups that support the next chunk of information and objectives, ordering the presentation of material, determining the best tactics for assessing performance, and considering the best mode of training.

Design is also where you do more specific project management. You create supporting documentation detailing your plan of development and measurement, and create control documents that provide stakeholders visibility and approval opportunities, while keeping them in their lanes of responsibility. Stakeholders do not need to know what discussion questions are going to be asked, but they will want to know how the training goals will be accomplished.

We still haven't built anything that looks like a course yet, but we are creating the architectural plans for it.

Performance objectives

Training, learning, or performance objectives

The Learning and Development industry is rife with terms, labels, and confusing semantics. You would think in an industry where science and process are so important, there would be a common way to refer to important things such as objectives. Instead, we get a lot of terminology that conflates terms or blurs the lines between them.

You have heard objectives referred to as "learning" and "training objectives," but each have implications. Words have meaning, so there has been a strong push to change "training" objectives to "performance objectives." We talked about the difference between education and training, this is where we continue the paradigm shift that we need in law enforcement training. We will be using "performance objectives" to reinforce the fact that the ultimate goal of training is to change current or create new behaviors. Training requires performance assessment, so performance outcomes should be the foundation.

Does that mean if we are only educating we should only use learning objectives? No, training entails education: you have to learn before you can do and both are performing something. Education and training

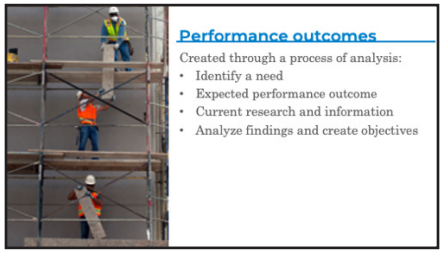
require assessment of performing at some level of competency, whether it is remembering or creating.

Another important part of using the term "performance" is that it reminds us that we need our participants to do something.

How we get Performance Objectives

When do you develop objectives?

We have already talked about how training should be based on observation and research - essentially, based on the scientific approach. There is a process to this, which most of us aren't aware of even after our basic instructor certification course.



We start with identifying a need. Either through our own view or experience of the world, observations of superiors, or by regulatory mandate, we find a topic that needs addressing. Prior to 2020, we heard about a need to develop de-escalation training. After the events of 2020, de-escalation training is one of the most common courses evaluated by IADLEST's National Certification Program. Everyone seems to have made one and thinks theirs is the best.

However, how many of these courses are based on observed or validated research? They may all have research cited in their courseware and many instructors do have experience with de-escalation or took a de-escalation course themselves. But how many of them actually observed other officers de-escalate a situation and recorded all of the before, during, and after behaviors of those other officers? How many evaluated the performances of a wide range of officers of varying experience and capability? Easy to say, not many at all.

That doesn't mean that all de-escalation training without this level of research is automatically invalid. You can certainly create training entirely off of research. But the more data you have, the more you can observe different scenarios across a range of LEOs of different flavors. The more accurate the data you have, the more sound and valid your training will be.

This process is called a performance task analysis. It starts with identifying a training need and what the expected performance outcome should be. Next, identify any current research and information regarding

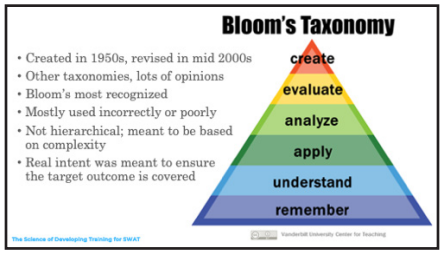
people performing the activity. Then determine if the findings correspond with the expected performance outcomes. Finally, create the performance objectives based on that analysis.

For our de-escalation example: currently, most people create training by going directly from "We need de-escalation training" to creating "training objectives." Then they write objectives that sound about right on paper, such as "At the end of this course, the participant will be able to de-escalate a high stress situation with a combative individual."

The problem is the expectation. This objective sets the participant up to expect to be able to de-escalate all incidents, even if you tell participants that they won't be able to, you set the expectation that they should be able to. What's more, how are you going to measure this objective or evaluate it in the field? You can't - at least with any meaningful value.

Instead, you identify the need, you perform an analysis, and then you write the performance objectives. The overall course performance objective instead is "Apply de-escalation techniques with a verbally combative person." This you can measure. More importantly, it doesn't put the onus of measuring performance on the outcome - the result - of the incident, only on the performance of the participant.

Why use and stick with Bloom's Taxonomy



One of the most powerful tools you have is Bloom's Taxonomy . In the instructional design world and the Learning and Development industry, there are many different taxonomies that people extol, plenty of opinions on how to write them, and a lot of people who argue about their value. If you are fascinated with these conversations, you can find a lot more of them on LinkedIn. There are also college degrees and certificates about learning and instructional design, if you are really driven to learn.

One of the positive aspects of Bloom's Taxonomy is that it is the most recognized taxonomy in the world. It is also the most widely used, referenced, and studied. There are a plethora of visual graphics, articles on application, and training opportunities on how to write with them. The reason I prefer Bloom's and use it exclusively is because one simple reason, that all my processes go back to – liability defensibility. Bloom's is based on 70 and 20 years of science, research, and use. It is a standard I don't have to defend; it is already established.

How it is currently used

The biggest negative aspect is they are almost always used incorrectly, not fully understood, or applied only partially. Oftentimes, people use them just for the sake of ticking a box that says "training objective written" without any thought to the implications of the objective. Therefore, most training objectives are wrong and uninformative.

Another problem with Bloom's Taxonomy is that it is most commonly represented visually as a hierarchy. People see this and assume that lower ordered verbs must be achieved before higher order verbs can be realized. This is completely false. Actually, the order is based on the complexity of what is being trained. To be able to "know" something is less complex than being able to "evaluate" it.

How it should really be used

The real intent of Bloom's Taxonomy is to evaluate whether the training objectives match your intent. There is a rubric that can help you determine if there are any gaps or if you are training something that may not need to be trained, but this is a complex process that we won't get into here.

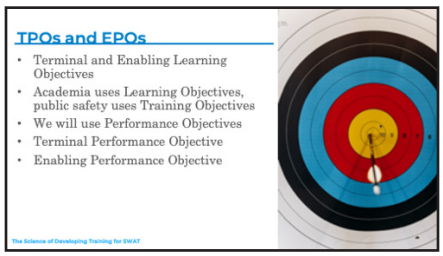
The biggest mistake made when writing an objective is when the instructional designer writes it for what people are doing in class. This is completely false. Instead, the objective should reflect what people can do after the course, in the real world. This implies that evaluation/ measurement continues after the course is completed, yet most measurement ends with the end of course assessment of a ten question, multiple choice quiz.

