



# EMS Educator's Primer

**Best Practices to Enhance Education and Avoid Pitfalls**

Texas Association of EMS Educators  
2024 Edition

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This Primer was created by the Texas Association of EMS Educators to assist with the introduction and orientation of newly appointed faculty, and to improve the educational outcome of the programs. The information presented represents the Best Practices for classroom activity and laboratory sessions. As a Primer, this is a starting point. It is intended to get the new instructor (and maybe refresh the seasoned instructor) off to a good start in the world of EMS Education. It is important to note that each program will have specific standards of classroom conduct, presentation, and structure. The material in this Primer is not intended to supersede any requirements associated with individual programs.

As a Primer this is a starting point. It does not replace a formal EMS Instructor course. It is highly recommended that all faculty and instructional personnel complete a state approved instructor course as soon as possible upon entering the field of EMS education.

Although written in Texas, associated with Texas rules and regulations pertaining to Emergency Medical Services, this material is relevant to all educational jurisdictions and disciplines. Modification to meet the needs of those jurisdictions and disciplines are the responsibility of the reader and presenter.

**This Primer is dedicated to:**

All the patients that teach us compassion and instill in us the desire to never give up.

All the educators across the United States that taught us to do better than the norm, to advance the standard of care, and to work just a little harder.

All the students, whose desire to learn encouraged us to teach beyond the textbook, a little more each class, advancing our understanding of Emergency Medicine.

All those mentors that believed in us.

All those we've mentored, that have made us better along the way, and keep us proud.

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## Welcome to EMS Education and thank you for what you do.

First of all, laboratory faculty play an essential role in the complete education of our EMS students. A huge thank you is in order for all of those that have answered the call to do this job. It is very rewarding, but not without its challenges. Whether your plans are just to teach for a while as you continue to advance your EMS career, or your end game is to be an EMS Program Director, we all start out in the same spot.

As you read further, keep in mind this is not intended, in any way, to downplay the importance of laboratory or support faculty. But ... it is important to understand a very sad fact: the majority of educational problems at any school, come from this same group of employees. More often than not, the biggest frustration identified by students is that lab instructors are not on the same page, are not focused on the tasks and the students, and cannot teach beyond their own protocols.

Why, do you think, this is true? Sweet and simple - It's the program's fault. All over this country, EMS programs, whether based in colleges, teaching hospitals, EMS services, or privately operated, employ field personnel as part-time laboratory instructors. And more often than not the training received to do that job is, "welcome aboard". To be fair, that is all most full-time faculty are given as well. This leads to a "fend for yourself" approach to learning your craft as an instructor and the complete job requirements are never identified – until something goes wrong.

As an industry we have worked to develop instructor classes that are much more appropriate for the full-time educator with administrative responsibilities. The educator who writes their own schedule, their own lesson plans, develops and validates their own exams. The flaw is that these classes may cover learning theory and student learning styles, but they still fall short on how to teach any particular subject. They don't cover what to teach and how to do it better.

A misconception all EMS schools have is that the instructor they hire comes fully prepared and can teach it all. That the new instructor knows the subject, has refined the skills, and is fully capable of teaching 100% from day one. That is never the case. Even the instructor who had a 95% in class still has 5% they learned wrong or did not learn. Working 10 years in the field under one protocol system makes the instructor very comfortable with one protocol system. What about the other equally feasible protocols? In those 10 years what was actually done, how busy was the system, how progressive was the system, how much oversight was there when inappropriate patient care was given? And what about keeping up with the science and the "evidence-based" approach to better patient outcomes.

Aviation is an excellent industry for EMS to model, as is the military. We share many of the same traits. There are structured processes that must be carried out, or people die. Everything has purpose, or people die. There is rank and a command structure. We often look at our success rates as "I'm good – I'm 90%". If you knew the airplane you were about to board only had a 90% chance of arriving safely – would you get on it? Ninety percent success for landing an airplane would result in over 2000 crashes per day in the United States alone. We do not accept this from aviation, we should not accept it from EMS. The aviation industry has adopted strict standards to assure safety. And they share their mistakes with others, so others don't make the same mistake.

One of the general principles of aviation is the Sterile Cockpit. This is a term applied to communication and actions which occur during critical phases of flight. We should adopt the concept of sterile classrooms, sterile labs. Only necessary communication should occur during these critical times. By adopting this practice, we reduce poor

performance, and we assure adherence to standards. This is a concept of Crew Resource Management that we should be teaching our students (it's actually in the education standards) and should adopt ourselves.

In the psychomotor world, everything we do has a purpose. It's important to reinforce that purpose. This is a lesson from the military. Cadenced processes assure safety in very dangerous environments. Although we don't provide battlefield care, we do provide care in stressful and uncontrolled environments where that same cadenced procedure assures the accomplishment of the goal at hand.

We must get better, and we must do it better. By establishing some ground rules, identifying some common weaknesses, and providing some instructional tools we can enhance the education provided to the students, and make the instructors look better along the way.

So again, Thank you. Thank you for putting yourself and your experiences into the service of education. And thank you for taking the time to look through the following pages to start off with a sound foundation of the educational process to the benefit of the students – and your future partners.

