

Professional role evolving

A PM is a link from the out of hospital environment to the health care system

MORE HOME. LESS HOSPITAL.

What’s really changing?

Coordinate care for all patients using multi-disciplinary teams including Mobile Integrated Healthcare (MIH) and Community Paramedics (CPs)

EMS AT THE HEALTHCARE TABLE

So, EMS education must change with the times and emphasize the integration of EMS within the overall health care system

National Education Standards (2009)

Pre- or co-requisites

Guide program personnel in making decisions about material to cover

Provides minimal terminal objectives for each level

Clinical/field requirements

NATIONAL EMERGENCY MEDICAL SERVICES EDUCATION STANDARDS

NHTSA

Our relationship with Harper College

Dual enrollment; taught at NCH; Harper credits Certificate courses (38 credits); AAS degree

The Joint Commission

ACCREDITED

Higher Learning Commission North Central Association

LINK TO THE HLC WEB SITE

Alteration and/or unauthorized use prohibited.

EMS education must be approved or accredited

Illinois Department of PUBLIC HEALTH



**Accreditation** evaluates programs relative to standards and guidelines developed by national communities of interest


Entry level competence assured by curricula standards, **national** accreditation, testing

We are under a Letter of Review full application filed 12/16



CoAEMSP - Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions

Our graduates may take the NREMT exams or the IDPH state exam

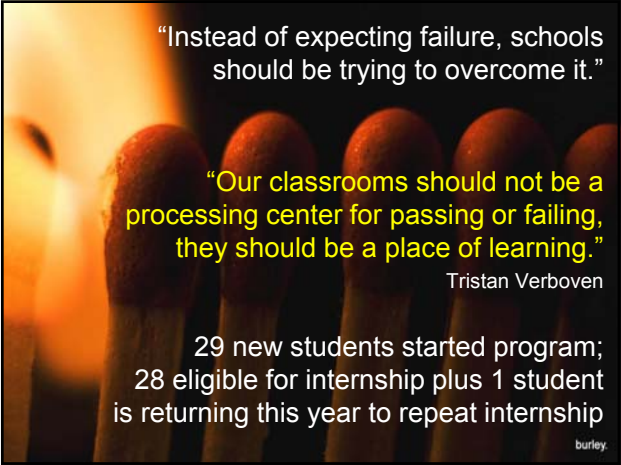


National Registry of Emergency Medical Technicians®  
NATIONAL EMS CERTIFICATION  
LEARN MORE

“Instead of expecting failure, schools should be trying to overcome it.”

“Our classrooms should not be a processing center for passing or failing, they should be a place of learning.”  
Tristan Verboven

29 new students started program;  
28 eligible for internship plus 1 student is returning this year to repeat internship



Expected outcomes of professional education

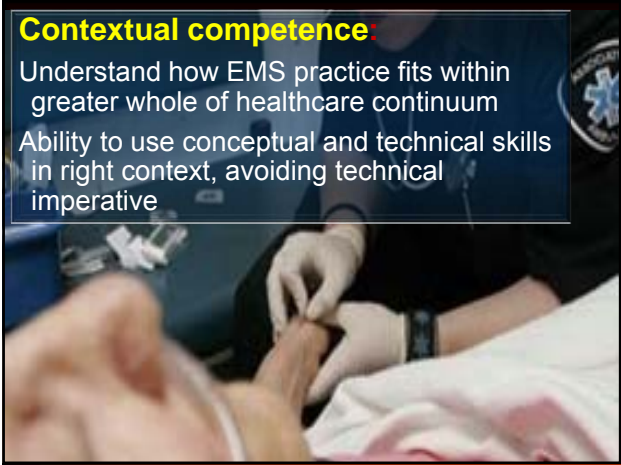
**Conceptual competence:**  
Ability to understand theoretical foundations of the profession



**Technical competence:**  
Proficiency in performing psychomotor skills



**Contextual competence:**  
Understand how EMS practice fits within greater whole of healthcare continuum  
Ability to use conceptual and technical skills in right context, avoiding technical imperative



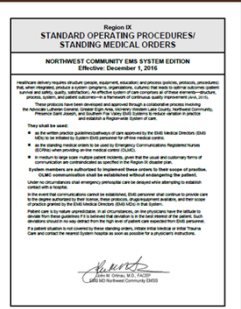
Integrative competence

Ability to take all other competencies and put them together to meld theory and practice