Also, they objective action verb implies how that task will be measured. One of my biggest pet peeves is seeing verbs "discuss" or "explain" in an objective list. Using this verb means that you should be measuring each participant's ability to actually discuss or explain. Yet, the same ten question quiz is used where there is no discussion or explanation.

Push back on this position I take usually comes from "but we discuss it in class." OK, that is acceptable only if every participant actually discusses it. That means that each participant has to demonstrate that they can, individually, discuss the material. How often does that happen? I have never seen it. Typically, a classroom discussion is two out of thirty say something, but the other 28 get credit for "discussing." This is where the gaps that expose us to liability start to shine.

As you see, just talking about training objective words can lead you into a rabbit hole of discovery and conflicting information.

Terminal and Enabling Performance Objectives



One thing that still lingers from the military days of instructional systems design is the concept of Terminal Learning Objectives and Enabling Learning Objectives. You will see many people don't use them or they reject the need, but what ends up happening is they create the same number of objectives, they just don't put them into tiers.

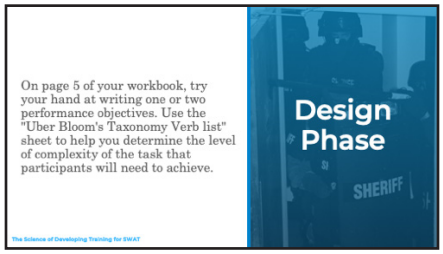
For the purpose of this presentation, in all the courses I deliver, and reflecting the current trend in training, we will call them Terminal

Performance Objectives (TPOs) and Enabling Performance Objectives (EPOs)

A TPO is the highest level of performance outcome. A good example of this is firearms training. The TPO will be "Perform a firearms qualification." You already know there are a lot of different skills involved in being able to perform a firearms qualification. This is where EPOs come in. You will have "Display safe firearms handling," "Safely draw a firearm from their holster," etc. Each of these enables the participant to perform a qualification.

Activity: Design Phase

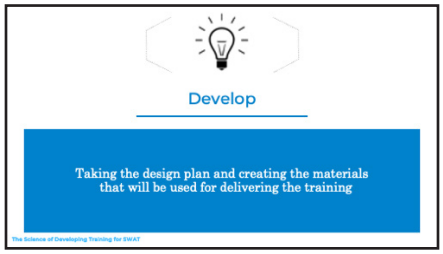
On page 5 of your workbook, try your hand at writing one or two performance objectives. Use the "Uber Bloom's Taxonomy Verb list" sheet to help you determine the level of complexity of the task that participants will need to achieve.



Develop Phase

For law enforcement instructors, this is typically where we start creating training. In every instructor course I took, it started with making an outline. Then we would determine what the performance objectives were, if they hadn't already been given to us. If the outline was developed further, it would be one or two short paragraphs supporting each bullet point and we would call that a lesson plan.

But this is the problem that gets us into trouble – what happens in between each bullet point? We, as the builder of the training, have an idea, but oftentimes, what goes in between the bullet points are either war stories or information dumped in a slide that is then read without context. Even the original instructor won't train the same course the same way with only bullet points. There is no consistency.

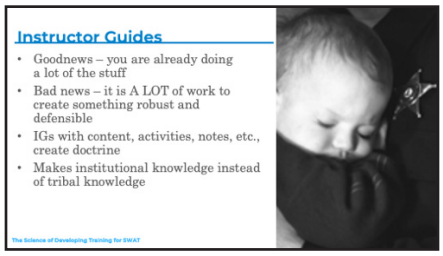


However, this isn't just a problem in law enforcement. It has been my experience that, overwhelmingly, most organizations do this, except one – the military. Instructors creating a course are typically relegated to only course Development.

In the Development phase, you take the design of your course and turn that into an outline. The outline is the first step to developing everything, not the first and last step. The outline uses the performance objectives created in the Design phase as the headlines for each chunked piece of learning. This provides a structure for taking it further, which we will cover more later.

Development includes all the materials both the instructor and the participant will need, such as the instructor guide, participant guide, and slide deck. It is also when you build assessment tools such as tests and scenario scripts, and rubrics for assessing performance, job aids, activities, etc.

Instructor Guides



Here's the good news: you are already doing some of the heavy lifting when it comes to creating courseware that will help you create defensible training, create consistency, continuity, and accountability, and create a doctrine you can hold instructors and participants accountable to.

The bad news – it is A LOT of work. One thing I say often is that the more complex in, the more simplified out. Doing all of the heavy lifting at the beginning will make updating and maintaining records and that "learning chain of evidence" a lot easier. If you want consistency between iterations of courses and between instructors, it takes work.

Your instructor guides become your history; your doctrine on how tasks should be performed. We have, for the life of law enforcement training, relied almost entirely on tribal knowledge. We train using our experience as content. Instead, we should be using our experiences as context, not content. The only way to make sure that every instructor and following instructors can carry forward consistent training doctrine is by developing instructor and participant guides that are more like text books. This sounds daunting, but I have shortcuts which we will discuss.

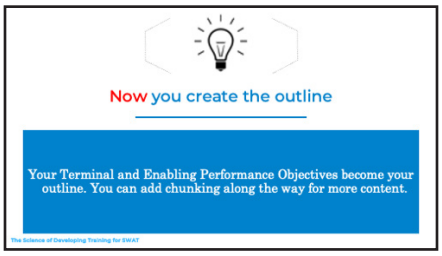
We have to change the paradigm that instructors are experts in a particular field of law enforcement and move to the paradigm that instructors are experts in adult learning and training law enforcement as a whole. Granted, there are specific things that have to have particular expertise, like SWAT, firearms, defensive tactics, K9, etc., but the instructor guide should be designed and developed in such a way that the most novice instructor can deliver the same course as the most experienced instructor and still achieve a minimum level of competency.

This is how you train new instructors, too. They get the approved doctrine and train to that. They get the instructor guide, verify they can follow it by instructing to the current instructors, then are "signed off" they know what to do. If they do not cover certain areas or if they embellish outside the approved doctrine, they can be held accountable. This is how the military trains new instructors at their school houses.

By creating your training doctrine, your novice instructors can perform sufficiently if need be. This doesn't mean it will be excellent training, but if your training cadre goes down because they dined on bad pork burritos the night before, and you can't just cancel all the training, you have someone that is be able to continue the training. It may not be the best experience, but if the novice instructor picked up the instructor guide and

just read it to the class, they would be able to get participants to at least a "meets expectations" level of competency.