# The Basics

## 1. Let's start at the beginning – Check your ego at the door.

- Students really do not care how wonderful you are. As a Medical Director once said (paraphrasing Theodore Roosevelt it turns out), ***“Patients don't care how much you know until they know how much you care”***. This is true with students as well. They will be more impressed with your compassion and your ability to help them learn than all the impressive things you have done in your career.
- Your personal life is yours, not your students. Keep it that way.
- Students have their own personal lives. Do not get personal with them.
- Students are here to learn; you are here to teach. Keep those rolls clear.
- Be realistic about instructor certifications.
  - EMS instructor classes teach how to create objectives, lesson plans, and use audio-visual aids. They teach methods of teaching, student learning styles, test design and how to write simple test items. What they don't teach is anything about EMS. In reality they teach how to teach but not what to teach.
  - What you teach becomes your responsibility and requires learning more than you learned in paramedic school. It may actually require you to unlearn what you learned wrong in paramedic school and undo the bad habits you've picked up since completing paramedic school. It requires learning to pronounce terms correctly, the science of medicine, the actions of drugs, and the why we do things the way we do.
  - You must become a Master of EMS, not just a practitioner.
- Experience is wonderful and important, but consider the following.
  - Your performance in paramedic school may have been respectable to near perfect but that does not imply that you know everything that should be taught.
  - After 5 years in the field, it is highly likely that you have only used a portion of what you learned either through non-use or from memory loss.
  - That leaves you with a large gap in expected knowledge. This is what is brought into the classroom if no additional preparation is taken. And this does not account for bad habits that have been acquired.

## 2. Remember the basic rules:

- “Only perfect practice makes perfect.” We will not hit perfect, but we should aim for it.
- “Don't practice until you get it right, practice until you can't get it wrong” (remember it has to be taught correctly for this to occur)
- “If you don't have the time to do it right, do you have the time to do it over?”
- Textbooks reflect the past; protocols represent today; education prepares for the future.
  - Manuals and algorithms are updated on a regular basis, much more frequently than textbooks, and possibly more often than protocols.
- And remember, “Temper with Love.”
  - In all things related to students, temper with love. Students are by definition uneducated. They have lives outside the classroom and are facing challenges at home they do not always tell us about (and many times we do not want to know) that impact their ability to learn and succeed. If THEY fail, then THEY fail. But YOU never fail them.

- This does not mean to be overly kind and giving in to the students' problems. Sometimes it is tough love, but it's never punitive, hatred or revenge.

### 3. Students have rights

- All students.
- Students have the right to a fair and complete education, fair and non-biased examination and evaluation, and to an educational classroom and clinical setting that tolerates who they are or wish to be.
- Regardless of feelings of indifference, religious beliefs, or personal creed and tenants, student rights must be protected and defended within the educational environment, which includes the classroom, laboratory, clinical and field experience settings.
- Students have the right to be treated as NOT different or special.
  - Do not announce or demean student differences in a way that singles them out for ridicule. Many of the differences are learning disabilities that fall under FERPA or other confidentiality regulations, others are medical or psychiatric which fall all under similar rules of confidentiality. Either way, this information does not need to be shared with others in any way.
- Personal feelings need to be withheld. Remember there is a difference between Acceptance and Tolerance. You do not have to accept the students' differences (that is a personal thing) but you do have to TOLERATE those differences.

### 4. Consider classrooms **Sterile Environments** when it comes to communication with students and other faculty members

- During class, only necessary communication should occur:
  - Especially during exams.
  - Especially when another instructor is teaching (the assigned instructor has the class. Offering additional information can create conflict and detract from the planned presentation).
- At all times, in the presence of students, appropriate language is essential.
  - Foul language (by the MPAA rating standards, not yours) is NEVER appropriate.
  - Discriminatory, derogatory, demeaning, or disrespectful statements are NEVER appropriate.
  - A professional presence should be displayed at all times.
- Sharing information with students should be limited to classroom material, and the assigned material. Discussing grades, performance, and other personal information constitutes a potential breach in confidentiality and may violate federal FERPA laws.
  - Performance discussion following a particular skill using constructive feedback is appropriate in most cases.
  - However, there are times to consider private reviews of performance when the review would require evaluation that would not be appropriate in front of other students.

### 5. Class times and schedules

- The start and end times of the class and the individual labs are set to allow the best use of time.
- Arriving on time (on time is 30 minutes before the class begins) and staying for the entire session is essential.
  - Arriving late would mean labs are delayed or would need to be rearranged.
  - Leaving early would mean labs are shortened or would need to be rearranged – both result in a loss of practice time for the students.
  - If you cannot commit to the entire class, we are probably going to adjust the lab session, so you are not needed.



## 6. Teach the assigned content

Here is a scenario: An instructor was assigned a class, given the material to cover in class, and the times of that class. At the conclusion of the class the instructor made the comment to the director: “I didn’t cover everything I was supposed to, but I can come catch up the next class”.

- Every class has a schedule and a plan for the material to be covered.
- There is no time scheduled for material not covered in previous classes. Although most skills are covered multiple times, missing one day means the students do not get those “multiples” and do not learn the skills to the desired extent.
- For the best use of lab time, remember the following rules.
  - The material has been introduced; it is time to practice. Decrease talking, increase doing. Lecture has already occurred unless is specified in the plan to introduce the skill or topic.
  - Stick to the schedule and the plan. Deviation creates schedule conflicts and other problems and may detract from the objectives.
- Hone skills for perfection. Practice over and over, and over again. Remember the tenant, “Don’t practice until you get it right, practice until you can’t get it wrong”. Use the entire lab time to practice.
- Stations should be set up to encourage the maximum participation possible.
  - Idle students naturally become a distraction. Distractions reduce learning and waste time. To reduce those distractions:
    - Never set up only one IV arm; set up one for each student. All resources should be used.
    - Never set up only one intubation head, set up one for each pair of students.
    - Students rarely learn by watching another do something, they learn from doing it themselves. Provide those opportunities.
    - Student : Instructor ratios should also relate to Station : Instructor ratios and is often skill-specific.
- Once is never enough. Students should practice each skill as many times as possible in the allotted time. If they think they have done it enough, make them do it in a different setting (turn the lights off. Go outside. Increase the difficulty).
- Practice as you play (train as you fight, fight as you train)
  - Create EMS style laboratory designs. Patients are not on tables, they are on the floor, on a couch, on a cot. Set up stations to reflect those areas. Never teach skills on tables.
  - Students need to get used to using PPE. It is required in all lab settings, by the students – and the faculty (we set the example).