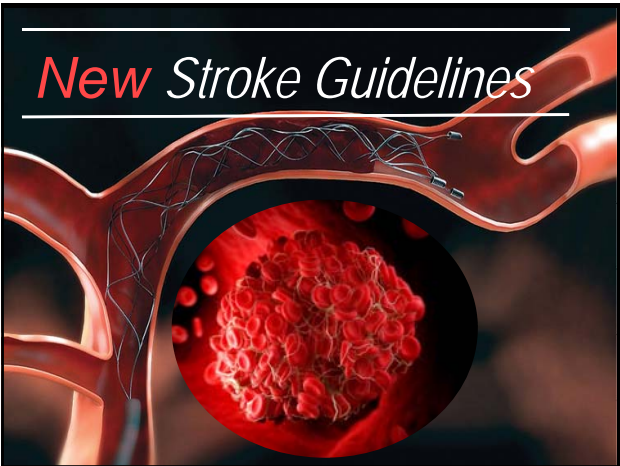


**Adaptive competence:** Ability to change with evolutions in medicine or in the care of one patient based on changing clinical presentations (move from 1 page of SOP to another)

Challenge for us all due to constant pace of change~



Drug changes  
Good job adapting to this one!



Septic shock

2 or more qSOFA criteria (1<sup>st</sup> 3 points) plus points below should trigger a sepsis alert

• GCS < 15

• RR ≥ 22

• SBP ≤100

• EMS suspicion of infection

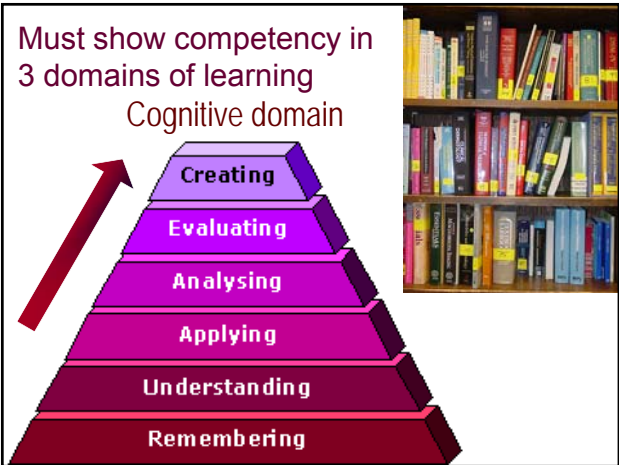
• ETCO<sub>2</sub> < 31

Teamwork and diplomacy

EMS is a team sport!  
Must work well with others to achieve common goals  
Team leader role crucial part of internship  
Puts team success above own interest  
Respect for all team members







Critical thinker traits

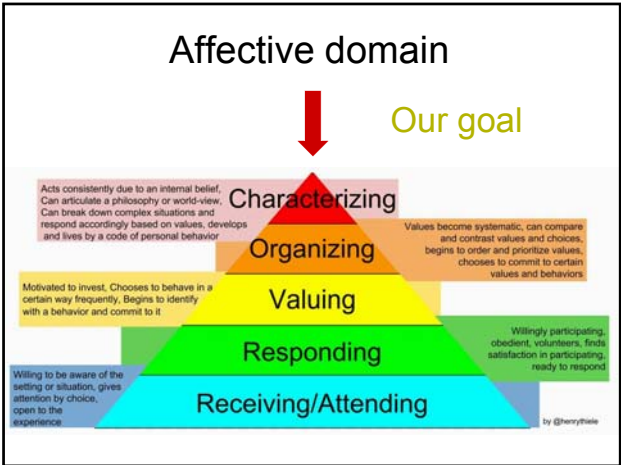
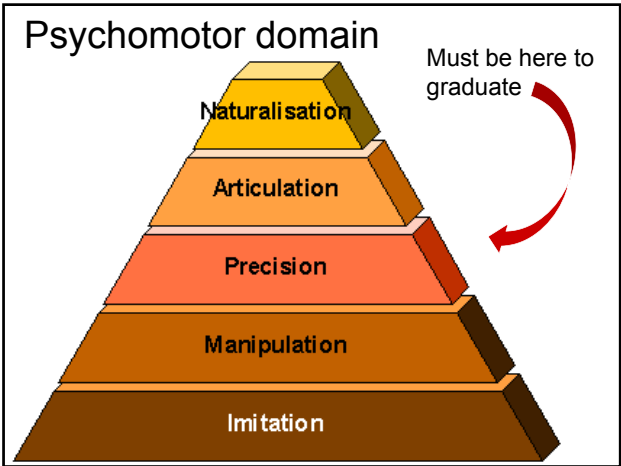
Strive for intellectual ends such as **clarity, precision, accuracy, relevance, depth, breadth, and logicalness**