Outlines/lesson plans



The Terminal Performance Objectives you developed during your design phase each becomes a header for a section of your outline. Your Enabling Performance Objectives become sub-headers. As you need to subdivide information, you create different levels of headers.

Most people are familiar with Roman Alpha-numeric outlining, which is:

I. H1 - Header: Terminal Performance Objective
  A. H2 - Sub-header: Enabling Performance Objective
    1. H3 - Chunk: content
      a. H4 - Sub-chunk: content

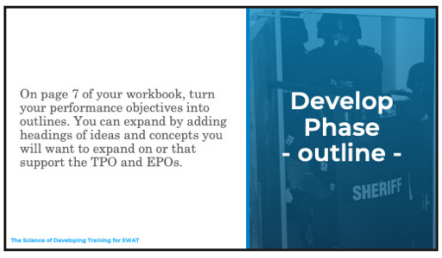
The style I prefer for outlining is the decimal style of outlining, which is:

1. H1 – Header: Terminal Performance Objective
  1.1. H2 - Sub-header: Enabling Performance Objective
    1.1.1. H3 - Chunk: content
      1.1.1.1. H4 - Sub-chunk: content

I like the decimal system because it is easier to find where you are in a large body of content. Each line has a unique identifier. If we were working on content, it is easier to find subject:

3.2.4.1.
than
III. B. iv. a.

Once you have your outline developed, if you see something you want to change, make sure you update the previous materials, as well. You need to make sure that all of you documentation matches or you risk adding inconsistency in the history of your development. This is bound to happen. As you see your outline in different formats, it triggers different thought processes. Also, typically this is done of over several days, so you might come back to it and realize you missed something, or you had an amazing idea of adding more information.



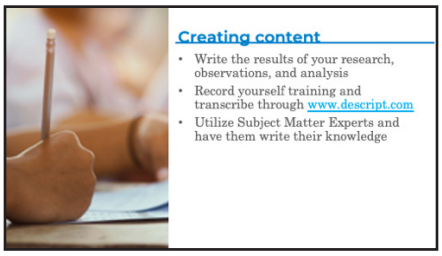
Activity: Develop Phase - outline

On page 7 of your workbook, turn your performance objectives into outlines. You can expand by adding headings of ideas and concepts you will want to expand on or that support the TPO and EPOs

Adding content

This is the hardest part, but easily stated. You literally write everything that a participant needs to take away from the training. Most law

enforcement instructors do not like writing, so here is the short cut: Once you have finished the outline, record yourself presenting the course as you normally would.



There is a website, **www.descript.com**, that you can upload the recording to and it will transcribe the entire content. Then you can import it into Microsoft word and fix it rather than write everything. Word has a spelling and grammar fixer, or you can purchase a subscription to Grammarly. Once you have it all corrected for typos and grammar issues, fixing words that the transcription got wrong, you can go through and make it more objective and text book like. Or, as I like to do, have someone who is much better at reading and editing than I am.

This is the technique I use for one of the services I provide as a company, which I call Course Reverse Engineering. There are some schools and agencies that want to convert their training to be more robust, as well as starting the process of building consistency, continuity, and accountability, but have current courses they run. Rather than reinventing the wheel, I have them send me all the current materials and a recording of the most recent course. The content is extracted from the recordings using Descript.

Fill in the outline with everything a participant needs to accomplish competency in their performance outcomes. The outline should be detailed, so each concept is easily understood. Write it using plain speech. Avoid colloquial jargon or writing to imitate accents. Use common terms, unless they are technical terms specific to the topic being trained.

While you are writing, do not worry about activities, knowledge checks, or any other instructor prompts. Keep track of those separately as they come to you; do not get caught up in trying to capture every detail of the training event all at once. Oftentimes, a great idea will hit you after you have passed a section where it would apply. Do not lose your momentum by stopping and changing directions mid-project. Instead, jot down a note with enough detail you can return later and develop the idea.

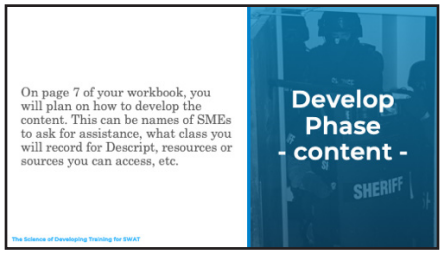
Once you have written your first draft, walk away, and later reread it. Do not worry too much about editing at this phase, either. You will be asking others to review your content to edit and review. Including the instructors who will be delivering the content, or just instructors you trust that know what you are doing, will make all your training more effective. Eventually everyone who writes becomes blind to their own work and stops seeing what they are writing.

Another advantage to writing out the content in the outline is apparent when you are working with Subject Matter Experts (SMEs). You may become the de facto instructor and instructional designer. But that does not mean you are an expert in all things public safety - it means you are an expert in parsing, developing, and disseminating information.

When you have to work with a SME, you will go through many iterations of review and revision. Having a SME work through your instructor guide is cumbersome and distracting. They do not need to know how you are planning on training, they just need to make sure what you are training is correct, current, and accurate. They do not need to see all the notes and activities. Giving them the outline with content makes review clean and quick.

Activity: Develop Phase - content

On page 7 of your workbook, you will plan on how to develop the content. This can be names of SMEs to ask for assistance, what class you will record for Descript, resources or sources you can access, etc



Adding activities, notes, and directions

Once you have completed your outline and content generation, now you build your Instructor Guide. All of those great ideas, instructor prompts, activities, ice breakers, and knowledge checks will be added to your IG as you layout the course.

IGs are the cornerstone of Instructor Led Training. They should contain all the information, in a manuscript format, that a participant needs to achieve the performance objectives of the course.

A quick list of what the IG should contain:

- - A list of pre-staging items before the class starts
- - A list of materials necessary for the course
- - A list of the training objectives using verbs from Bloom's

Taxonomy, the measurement of performance, and any time elements necessary

- An agenda and schedule
- House rules and participant conduct expectations
- A column along one side of the document for notes and slide imagery
- Instructor prompts, such as:
  - Images of the slides for the section of content being delivered, located in the column
  - Discussion questions
  - Instruction tactics
  - New terminology
  - Topical background information
  - Timing indicators
  - Answers to questions
  - Instructions for activities including purpose and expected results
  - Media introductions and alternates for backup
- The content to be delivered
- Assessment materials, checklists, and rubrics
- Scenario documentation and planning materials

- Job aids, handouts, and other ancillary materials in an appendix
- Citations and references

Every IG I use starts as a template, where I have all the styles already indicated. Once you have a template that you like, completing your IG is fast.