## 7. No “war” stories.

- Students do not come to class to be entertained by our careers. They want to learn how to become part of this profession. War stories are entertaining but unless they serve an extremely valuable “lessons learned” role they just take away from the time to practice.
- From an educational standpoint war stories may reflect poor performance or older protocols. Unless the situation has been vetted by the medical director the educational value cannot be assured.

## 8. Practice over preference. One of the deadliest sins of an educator, mentor, instructor.

- **Practice:** Acceptable approach to providing medicine
- **Preference:** the approach that “I” have developed.
- What’s the difference?
  - Practice: Students may treat the same patient multiple ways, as long as the basic principles of treating life threats are managed as a priority and not missed.

- For Example: Hypotensive, bradycardic, conscious, mildly symptomatic patient. As long as the student can reasonably justify their answers, it is acceptable to do any / some / all of the following:
    - Immediately pace the patient
    - Sedate the patient then pace
    - Start an IV and administer a fluid bolus
    - Administer atropine (before pacing)
  - Preference: The instructor interjects personal preference in how she or he would have treated this patient, which causes:
    - The student to feel they did it wrong (when in reality they just didn't do it "your way")
    - The student to focus more on trying to mimic what each individual instructor wants rather than understanding why they should do the skill in a specific way or render a specific treatment.
- The instructor MUST understand the wide range of what "acceptable" approaches are and cannot strictly adhere to their own practices or individual department practices.

## 9. Teach from the established plans and manuals, not from memory or personal practice.

- Field shortcuts are not appropriate for students – often because they are actually poor or dangerous practices. Manuals describe the "textbook" process focusing on best practices. This is the mission. Although there are many ways to achieve the same objective, it is best for all faculty to teach the same techniques, so the students get consistency in what they are learning.
  - For Example:
    - Patient assessment should be scripted, and all the instructors focus the students' performance to the same foundation. Having one instructor say, "I wouldn't listen to breath sounds now, I would do that later" then another instructor on the next scenario say, "You should have listened to lung sounds first" is a reflection of the preference over practice.
    - "Everyone is 220 pounds" sets the student up for failure. Multiple major national EMS legal incidents have this connotation in it, especially with Ketamine.
    - "Titrating to effect" is a real thing, but used as slang it means "wing it". If the student (or instructor) wants to use this phrase, they have to follow up with the logistics of how to assure the desired effect and the treatment strategy.
- Have you heard this before, "**Learn it this way in class, we'll show you the real way when you get to the field**"? This is one of the most TOXIC phrases you can say to a student. Not sure what people are trying to say, but it sounds like they are saying that what is being taught is not actually appropriate – which is a concern. But consider it from this angle. If we teach textbook perfection, anything else is a lower standard. Do not teach those lower standards. As an instructor, it is your responsibility to be both the catalyst and the buffer between the classroom and the field. In some ways we do this in foundational education by having students verbalize a thought – such as "BSI, Scene Safe". That is a great start, but it is not good enough for a student to tell us, they have to show us.
- Consider the aesthetic value.
  - Everything we do has a purpose. Every movement in preparation for a procedure has a specific characteristic. The end result should reflect the attention to detail in achieving the goal.
  - Take the time and make the effort to instill proper technique from hand positioning to final presentation. Everything should be taught with an orchestrated rhythm, assuring the students are comfortable with the task and the tools required to complete the task.

## 10. Teach Textbook Perfection.

- With proper honing of skills to achieve perfection, students can perform a skill properly faster than many practitioners can do it wrong. That may sound a little arrogant, but why not shoot for the best possible

outcome. The psychomotor portion is essential. Students should put equipment in their hands, held and welded properly, so it becomes second nature. Think of a toothbrush. Most people can use a toothbrush very well. How much practice did it take to get there (and can you do it just as well using the other hand). Students should be taught, and should practice, until the tasks become second nature so they can perform perfectly when acting under pressure.

#### 11. Focus on the skills and the students – no distractions.

- Students notice everything. Make sure that the time in the classroom is focused on them and the skill.
- In short, eliminate distractions that take the focus off of the subject.
  - Number one on this list is a cell phone, number two is a smart watch that constantly requires attention.

#### 12. Provide corrective feedback early, for each skill

- Although it may seem unkind to constantly critique students and point out their mistakes, that is actually the role of the lab instructor.
- It is essential to stop a student immediately when you see skills being performed incorrectly.
- Immediate corrective action prevents students from establishing a motor memory which is contrary to success.
- Always correct in a positive manner, never degrade. Students seldom (never) get a skill right the first time. But maybe they did a few steps well. Offer that praise. Then, describe the missed points and how to correct them on the next attempt. And give them the next attempt if at all possible.
- Remember to always “temper with love”.