Intellectual work

State. Elaborate. Exemplify.

Ask student to summarize the main point:

- State it,
- Elaborate it
- Exemplify it in their own words (real English) with their own examples





Ethics in patient care

Must prominently wear student ID

Pt may refuse to allow a student to perform a procedure

Limit # of invasive ALS skill attempts made by students

Outcome points for EMS Education:

Graduates have achieved the competency in all three domains of learning required for practice that ensures the delivery of **safe, timely, efficient, effective, equitable, and patient-centered care** to serve the health care needs of the population.

Instructional design

	Credit hours
EMS 110 EMT Education	9
<u>Paramedic CERTIFICATE Program</u>	
EMS 210 Preparatory (fall)	10
EMS 211 Med. Emerg I (fall)	5
EMS 212 Med. Emerg II (spring)	7
EMS 213 Trauma, special populations	6
EMS 214 Hospital Internship (fall)	3
EMS 215 Field Internship (spring)	4
EMS 216 Seminar (summer)	3
Total PM Certificate hours	38

In addition to EMS 110 and PM certificate coursework:

Required general education and support courses for the Associate in Applied Science (AAS) Emergency Medical Services Degree:

A grade of C or better in all BIO, EMS, (EMS 214 and EMS 215 with a grade of P), and NUR courses is required for all students.

- BIO 160 Human Anatomy 4
- BIO 161 Human Physiology 4
- Electives1 4
- ENG 101 Composition 3
- NUR 210 Physical Assessment 2
- SOC 101+ Introduction to Sociology 3
- SPE 101 Fund. of Speech Communication 3

**Total credit hours for AAS degree 70**

1Electives: BIO 130, CHM 100, HSC 104, or HSC 213

+ This course meets World Cultures and Diversity graduation requirement.

Program schedule by weeks


high speed learning...

- Weeks 1-4: Classroom sessions
- Weeks 5-21: Class/clinical
- Week 21: Complete hospital clinical rotations
- Weeks 22-32: 3-3-17 Field internship
- Weeks 33-36: Paramedic seminar
- Week 37: Graduation! June 14, 2017



**EMS 215 –  
Field internship**

Minimum 384 clock hours  
CoA prefers closer to 700 hours  
Cannot begin until authorized in writing:  
EMS 213 done  
EMS 214 done except elective  
Simulated PCRs done & approved  
Preceptors approved: class, applications,  
agreements

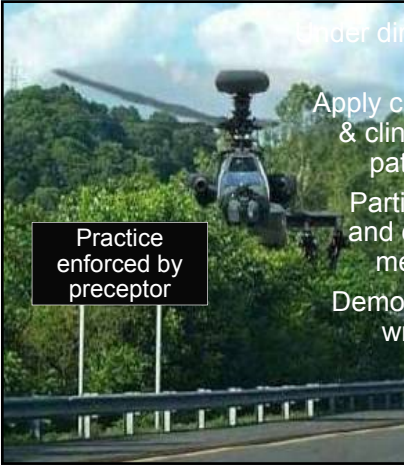


**Sailing ships into the future**

Internship

Membership - Leadership





Under direct supervision,  
a student will:

Apply classroom theory  
& clinical skills to real  
patients in the field


Participate as a safe  
and competent team  
member or leader.

Demonstrate effective  
written and verbal  
communication/  
documentation.