As you build it, though, you will discover gaps, formatting needs you had not thought of, etc. It is a process of updating all the supporting materials. Literally, during every IG build, I update my template a few times. Each course brings with it formatting that I previously would not have thought of, or I discover things that did not actually work the last time. As far as gaps, you will continue to refine your content as you go and revise. Make sure you update the supporting material to reflect it. You may find that the chunks you thought important were actually redundant. I did that several times in writing this course!

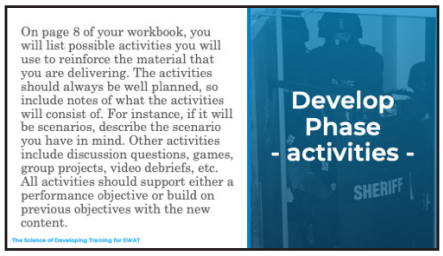
Once you have the IG as complete as you can, you hand it off for review and revision to people not associated with the course. They will see things you did not and make suggestions. Most of the time, they are right!

Once the IG is as good as you can make it for this first round, you are off to the next step!

Ordinarily, you would have someone review your content before you start building your IG. We will talk about review tomorrow and how to create good processes, hold people accountable, and get the best results for your work.

Activity: Develop Phase - activities

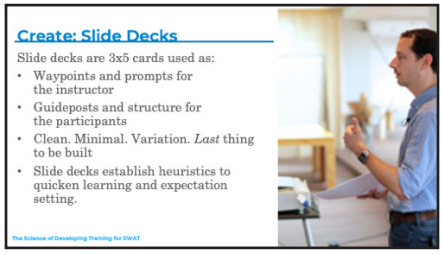
On page 8 of your workbook, you will list possible activities you will use to reinforce the material that you are delivering. The activities should always be well planned, so include notes of what the activities will consist of. For instance, if it will be scenarios, describe the scenario you have in mind. Other activities include discussion questions, games, group projects, video debriefs, etc. All activities should support either a performance objective or build on previous objectives with the new content.



Slide decks

Slide decks establish heuristics

Now you create the slide deck.



Slide decks should be considered "3x5" cards for the instructor to stay on topic, and as waypoints for the instructor to know where they are in

the training. They shouldn't be used for delivering the content, only for identifying where in the content you are.

They are also heuristics for participants - subtle cues to the participant of what is expected of them at this moment in time. Participants learn better when they feel they are in a consistent environment where they know what is expected of them. When slide decks are chaotic, they spend a lot of time trying to orient themselves to what is going on and what they are supposed to get out of what is presented. The heuristics you are creating with a slide deck is not only orienting them to where they are in the material, but also subtly building shortcuts for their minds of what your expectation for their interaction should be.

A slide deck template should be consistently applied so that every heuristic is identical. That is, all activity slides look and function the same, all content slides have the same layout and proportion, and all media slides have a common look. This enables the participant to quickly identify what the instructor is expecting them to do and keeps a slide deck clean and simple.

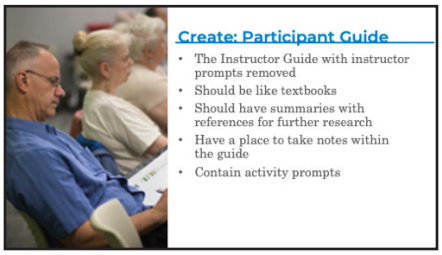
Simple is always better. You do not need to be clever with 500 different animations on a single slide. Adding a bunch of animations or complications on a slide is confusing for participants and new Instructors and there are chances that things can break.

Once you complete the slide deck, save out the slides as images and add them to the Instructor Guide. You will want to place the slides in the notes section of the guide in-line with the content that the slide represents. This is a quick reference guide for you to keep track of where you are in the content.

Also, do not number your slides, use the image of the slide, instead. Numbering slides makes updates and changes a headache. You will, at some point, have to update your courseware. When you update your materials, the images on slides are less likely to change than the number. If you only use slide numbers, you spend a lot of time searching, replacing, and adjusting EVERY number in the courseware. You cannot just add one slide to your deck without impacting all of the other numbers.

Also, naming the slides can be difficult, too, especially if you have one topic that goes over multiple slides. By using image references rather than the name of the slide, you can locate the slide faster and the material you should be on faster. Setting up the initial document is more complicated. But using it and updating it is exceptionally less complicated.

Participant guide



The power of a Participant Guide that has everything that will be delivered from the Instructor Guide is that your participants will be able to focus on actual learning. How many times have we seen, and have we ourselves, found ourselves madly scribbling everything the instructor says or what is on a slide, but we aren't really hearing what we are listening to? Eventually, most people give up and just listen, but then just listening allows our minds to wander and we miss things.

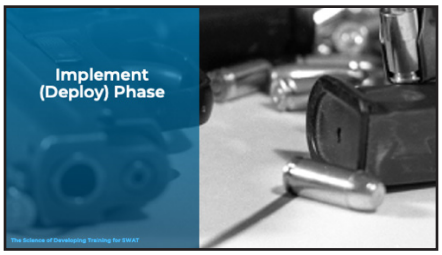
A participant guide that contains everything helps the participant feel safe about not missing something. A textbook style participant guide allows them to listen, make connections, and then take notes directly in line with the content the instructor is covering. The participant guide has now become a record of their thoughts, helps reduce cognitive load, and aids in your defense in vicarious liability because now a participant has a record of what you delivered in their possession for study and reference.

The Participant Guide is nothing more than the IG with instructor prompts removed. It should have:

- A list of materials the participant will need to have for the course
- An agenda and schedule
- House rules and participant conduct expectations
- A column along one side of the document for notes
- Discussion questions with lines for notes
- Instructions for activities
- The content to be delivered

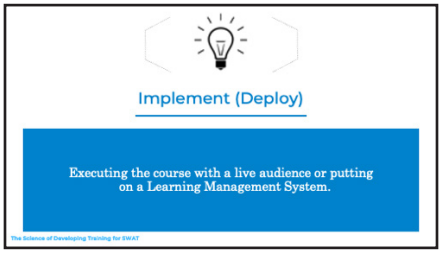
You will keep the activities with directions and note lines, but remove the answers, expectations, or prompts that are in the IG. You will see that content shifts a lot and it is difficult to keep the PG content on the same page as the IG content, but that is OK. You can provide extra note lines to help with formatting.

If you use the MS Word template from the files I provided, just save a copy of the IG (Save As) and name it "Participant Guide." Then go through the process of removing instructor information. If you are using the InDesign template, you have both the IG and PG facing each other for quick reference.