#### 13. Post scenario critiques encompass the total process (all steps)

- As with individual skills, scenarios also require corrective action and detailed critique.
- Two types of action need to be utilized during the scenario:
  - Serious mistakes, those that would be immediately detrimental to the patient or pose a safety issue for responders, need to be stopped immediately.
  - Minor mistakes, those that don’t pose immediate problems, should be addressed in the after-action review of the scenario.
  - Don’t let little mistakes slide (it encourages poor performance)
- On the subject of scenarios, consider throwing in some refusals.
  - Refusals are a fact of prehospital care, although often overlooked in training because it’s not the cool stuff like intubation and giving medication.
  - Refusals require understanding of the patient’s condition, external factors, and communication that is effective in discussing risk versus benefit, to a non-medically training individual.
  - Stay away from “If you don’t go to the hospital, you may die” to the knee pain patient. This is unrealistic and gives no “release of liability”. In fact, it brings more – so do not say it unless it is plausible.
  - Remember that we don’t refuse care, the patient does. AMA means Against Medical Advice. The patient has to be provided legitimate, realistic “advice” to go to the hospital, to be evaluated, and been told the risks of acting “against” that advice.

## Advanced – Develop the Student

### 14. Students cannot EMT or Paramedic quickly, it takes time.

- There are many historically poor teaching methods we all survived. If we were to think back at some of the most counterproductive or negative experiences we had as a student, we often find ourselves unwittingly doing the same things to our students – because it is the only thing we know how to do. Be realistic.
  - If you let go of the tube, it does not magically fly out of the patient’s mouth across the room.
  - If you make a mistake, the patient dies/arrests is probably one of the most over-used and unrealistic statements made. Yes, there are situations where this is possible but that is not the objective. The objective is to “teach the student” the objective of the situation/scenario/skill.
  - Keep the scenarios realistic and objective based. There is value in distracting information, but there is seldom value when the entire scenario is a distractor or unrealistic.
  - That stumper of a call you ran last year should stay in the past. If it was a stumper for the instructor, it is definitely way beyond what the student is ready for.

### 15. Teach with and promote a positive attitude

- Assure that the message we deliver is one of success and capability.
- You have to be clear to a student if their performance is poor or they made a mistake but ensure that your review and feedback do not focus only on the bad. Make sure you make time for the good and the positive aspects of their performance. Praise is a terrific modifier to do better. Ridicule often drives regression and concerns that they cannot do “anything right”.
- NEVER state something is hard, or that it seldom works, or that you hate doing it. We want students to graduate thinking all aspects of what we do are beneficial, positive, and fully within their reach and capability. Any other message detracts from the confidence we need to build in our students.

### 16. Promote education, both initial and continuing

- Have you ever noticed that the number one reason people disagree with something is because they don’t have it. We see a lot of that in education. As educators we should promote education, especially when you expect to work in academic settings. If you say “you don’t need a degree to do this job” you will politely be asked to leave. While at the baseline, this is a fact, it is a derogatory statement that doesn’t motivate students to expand their education. Just because you didn’t, doesn’t mean they can’t. We should challenge and encourage students to do better for themselves.
- While we have students in school with a learning mindset, encourage them to seek additional education. Achieving an AAS is great, but what about a Bachelors. If they want to teach or be a chief, what is wrong with a Master’s. And if they have the desire and ability – they should pursue MD/DO, RN, PA, PhD. Education opens doors. Promote the advancement of their career and our profession.
- Continuing education is also essential. It is a very sad fact that quite a bit of what we teach today is actually (will turn out to be) wrong – we just do not know which bit or bits that is yet. It is essential that students embrace continuing education and not as knowledge maintenance, but as evidence-based material that changes our practice.

### 17. Keep up with High Acuity / Low Frequency skills

- Skills that are seldom used need to be honed in class because the opportunities to practice in the field are limited. Our job is to make motor memory recall for these low frequency skills; it's like riding a bike.
- Do not forget to keep up with your own Low Acuity / Low Frequency skills as well.
- As an instructor there is no excuse not to know these skills just because they are low frequency, whether high or low acuity. As instructors we must have the ability to teach all EMS skills with equal efficiency and with a positive attitude.

### 18. Do not teach protocols – follow manuals and algorithms

- Teaching individual protocols limits the depth of instruction. Manuals and algorithms are intended to encompass a much broader view and to blend multiple protocols together to look at various treatment options.
- Understand that algorithms form the foundation of practice, but if they deviate it does not mean they fail – unless it would actually cause harm. Refocus, get the student back on track, and move forward.

## Advanced – Develop the Instructor

### 19. Promote a positive image.

It is essential that all aspects of our program, viewed from either inside or outside of the school, represent the wholesomeness expected of EMS providers. Our positive image creates a positive public perception.

- To our students the faculty are Role Models, like it or not. It is essential that we provide them with a positive image of our industry, as much as a complete education to work in the industry.
- Photographs taken of students, whether used publicly or privately (nothing stays private) should reflect textbook images of procedures and the best of Galveston College EMS.
  - Photographs must show proper body substance isolation in both the students and the faculty. No exceptions.
  - Images of performance must reflect aesthetic and textbook perfection. Mistakes will be obvious to the discerning eye and WILL BE used against us by those that live to stir up trouble.
  - Photo release forms must also be in place to ensure we have permission to use their image in anything related to the college.

### 20. You don't know what you don't know. And that's okay. But ...

- It's difficult to teach what you do not know. There are many references to help overcome knowledge and performance gaps. Please use them.
  - If you want to stretch your instructional skills and teach beyond your comfort zone – Great. But ask for help. You are responsible for covering all required material, and that may have to come from information beyond the textbook. Ask for help. Ask for resources. Do it early, not the day of the class.
- If you need more, please ask. There is always more, and we can find the answers. What we should not do is provide incorrect and conflicting information to our students.
- Much of what has always been taught in EMS is not as true as we have been led to believe. We need to work on eradicating outdated and incorrect information and stop its proliferation.
  - It is preferred to teach evidenced based information. Unfortunately, much of what we do is based on history, tradition, and anecdotal information – and not evidence.
- Just because it has been done or being done in the field does not make it right – it just means it's being done. As educators we have an obligation to teach correct actions and procedures.
- The truth is you can only share what you have. That is true with everything including knowledge. As instructors we are expected to have a bit more than the average provider.
- Remember we don't hire instructors for what they know, we hire them to teach what the students need to know. This may take a little work and study.