Practice  
enforced by  
preceptor

**Sequence – 2 phases**

I: Team member – what role?  
II: Team leader – what role?  
**How long will it take?**



**It depends...**



**Let's look at  
the forms  
and  
paperwork**





**Where are the forms?**

Phase meetings

- Who?** Student, preceptor; PEMSC welcome; Hospital EMSC/educator
- What?** PCR's (care/ documentation) , drug cards, ECGs discussed in detail
- Time estimation:**  
Phase 1: 2-3 hrs  
Phase 2: 3-4 hrs



Prepare in advance for phase meetings

- Evaluate as you go!
- Complete/sign all paperwork that day; schedule meetings well *in advance*
- Submit Phase Eval form and all outstanding paperwork at least 1 week prior to meeting
- Quiz student on pathophys, drug profiles and EMS care
- Review calls so you all can explain deviations from SOPs, receiving hospitals, scene times, and ensure PCR is thoroughly documented

Phase 2 conclusion options

- ❑ Internship complete; graduate; allow to take credentialing exam; unrestricted license
- ❑ Graduate; allow to take credentialing exam; retain with preceptor
- ❑ Retain in Phase II (attach IEP)
- ❑ Terminate the internship; sponsorship withdrawn (attach documentation)



Goal:  
Complete requirements by  
June 9, 2017



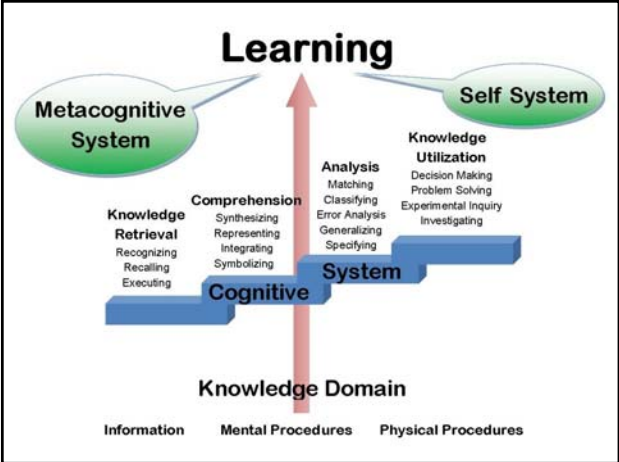
So, where do you come in?

"After 25 years of research and \$60 million later, what really moves diverse learners forward is a **masterful teacher** who commits the necessary energy to: create a learning community; provide a learning apprenticeship; and makes plans or content explicit enough so that all (learners) are on the journey!"

Dr. Donald Deshler, Dir. Center for Research on Learning, U of Kansas







You understand it  
only if you can teach it,  
use it, prove it, explain it,  
defend it, or read  
between the lines.

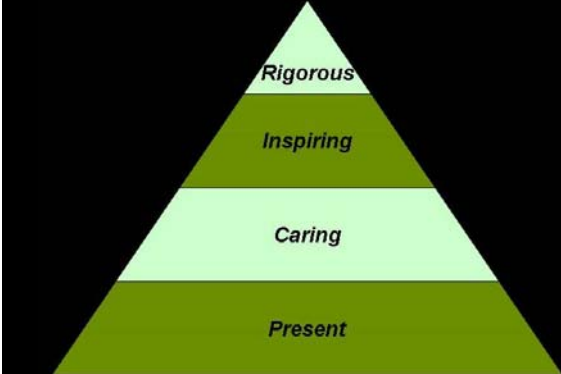
Wiggins & McTighe, 1998

What is your job?

Champion of  
excellence  
Learning coach  
Build to practice  
excellence so  
student has best  
possible chance  
to succeed

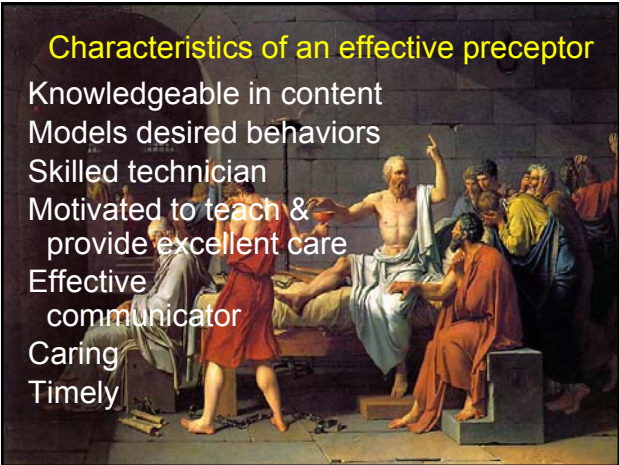


Coach model



Characteristics of an effective preceptor

Knowledgeable in content  
Models desired behaviors  
Skilled technician  
Motivated to teach &  
provide excellent care  
Effective  
communicator  
Caring  
Timely



What are your strengths?