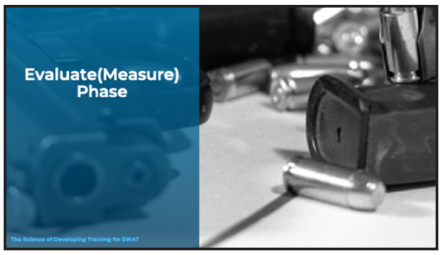


Implement (Deploy) Phase

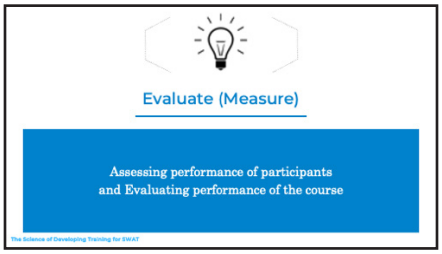
Implement (what I call Deploy) is the execution and dissemination of the course. I call it Deploy because of how technology has changed and implementation could mean very different things. It could be the first iteration of an in-person class or uploading to a Learning Management System (LMS). You need to have a deployment plan that includes a process called "validation."



Evaluate (Measure) Phase



Evaluate is one of the eccentricities of the ADDIE framework, especially with the change in technology and systems we have today. If you look up diagrams, you will find many different ways ADDIE is presented graphically. Some show ADDIE as one big circle, some show ADDIE as little circles in the bigger circle (called an iterative process), and still others show ADDIE as some sort of cross with arrows pointing everywhere. It is one of the weaknesses of ADDIE - what does "evaluation" really mean?

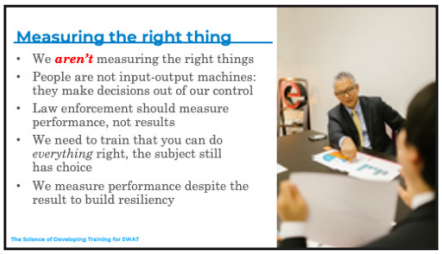


In reality, the problem, again, is one of conflating terms and an unwillingness to choose words that mean something. So, I break Evaluation into three things - assessment, evaluation, and review.

Reviews should be done throughout the entire project. When you see ADDIE charts with arrows pointing at everything else, it is a Review process they are indicating. Every document, every step and process should be reviewed by someone else. Since a review is a type of evaluation, it fits in the iterative concept of ADDIE.

Then you have the problem of evaluation and assessment often being conflated or used interchangeably in the L&D industry. Choosing words carefully, I decided that they are distinct in what they measure. For the purpose of this course, we will break evaluation into two words and use them specifically for two very important parts of training. The first word is Assessment and will be defined as measuring a participant's performance competency. The second is Evaluate, which will be used exclusively for measuring course performance in regard to impact on the systems and personnel of an organization and efficacy.

5.3.2.5.1. Measuring the right thing



We are measuring the wrong things, but it isn't law enforcement's fault. It is how we have been trained by academia, the media, and business schools. We, as LEOs, however, feel that this is wrong. It is.

The corporate world does the same thing to their people that we do in law enforcement. They measure results and then hold them accountable to those results. We see this most often in sales.

The problem is, they are measuring results as if we control the results. We don't. They treat the target of their work, other humans, as input-output machines. "If you do this, then this should be the result." However, the targets of our work are irrational, opinionated creatures prone to free will and decision making. We can't measure law enforcement training on the results because we can't control the choices of others.

Yet, the media, academia, and law enforcement leaders only measure the results. How many use of force incidents? Too high - we need training.

Disparities in policing patterns? Too high – we need training. Over the last three, last six years, have law enforcement practices and policies changed that much? I would argue no. Yet, society continues to hold us accountable for law enforcement contacts. But what has changed? The behavior of who we make contact with.

It is easier to count results than to look at exactly where the problem would be, if there is actually a problem. We need to measure performance, not results. Which means we need to train to performance, not results.

We all know that you can do everything right and the incident will go sideways, then you are blamed for the result. We also know those people in our agencies that do everything wrong, the incident is resolved, and they are never held accountable, because nothing went sideways.

The best training will include failure. How many de-escalation trainings have you been through where if you did it right, the scenario ended well. If you did it wrong, it goes sideways. This doesn't train performance, it trains expectations.

Training is a safe place to fail. Adding scenarios where the participant fails despite excellent performance, builds resiliency and confidence in their abilities. It reinforces that we should focus on our performance and always go for the best result, but ultimately, in our profession, the result is NOT dependent on us, it includes the other decision maker in the incident.

This changes how we measure performance at the end of training. Part of our assessment should be what happens after the scenario is complete – how does the participant react to a result other than what the goal is?

Assessment

Assessment is measuring participant performance.

Written assessment

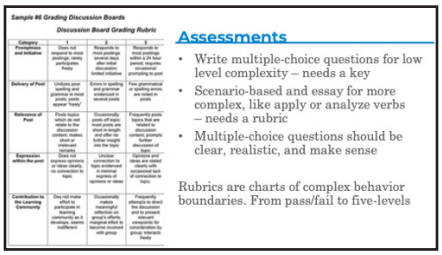
Creating the assessment tools is the last thing you do. Assessment tools are the scenarios, quizzes, exams, and all the answer keys, and rubrics that go with them.

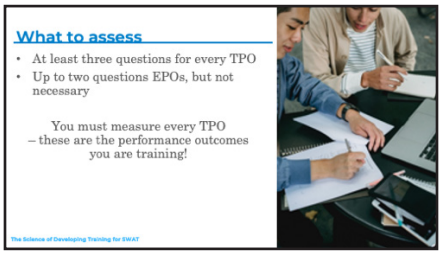
Here are some quick tips on creating assessment tools.

Multiple-choice Assessments [21] [22] [23]

Avoid True/False questions. They have little value other than increasing the odds of guessing the right answer.

Avoid silly options that would be clearly wrong. These can be sarcastic, unlikely, or obviously wrong answers.





Example:
If you come to a four-way stop, you should:

A. Run it and let God sort it out.
B. Come to a complete stop, identify who has the right-of-way, wait your turn, then go.
C. Purple
D. Take a good hit on the bong and turn up the radio.

Avoid "All of the above," "None of the above," and "Both _ and _" options. These are no better than True/False and only go so far as to "Identify." [24] [25]

Write questions that require analyzing the answer. Overwhelmingly, questions are written to Know or Identify. You can get far more complex Bloom's verbs if you write the appropriate questions.

Write options that are related to each other, so they sound plausible but require recognizing the nuance.

Essay Questions

While you can reach the higher complexity verbs with a multiple-choice quiz, it is very difficult, and you will not know what the participant got out of the training. Essays are more complex and require more effort on the instructor, but it is very difficult to bluff your way through an essay question.