### 21. Mutually support your other instructors and EMS personnel

- When students talk about other instructors and what they taught them, remember that the other instructor is not there to defend themselves (that is actually your job). Students tend to sway the story to their benefit. It's mostly true... except that little detail they left out that changes the entire story.

- Never “side” with the student or defend the instructor. Students are always looking for affirmation, but you can’t be fair unless you were there or can hear both sides of the story. Provide feedback on what topic they are discussing, not the individual situation.
- Remember, if the roles were reversed, you would want the same support and respect.
  - Failure to support our instructors, our preceptors, and other providers just degrades the student trust in our faculty and our industry.

## 22. Learn to think like a doctor. It is good practice as a practitioner, it is essential as an instructor.

- Doctors do not jump to conclusions and focus on the obvious. They focus on the patient’s complaint and develop multiple differential diagnoses. Then, in order of most life threatening and most obvious they go through a process of eliminating possibilities until they come to the most likely. On the way, they manage the airway, provide comfort, and do what we learn from the AHA algorithms – search for a treatable cause.
- Remember all patients are hiding the fact that they are trying to die on us. Teach the students how to work through the obvious and not to overlook the mondain.

## 23. Touchy subject but work on pronunciation of words.

- As an educator, you set the foundation for how medical terminology is used in EMS, especially when it comes to pronunciation. Some words can go either way – is it An gina or An gin a. Whoever started that word probably has an opinion, but the general acceptance is it can go either way – like a regional dialect. However, there are some words that we need to do better. We will all have our pet peeves, but let’s start with this list.
  - Larynx. It is “lar inks”. Like the cat, the lynx (links). It is not an l n x. Pharynx is the same way, “fair inks”.
  - There is no U in defibrillation. Defibulation is the removal of a bone from the lower leg.
  - It’s “ilets of Langerhans”, not IS Lets of Landerhorn. It’s the Hawaiian “eyelands” not the Hawaiian “IS Lands.”
  - And there are so many more.
- The standard use of medical terminology and anatomical terms, along with drug names are all important for us to set the foundation of correct pronunciation.
- The important message is that you did not make up this pronunciation yourself, you probably learned them from your instructors. Let’s work to break that cycle.

## Teaching Styles and Student Faculty Relationships

### 24. Keep the roles well defined – and separate

- Set boundaries and stay within them.
  - Students are students, not friends. Maintain boundaries by not getting them involved in your personal life, and do not get drawn into theirs. Familiarity seems like a good thing, but it will lead to problems when students need an excuse. Do not let them see your weaknesses, and do not let them believe their weaknesses will be overlooked.
  - Be careful of “casual” conversations that open doors. Discussing drinking habits, recreational (even if just on holiday in Jamaica) drug use, dating habits, dating preferences, even political views have no reason to be discussed around students.
- Official communications systems should be employed – personnel cell phones should never be official. Most schools have “official” communications processes for notifying students of important information. This same process should be used for less important communications as well.
- For many part-time faculty, students are coworkers at full-time employers or with volunteer agencies. This previous relationship does not alter the problem of familiarity. A professional front needs to remain in place even for people you work with more often than you teach.
  - Other students may also see previous relationships as a form of bias against them. Remember a simple rule; “what we do for one, we do for all”.

### 25. Teaching styles

- Maintain professional standings, dress that way.
  - Students have a uniform and a dress code for both laboratory and for clinical, faculty should as well. If the rule applies to students, it should apply to us.
    - Policies that affect students, really should apply to faculty as well. The concept of “I’ve earned this”, or “I’m above this”, really do not exist in the eyes of students.
    - This applies mostly in the world of professional appearance.
      - If the students have to be in uniform, the faculty should at least have a dress code that matches.
      - If students cannot wear hats, faculty should not wear hats. If students have to wear their shirts tucked in, faculty should wear their shirts tucked in.
    - Actually, whatever the policies are, faculty should be better. It should be obvious that the faculty stand out at a higher level.
- Remain a role model.
  - How you present yourself in front of students sets a two-way path, involving how they see and interact with you as well as how they see the Profession and their expectations of the professional standards.
  - This involves your actions, your support for the profession (always positive, never negative), your language, your interactions with fellow instructors, and your ability to thoroughly teach the material being taught.
  - This also means we have to stop justifying inappropriate practice. No means no. If the policy says no, then it’s no. The fact that you did it in school, on the job, in a bar (never talk about your bar habits), does not mean it’s acceptable.



- Many different philosophies, from formal to relaxed, rigid to loose. In the end the students must LEARN the information, not just be exposed to it.
- Consider anatomy – ears face forward, do not teach from the side or behind students (it forces them to look at you rather than whatever media may be on a screen (at conferences, speakers can walk around, because of speaker systems).
- Never sit. This is a presentation / lecture / demonstration – not an informal conversation. You are not a talk show host.
- You have empowerment.
  - As an educator it is your responsibility and your obligation to know and enforce policy. As long as follow appropriate guidelines of the program standards, you will be supported by administration.
  - Failure to understand and enforce policy leaves the entire program in a hole, because students see different policies applied and enforced by different instructors.

## 26. Failure

- Sadly, there are students who will not pass. They either cannot grasp the material academically, or they cannot put the tasks together properly to pass the skills. That is a fact. BUT ...
  - Before pointing a finger at the student for not doing the work, first point one at the faculty and make sure it is not our fault.
    - Academic failures are often caused by not finding a way to reach a student who learns a little differently. Education is not a one-size fits all process and we must try different methods for different people. Knowledge comes from understanding; if we do not help them understand, they will never acquire the knowledge.
    - Skills failures almost always come from a lack of adequate preparation and practice. The students have not put in enough time doing the skill correctly, over and over and over again. The question is why.
      - Was there not enough lab time?
      - Was there too much talking and not enough doing?
      - Was the lab set up as “do one right, move on”? OR the common variation “they did it a couple of times and they don’t want to do it anymore”.
    - Building motor memory requires multiple evolutions of the process, being performed correctly. Before we note a student failed, we need to be sure we didn’t fail them.
- In the long run, students fail themselves. We DO NOT fail them, we just document that the student failed to achieve the required level of competency required for course completion. Never let a student believe that “you / we” failed them.

## Through the Eyes of the Coordinator

Through decades of teaching and multiple EMS classes taught, it is still interesting that the same problems keep coming up repeatedly – and often from the same people. During annual faculty meeting discussions of “we must do better” the common answer is “well, s/he’s not talking about me”. Here’s the truth – yes s/he is. We all develop comfort zones and those are not always tied to competence zones. Time and time again I walk into a lab to see how things are going and very often leave shaking my head. Teaching takes action, it takes effort.

These are a few of the comments shared by experienced program directors and coordinators – that should make us all cringe.

“I walked into a class to hear the faculty member discuss the process of MONA in cardiac care. He said, ‘We give morphine for the chest pain, oxygen if the O<sub>2</sub> stat [he said “stat”] is less than 94%, nitroglycerin to dilate the coronary arteries, and aspirin because the nitroglycerine will cause a headache.’”

“For three weeks in a row I tried to get pictures of the students doing skills. In each lab I walked into, the students were standing around while the instructor talked about the skill. As the session came to a close the students were able to practice about one time each – sometimes not everyone got to practice. After three weeks, I was only able to get pictures in the last 10 minutes of each station.”

“Walking by the labs I often see the students practicing and the instructors working with one of the groups of students. Started to notice they only worked with the cute female students. Never once saw them working with the males.”

“The high school CTE director called me to have a talk about professionalism with our Dual-credit EMT instructor. Apparently, the instructor informed the students that while she was in school she smoked cigarettes and marijuana, drank, often ditched class, and dated her instructor. Then said ‘and look at me know, I’m a teacher’.”

“I walked into class to find two of my faculty encouraging my students to quit EMS and go to nursing school. Apparently the two male “firefighters” were attempting to provide career counseling to the women in the class because women wouldn’t do well in fire service.”

“For years the doors of the EMS classrooms were always open. I often walked by the EMS labs had a good view of the instruction being offered. At one point I started to see the instructors getting lax and not really working with the students as I would have preferred. I told the faculty that I didn’t want to see that anymore as I walked past the classrooms. From that point on the doors to the labs were always shut”.

“I walked into a class on IV initiation to find the students engrossed in the stories of the instructor. As I listened, I heard several incidents of how the instructor used IVs as a means of punishing his patients: ‘if they don’t behave they get a 14’; or ‘I told the guy if he didn’t cooperate this needle was going in his eye’. I told the students to take a break and immediately fired that instructor. He was also reported to his company and the state.”

“Got a call from one of our fire department field internship sites letting me know that they had dismissed a student for inappropriate language during his clinical. The chief said the incident happened at 0730 when the crew went to Chick-fil-a for breakfast and the student let out a ‘F-bomb’. He was dismissed from his rotation 13 hours later. As I talked with both the chief and the department’s medical director that same word and many others were used to describe how inappropriate his language was. I told them that this student grew up a missionary and never used foul language. The chief said ‘well, he learned it somewhere.’”

## In Memoriam

The origins of EMS were based on conjectured, assumption, anecdotal evidence, and tradition. As we enter the world of evidence-based medicine and evidence-based education, it's time to let go of the past, and allow the dead to rest in peace. The following terms, thoughts and ideas need to be stricken for the vocabulary of EMS and EMS Education.

- “EMS does not diagnose”. Yes we do. We diagnose, plain and simple. That is the truth, and anything we do to make it sound less specific is an injustice to the management and care of the patient, and disrespectful to our profession as a whole. EMTs, AEMTs and Paramedics diagnose.
- “Tracheal deviation is a common sign of tension pneumothorax”. Actually, this is true, but not in the neck. Instead, it is seen on x-ray and can be quite bold and distinct. Tracheal shifts in the neck are extremely rare, occur extremely late (like you should have managed the condition a long time ago) and don't really deserve even being mentioned in the assessment of trauma patients. It should be assessed, yes. But as an indication of thyroid enlargement, not thoracic trauma.
- “Basic” or “EMT-Basic”, or “EMT-B”. The term basic has not been associated with EMT certification in many years. Continuing to use the term denotes a failure to modernize our profession.
- The “National Registry Standard”. The National Registry does not set standards, define curriculum, or dictate required learning. Standards are set by the Federal Government through the Department of Transportation and are available at EMS.GOV. This includes the National EMS Education Standards (which defines the actual curriculum), the Scope of Practice (which dictates skills and capabilities, but does not exist in Texas), and the EMS Agenda for the Future. The National Registry simply tests the capabilities of the candidate based on the Education Standards and the Practice Analysis.
- Technician. Okay, we are never going to remove it completely – especially since we have EMTs and AEMTs, but we should be promoting these individuals as Clinicians, rather than Technicians. This has already been adopted on the national level, and will soon be in Texas (actually, it was supposed to have been changed at the last revision and got missed) at the paramedic level. The Term EMT-P is no longer appropriate, instead its Pm for Texas and NRP for National Registry. Have you noticed that the EMT is no longer on the paramedic patch.