Write your essay questions to get the participants to analyze. Give them scenarios they have to analyze and then provide a solution. Give them questions that require them to answer the "why" of the issue. Knowing the date that Illinois started the first juvenile justice system does nothing for a participant working in juvenile justice. Knowing why it was started and what led to its establishment is far more useful. You can actually measure "Discuss" with an essay question.

Scenario-based assessment

These types of assessments are best for assessing participants because they actually have to do something. You cannot fake your way through demonstrating something and then explaining why you did it.

Like we have said before: the better the product, the more complex the build. Scenarios and practical's are more complex and require more logistics. The more dangerous or intense the scenario you build, the more personnel you need to have on hand. More personnel reviewing participant performance results in more subjective results. You have to have rubrics, scope documents, and briefings to prepare your personnel to assess participants accurately and objectively.

Designing scenario-based training and assessments is a big task, something we won't cover here. In the courses where I include this are typically 0ne to three days.

Rubrics

A rubric is a list of behaviors and competencies that you use to make assessing performance more objective. They can be as simple as a checklist of "did/did not do" and as complex as five levels of competency. To make performance assessment more objective, you have to have a device that defines what the level of competency must be. They are necessary for anything that needs to be measured that is not measurable with a written assessment.

Building rubrics requires a lot of intentionality. We have already set up how we are going to measure a performance objective, now we need to decide what constitutes that measurement. To build our first rubric, we are going to use the example of one type of assessment that requires a rubric for proper measurement: the scenario practical.

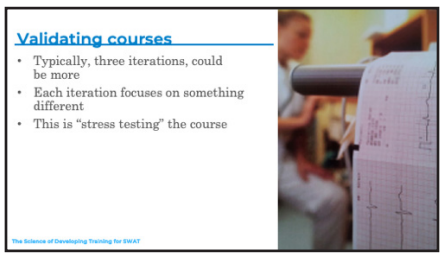
Scenario-based assessments are one of the most common ways that law enforcement assesses their ability to synthesize the range of training they have received; it is the culmination of everything they have been trained to do. Because of this, scenarios need to assess specific things. For a final practical that has multiple scenarios, you will need a rubric for each scenario. There may be general and specific objectives you may be measuring; you can decide whether the general things are assessed in each scenario or not. If the general objectives (maintains situational awareness, uses voice controls, etc.) are going to be assessed in each scenario, you will need to coordinate at the end of the activity to come to a general conclusion for the participant's performance overall.

Evaluation

Evaluation is measuring course performance

Validating courses

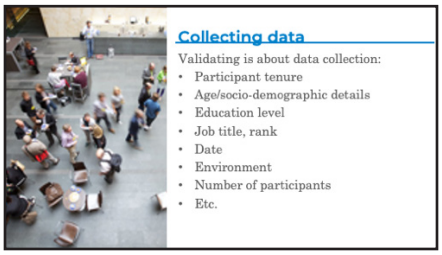
If the course is only going to be taught once, validation is still important for an After Training Report, but it won't be a complete evaluation. Validation is more important for courses that will have multiple iterations, like SWAT basic or specialist courses.



The first step in managing the course is validating it. Validation happens over multiple iterations and means that each time the course was attended by someone who observed and notated its progress and execution.

Each iteration is focused on one or two things. As in the review, you can't monitor everything at once, but since you have a lot of the kinks worked out through review, now you need to see if the theory of the course works as expected. Validation is essentially stress-testing the course.

Data

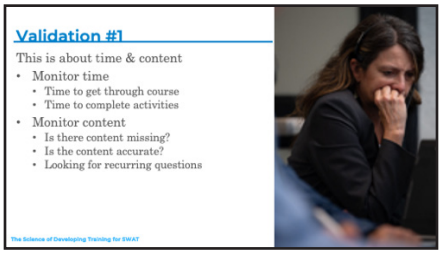


Validating is all about data and you acquire it for each validation iteration. You will want to track:

- A participant's tenure in their role
- Age and socio-demographics (as much as possible)
- Education level
- Job title and rank
- Date
- Environment
- Number of participants in the course and their attendance

To name a few. The more data you can gather about the people taking the course, the more you can understand the efficacy of it when it comes to evaluate.

Track all of this data for every course. It will be exceptionally useful for tracking trends and discovering aberrations.



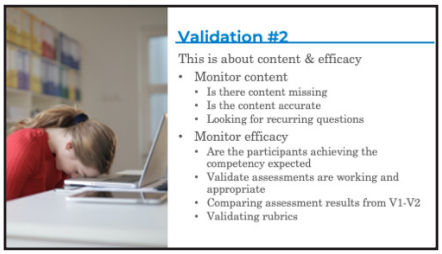
1st Iteration: Timing and content

The first iteration is monitoring time and content.

By monitoring time, you are tracking how long it actually takes to get through the course and how long does each part of the training take. Right now, the time you have allocated for content to be presented and activities to be performed is a rough idea based on your experience. But you really do not know until you have a full capacity class of the actual target demographic.

By monitoring content, you are tracking questions, times the instructor needed to explain material, and looking for gaps.
You will be looking to make sure that there is as few "you need to know this before, but we will talk about it later" events as possible. Sometimes you need to address something that will be explained further later, at other times, foundational information was put in the wrong place.

Validating for time tells you if the theory was right and everything is close enough. Validating for content makes sure that you did not miss anything.



2nd iteration: Content and efficacy

The second iteration is more about validating the content again and then evaluating the efficacy of the training - are they getting out of it what they are supposed to.

We covered validating content. Validating efficacy is making sure that you are getting the levels of competency of performance that the course is meant to develop. You are validating the assessments, now that you have two sets to compare, looking for most missed items, timing in assessment

issues, confusion in the assessment tools, and the accuracy of rubrics to assessing demonstration of performance.

3rd iteration: Efficacy

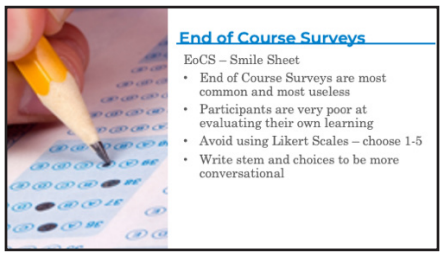
The last iteration is focused entirely on efficacy. You are looking at more than the assessments, though. In this iteration of validation, you are also observing the activities and knowledge checks.

By now you will know if the activities are tied in well with what their performance is expected to be. You will be able to validate that the activities are actually developing the performance indicators you are looking for and supporting the content practically. If they are not, you may need to reconsider your activities, which means additional validation iterations.