## Thank You

That sure seems like a lot of information in such a short time. If you are new to EMS Education it probably is a lot, but it is just a hint of what is to come – the tip of the iceberg; or maybe the first stone of your EMS Education foundation. As you advance in your EMS career, education is a great next step. But it is not a natural step and actually a career change, with a common core but an expanded body of knowledge. The tools of your trade remain the medical devices for patient assessment and care, but now include trainers, task simulators, test generators, and tools for presentation development. It all starts with the same passion and compassion that brought you into EMS in the first place. Now you can do more.

As an EMS provider you care for one patient at a time. Maybe 4 to 8 people a day. As you teach, you begin to spread knowledge that affects 100 people a day, then 1000. Good habits instilled in others are passed along, like good genes. If your students become educators, the growth is exponential.

In our profession you are never alone. Whether teaching at a large urban center with hundreds of students in the program, or a rural area that teaches less than ten students a year – we're all in this together. You are never alone. All over this state, starting with your program and the one down the road, you will find instructors willing to help you become a better instructor. All you have to do is ask.

All too often we spread our "Thank You's" when it's far too late. As Edwinna Harbert used to say "Don't wait until someone dies, give them their flowers while they can smell them." So, here are your flowers – well some of them.

Thank you.

Thank you for the care you provide as an EMS responder, for the lives you've touched and the lives you've saved.

Thank you for sharing your knowledge with the next generation of EMS providers, and for advancing your own knowledge so you have more to share.

Thank you for your time, effort, diligence, and patience as you work with students struggling to learn this amazing profession and igniting the spark that lights the fire into a wonderful career.

Thank you for rising to the challenge to become an EMS Educator.

There is so much more to come, but this is the start. EMS Educators are an elite group, and as you will come to understand, very well connected with our brothers and sisters in this state, as well as all the others.

Welcome to the family.

## Important Acronyms Associated with EMS Education

As with EMS, there are many acronyms that go into the world of EMS Education. These acronyms refer to governmental regulation, certification, and student protection. These are the documents and guidelines that outline everything we do in educating our students.

**AHA (American Heart Association):** The AHA establishes guidelines for the management of critical cardiac emergencies and strokes. Although EMS usually takes these standards to a higher level, the base of the AHA is the standard for teaching and one of the few standards adopted by the National Registry of EMTs.

**CAAHEP (Commission on Accreditation of Allied Health Educational Programs):** CAAHEP is the accrediting body that awards the accreditation to paramedic programs that have met the minimum standards. When you hear “our paramedic program is accredited” they are saying it is CAAHEP accredited. CAAHEP only accredits paramedic program at the present time. AEMT accreditation will be available in 2025 (voluntarily). There are no plans to accredit EMT programs in the foreseeable future. Graduation from a CAAHEP accredited program is required for a candidate to sit for the NREMT paramedic certification exam.

**CoAEMSP (Committee on Accreditation of Educational Programs for the EMS Professions):** In order to become an accredited program, the program must submit a self-study and undergo an onsite review to assure the program meets all requirements known as the “Accreditation Standards”. This review is complete by the CoAEMSP, one of several review committees that works with CAAHEP to assure the attainment of the minimum standards. NEW programs who are not accredited work with the CoAEMSP in order to obtain accreditation under what is known as a Letter of Review. The Letter of Review (LOR) allows program to graduate students eligible to sit for the NREMT paramedic certification exam.

**DSHS ((Texas) Department of State Health Services):** DSHS is a branch of Texas Health and Human Services and offers over 150 programs that work to improve public health in Texas, including EMS and Trauma Services. It is the DSHS, office of EMS that sets the rules of operation for EMS providers and education, based on legislative direction. Common legislative and administrative laws associated with DSHS rules are found under Chapter 773 (also known as the *Emergency Health Care Act*) of the Health and Safety Code and Chapter 157 of the Texas Administrative Code.

**FERPA (Family Educational Rights and Privacy Act):** The Family Educational Rights and Privacy Act is to Education what HIPAA (Health Information Portability and Accountability Act) is to health care. FERPA protects student information including personal information, grades, and transcripts. As educators we have access to much of this information but also have an obligation to protect it. In short, any information concerning an individual’s academic performance is confidential and must not be shared. This includes information about a coworker to a chief, asking how they are doing in class. FERPA allies to all programs receiving federal funds.

**GIPWE (Guidelines for Instructional Programs in Workforce Education):** The GIPWE is a formatting and information document that works with the WECM to establish consistent education in Workforce programs. It is the GIPWE that sets the hour capabilities for college classes when comes to career education programs. You are probably familiar with college courses that are 3 hours in length (3 SCH). The GIPWE sets the foundation that a 3-hour course may be 3 hours each week of lecture, or 2 hours each week of lecture and 2 hours of lab, or 1 hour of

lecture and 4 hours of lab. Based on this outline college classes are fixed length offerings, based on 16-hour increments. The GIPWE also sets the hour requirements for clinical, practicum, and internship hours. Because these are state documents tied to funding, college classes must be structured within the guidelines.

**NAEMSE (National Association of EMS Educators):** The National Association of EMS Educators is a professional organization based outside of Pittsburgh, Pennsylvania. The mission is to “inspire educational excellence” and provide a common resource for EMS Education. The NAEMSE worked with the NHTSA to establish the EMS Education Standard which serves as the basis for teaching EMR, EMT, AEMT and Paramedic courses across the country. NAEMSE also offers EMS Instructor courses which meet the 40-hour requirement required for EMS Instructor certification. The NAEMSE holds the *EMS Educator Symposium and Trade Show* annually, usually in late summer.

**NAEMT (National Association of EMTs):** The National Association of EMTs is based in Clinton, Mississippi and is a professional organization aimed at improving EMS. The NAEMT has lobbying capabilities and works nationally to improve EMS laws and status. NAEMT is the sponsor of many prehospital Continuing Education courses, including AMLS, EPC, GEMS, and PHTLS.

**NAEMSO (National Association of State EMS Officials):** NAEMSO is the permanent national leadership organization that supports, equips, and advocates for state, territorial, and tribal EMS officials in their work to improve systems of care and the professionals operating in them. NAEMSO publishes a generic protocol called the “*Model Clinical Guidelines*” which is a wonderful tool for education, outlining a variety of acceptable patient care modalities and medication regimens.

**NHTSA / DOT (National Highway Traffic Safety Administration / Department of Transportation):** The National Highway Traffic Safety Administration is the federal office that oversees EMS Education in the United States. The EMS.gov website contains the lists of many nationally important documents which were established or charted through the NHTSA/DOT process, including the EMS Education Standards, The EMS Agenda for the Future, THE EMS Education Agenda for the Future, and the Scope of Practice. Remember that EMS began following the white paper “Accidental Death and Disability: The Neglected Disease of Modern Society” that got EMS started. It was a way to end traffic deaths, not improve overall health care.

**NREMT (National Registry of EMTs):** The NREMT is the national single certifying organization, centered on protecting the public and advancing the EMS profession. The National Registry writes and maintains the cognitive examinations for EMR, EMT, AEMT and paramedic certification. Although the National Registry is the certification standard for many states, Texas is NOT a National Registry state. Texas uses the NR only as a certification exam. Certified personnel are not required to maintain NREMT certification in Texas. It is important to remember that the NREMT establishes MINIMUM standards and not gold standards. Their exams set the lowest level of knowledge acceptable in the United States. Our goal is to leave them in the dust.

**TAEMSE (Texas Association of EMS Educators):** The Texas Association of EMS Educators is a professional organization with a mission of “bringing educators together to advance the EMS profession”. TAEMSE is a non-political organization that works to bring educators together to share ideas and improve the delivery of EMS programs. Although a Texas organization, TAEMSE does not discourage or prevent EMS educators from outside our borders from joining the group. TAEMSE holds the *EMS Educators Summit* annually, in mid-spring.

**TxHECB (Texas Higher Education Coordinating Board):** The Texas Higher Education Coordinating Board, often referred to as the CoBoard, sets the standards for college classes in Texas. Through the ACGM (Academic Course Guide Manual) and the WECM (Workforce Education Course Manual) the TxHECB creates and maintains an inventory of acceptable college course offerings. These courses are tied to degree plans, transferability, and of

course funding. In theory, based on the descriptions and hours associated with the courses in the inventory, every ENGL 1301 should be the same, as should every EMSP 1501. Colleges may add and alter to some degree, but each course must contain the same base content and be taught within the course hours described in the GIPWE.

**WECM (Workforce Education Course Manual):** The Workforce Education Course Manual describes all workforce classes offered for Credit or Non-credit on college campuses in Texas. The purpose is to provide a guideline for transferability of courses taken at different colleges and universities, keeping in mind that colleges are funded by the state and wants to make sure these tax dollars are spent to provide a consistent education between schools. The courses offered in EMS Education are under the EMSP course name and include the common courses of Introduction to Advanced Practice, Cardiology, Trauma Management, Assessment Based Management, and several more. The same course titles are used at all colleges in Texas. EMS courses not offered through a college do not have to follow the course nomenclature of WECM. As a result, many colleges do not accept transfers from non-college EMS programs.



## Reading List

Suggested reading for both the novice and the experienced educator.

As an instructor it is vital that you read beyond your textbooks. Your knowledge depends more than what you learned in school, what you do in the field, and your protocols and standard operating procedures.

This list is a start. It will help build your knowledge base and understanding of Emergency Medical Services and make you an educator and not just an instructor.

### **EMS White Paper**

Not that its content is revolutionary, but every EMS Instructor should be required to read to understand where EMS came from.

### **Checklist Manifesto** by *Atul Gawnde*

The use of checklists in medicine to reduce errors and omissions.

### **American Sirens** by *Kevin Hazzard*

History of the first "experiment of EMS", Freedom House in Pittsburg Pennsylvania.

### **Talk like TED** by *Carmine Gallo*

Tips on how do to effective presentations.

### **Start with Why** by *Simon Sinek*

Leadership inspiration, which can be applied to the classroom.

### **How Doctors Think** by *Jerome Groopman*

Why doctors err and shows when and how they can -- with our help -- avoid snap judgments, embrace uncertainty, communicate effectively; again, can be very useful for instructors.

Additional Reference texts

### **Tintinalli's Emergency Medicine: A comprehensive Study Guide** by Judith Tintinalli

The study guide used by Emergency Medicine Physicians in preparation for the board examinations.

### **Guyton and Hall Textbook of Medical Physiology** by John Hall and Michael Hall

In-depth physiology of the human body.