You also now have a wide array of data from three different sets of participants to analyze and discover trends. You can now compare the performance between the three iterations. If they are steady and within a good range of each other, you have a solid course. If not, you need to examine why.

It will be unlikely to see three iterations that are close in range though. The first iteration will be lower than the third, typically, because the instructor is new, too. By the third iteration, the instructor should be locked in pretty well and able to deliver a consistent training experience.

EoCS and 30-90-180 Surveys



There are two types of surveys – the End of Course Survey (called a Smile Sheet, typically and derogatorily) and surveys you use to evaluate the efficacy of the course, called 30-90-180 Surveys.

The Smile Sheet is the most common form of evaluating a course. These are used in a lot of institutions, which will consider a course successful if they get good Smile Sheet survey results. The problem is, what they are measuring is fleeting; they are not measuring the efficacy of the course, they are measuring the personality of the instructor and how people feel about having been in class. Research has shown that participants are poor assessors of their own learning.

People are generally happy when they learn something they didn't know before. This doesn't mean they know how effective the course was on developing new or changing previous behavior, only how effective the instructor was with conveying new information and managing the classroom.

While this information is important, it doesn't measure what participants will be able to do when they get to the job.

For instance, instead of using the common Likert Scale method, which is using a range of numbers like 1-5 or 1-10:
"On a scale of 1-5, rate how your knowledge and skills improved."

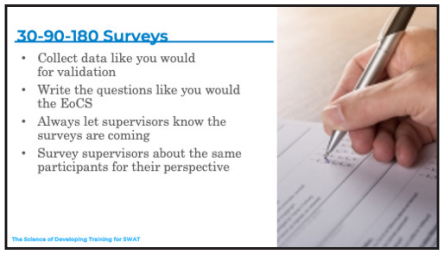
You could write:
"Now that you have completed the course, how do you feel about your knowledge and skills?."

- I didn't really get anything new out of this course.
- I got some new information and skills, but nothing really transformative.
- I feel validated and feel this course has really given me a lot to consider when I get to work.
- This course has filled a lot of the gaps that I felt I had, and has given me a path for further professional development.
- I feel more comfortable with my work now that I know more of what was missing in my process.
- I still don't feel comfortable with my knowledge and skills because this was far more than I was expecting.
- I felt overwhelmed during the whole course.

The Likert Scale is a generalized, ambiguous measurement. The participant may have had a rough start and crushed it for the rest of the time. But how would you account for that if the only feedback you receive is a "3" as an answer, and they do not fill in the optional commentary? Requiring a text response they will either provide an answer or nothing. Either you win or you end up where you would be anyway with a Likert score.

With informative answers, you get a better sense of what the participant is thinking, it is far more useful and deliberate.

The real power of survey is when you leverage it to evaluate the impact of the training after the participants have gone back to their roles and put their new behaviors, skills, and knowledge to work. This is where you find the data you need to evaluate the efficacy of the training.



You send the survey out to all participants on the first business day 30, 90, and 180 days from their training completion date.

Each survey asks the same questions, so that you have control over the data. You will ask essay questions almost exclusively, but you can still parse the information into more valuable ranges than a straight Likert scale.

First is data collection questions, such as:

- Are you still in the role you were in when you took the training?
- If not, what is your role now?
- Your tenure in the role you were in when you took the training.

- If you are in a new role, how soon after the training did you change roles? (If they changed roles before they reached the next milestone, their insight may not be as valuable).
- If you are in a new role, did the training provided for the former role prepare for the new role?
- Age
- Education
- Years of previous experience in the role somewhere else.
- Then you ask the qualitative questions, such as:
- How did the training prepare you for the work?
- What do you wish had been covered that was not?

Some examples of post-course surveys:

- If processes, systems, policy, or layout has changed since your training, what are the first three things you believe need to be updated?
- List three things that you remember from training you are still doing now.

And so on. Depending on the topic, you can come up with more specific questions, ask them what resources they are using that they did not have in training, etc.

There is a part of this plan that is often overlooked: the input of the supervisors or managers of those that received training. Often times, supervisors will have insights and input that the employees may not have. Creating a companion survey for those that managed the trained is very important, as well.

You can ask questions such as:

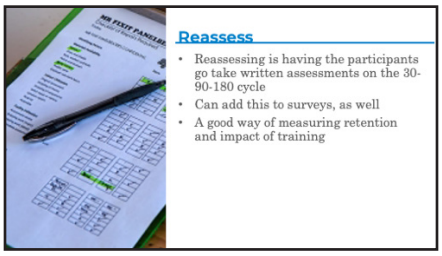
- What are the top three questions you are asked by people coming out of training?
- Do you see common errors and mistakes that should not occur that should be covered?
- Do you see a difference between those coming right out of training and those that have been out of training longer and what are the top three?
- You are only limited by your creativity and curiosity. You need to be specific, though. If you ask vague questions, you will get vague answers.

One last note: it is absolutely necessary to forewarn supervisors that these surveys are coming out. You need their buy-in to get employees to respond. Including them in on the process and then promising them a report of the results will motivate them to not only comply but encourage participation. This is an opportunity for them to get a measure of their employees, as well as being included in the training process.

The two most effective ways of doing these post-course evaluations is through surveys, reassess, or both. There are others, but we won't cover those here.

For more on writing smile sheets, check out the book by Will Thalheimer, Performance-Focused Learner Surveys: (Second Edition) Using Distinctive Questioning to Get Actionable Data and Guide Learning Effectiveness.

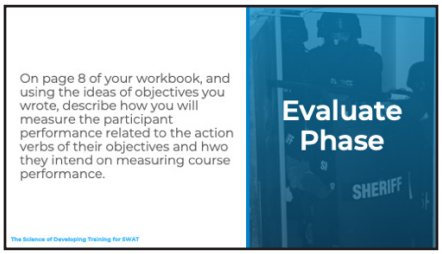
Reassess



Another method that you can use on a 30-90-180 day post-course evaluation is to reassess the participants. It is one of the most effective forms of evaluating a course – having participants go through a written assessment or scenario-based assessments from the course. You don't want to use the exact same questions for the written assessment, but this is why we create multiple questions for the same performance objectives. For the scenarios, use different scenarios that are based on the same performance objectives.

As you get further from the training event, there will be some drop of retention. If they have had a chance to practice and apply the objectives they were trained to, retention should be better. Yes, their ability to apply the material in their work will skew the results, but that is good – it means your training was on point and relevant.

Ultimately, you could use a mix of both surveys and reassessment to evaluate your course. Again, there are a multitude of options for post-course assessment, but those are covered in deeper courses. Whatever the methodology, having post-course evaluation is essential to keeping training up to date and is a great method of discovering changes to the processes, policies, and technologies used in the agency before it becomes a problem.



Activity: Develop Phase - activities

On page 8 of your workbook, and using the ideas of objectives you wrote, describe how you will measure the participant performance related to the action verbs of their objectives and how they intend on measuring course performance

Conclusion

You have been doing a great job with what you have. Hopefully you feel some relief knowing that not only is there an actual industry dedicated to what we have been doing for decades without knowing, that feeling that there has to be something more proved true. Also, you have been creating a lot of stuff correctly already, but it just may have been by a different name or in a different order.

You are also not alone: many people in the civilian world develop training as we have been. The difference is, by the fact you are sitting here, you have been uncomfortable believing there are things you don't know yet. That's one of my biggest fears – what do I not know that I should. This is why I am passionate about what I believe are the top two requirements for being good in the Learning and Development industry – humility and a drive for continuous learning.

My most common mantra to people in the learning industry is "If you are unwilling to challenge your beliefs and to constantly seek learning, you don't belong in the Learning and Development industry." Just as we should never get comfortable with the routine of patrol or with our confidence in our ability to respond to crises, we should never get comfortable with our knowledge.

Thank you for attending this seminar and please feel free to reach out to me at anytime.

End of Seminar

References:

1 "876 F. 2d 17 - Clipper v. Takoma Park Maryland & a." Open Jurist, 14-Dec. 2021, https://openjurist.org/876/f2d/17/clipper-v-takoma-park-maryland-and-a

2 "824 F. 2d 1380 - Spell v. D McDaniel." Open Jurist, 14 Dec. 2014, https://openjurist.org/824/f2d/1380/spell-v-d-mcdaniel

3 "489 U.S. 378 - City of Canton Ohio v. Harris." Open Jurist, 14 Dec. 2021, https://www.oyez.org/cases/1988/86-1088

4 "Clarence Michael Paul, Plaintiff-appellant, v. the City of Altus, et al." Justia US Law, 14 Dec. 2021, https://law.justia.com/cases/federal/appellate-courts/F3/141/1185/554504/

5 "What is the behavioral learning theory?" Western Governors University, Western Governors University, 29 May 2020, https://www.wgu.edu/blog/what-behavioral-learning-theory2005.html#close. Accessed 15 August 2023.

6 "What is cognitive learning?" Western Governors University, Western Governors University, 12 March 2020, https://www.wgu.edu/blog/what-is-cognitive-learning2003.html. Accessed 15 August 2023.

7 "What is constructivism?"Western Governors University, Western Governors University, 27 May 2020. https://www.wgu.edu/blog/what-constructivism2005.html. Accessed 15 August 2023.

8 "What is humanistic learning theory in education?" Western Governors University, Western Governors University, 21 July 2020, https://www.wgu.edu/blog/what-humanistic-learning-theory-education2007.html. Accessed 15 August 2023.

9 "Connectivism Learning Theory." Western Governors University, Western Governors University, 27 May 2021, www.wgu.edu/blog/connectivism-learning-theory2105.html. Accessed 15 August 2023.

10 Snider, Eva Grouling. "What We Can Learn from the Learning Styles Myth." The Teaching Innovation Blog, Ball state University. 1 February 2023, https://blogs.bsu.edu/teaching-innovation/2023/02/01/what-we-can-learn-from-the-learning-styles-myth/. Accessed 15 August 2023.

11 "Learnings About Learning Styles." Western Governors University, Western Governors University, 26 January 2022, https://www.wgu.edu/blog/learnings-about-learning-styles2201.html. Accessed 15 August 2023.

12 Britannica, The Editors of Encyclopaedia. "Are There Really Right-Brained and Left-Brained People?" Encyclopedia Britannica, 23 May. 2017, https://www.britannica.com/story/are-there-really-right-brained-and-left-brained-people. Accessed 28 August 2023.

13 MacCarthy, Libby. "Why Your Myers-Briggs Personality Type Is Meaningless." Psycom, Psycom, 22 February 2023. https://www.psycom.net/myers-briggs-personality-type. Accessed 15 August 2023.

14 De Bruykere, Pedro."Myth-Busting: Gardner's multiple intelligences." ResearchED, ResearchED, 26 September 2018, https://researched.org.uk/2018/09/26/myth-busting-gardners-multiple-intelligences/. Accessed 15 August 2023.

15 Thalheimer, Will. "Mythical Retention Data & The Corrupted Cone." Work-Learning Research, Work-Learning Research, 5 January 2015, https://www.worklearning.com/2015/01/05/mythical-retention-data-the-corrupted-cone/. Accessed 15 August 2023.

16 Fuhrman, Jesse. "Cognitive Load Theory: Helping Students' Learning Systems Function More Efficiently." The International Institute For Innovative Instruction, 6 June 2017, https://www.franklin.edu/institute/blog/cognitive-load-theory-helping-students-learning-systems-function-more-efficiently. Accessed 15 August 2023.

17 Ibid.

18 Ibid.

19 Ibid.

20 Murphy, Maureen. "Matching Workplace Training to Adult Attention Span to Improve Learner Reaction, Learning Score, and Retention." Journal of Instruction Delivery Systems, vl. 22, no. 2, 2008, pp. 6-13.

21 University of Illinois Urbana-Champaign Center for Innovation in Teaching & Learning. "Improving your test questions." 2022. Accessed March 2023. https://citl.illinois.edu/citl-101/measurement-evaluation/exam-scoring/improving-your-test-questions

22 Lucy Jacobs. "How to write better tests: A handbook for improving test construction skills." Indiana University. 2004. Accessed March 2023, https://www.uky.edu/Ag/CLD/CETL/files/f09workshop/IU%20How%20to%20write%20better%20tests.pdf

23 R. Moreno, R. J. Martínez & J. Muñiz, J. "Guidelines based on validity criteria for the development of multiple choice items." Psicothema, 2015: 27, 388–394. doi:10.7334/ psicothema2015.110

24 University of Illinois Urbana-Champaign Center for Innovation in Teaching & Learning. "Improving your test questions." 2022. Accessed March 2023. https://citl.illinois.edu/citl-101/measurement-evaluation/exam-scoring/improving-your-test-questions

25 Lucy Jacobs. "How to write better tests: A handbook for improving test construction skills." Indiana University. 2004. Accessed March 2023, https://www.uky.edu/Ag/CLD/CETL/files/f09workshop/IU%20How%20to%20write%20better%20tests.pdf