**PRECEPTOR SELF ASSESSMENT FORM**

Instructions:  
Use the following table to rate yourself in a manner that best represents your own attributes. Do not project an image of who you want to be. Give each attribute a ranking, from 1 to 5, based on the following rating scale.

Rating scale:  
1=Never, definitely not me  
2=Rarely  
3=Sometimes  
4=Often  
5=Always, this is who I am.

Personal attributes	Attitude attributes
1. Warm	1. Enthusiastic
2. Humorous	2. Respectful
3. Mature	3. Supportive
4. Self-confident	4. Concerned
5. Charismatic	5. Patient
6. Empathetic	6. Accepting
7. Trustworthy	7. Nurturing
8. Flexible	8. Effective in coping
9. Accountable	9. Professional
10. Experienced	10. Delegator

# Because of your presence...

## Students understand System expectations

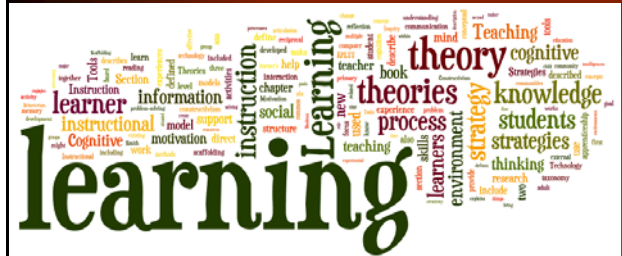
## Patients are safeguarded

You can *NEVER*  
condone  
sub-standard  
performance



## What's wrong here?

The accumulation of facts is the easy part, what to do with those facts is another matter entirely!



## Unleashing the learning potential

**Learning** = Interaction of principles/theory  
+  
Experience/practice



*"It is when sparks jump between two poles - the general and the actual - that learning occurs. So you need both."* - John Adair

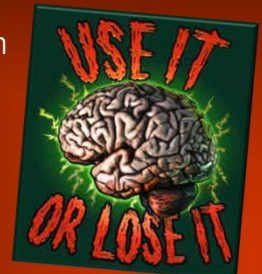
## Laws of learning

**Primacy:** First impressions are lasting

**Exercise:** What's repeated becomes a habit

**Disuse:** Facts/skills not practiced are soon forgotten

**Intensity:** Dramatic experiences are more likely remembered



## Characteristics: Adult learners

## Self directed

## Need to know *why*

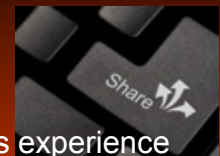
Problem oriented; relate new material to previous experience

## Participative; collaborative learning

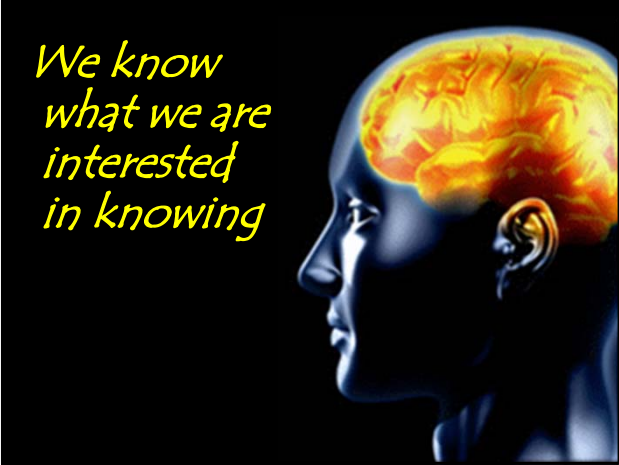
Help plan their own evaluation

## Impatient with time wasters

## Prefer to be treated as peers







How to use adult learning theory

- Motivated to learn based on need
- Involve in discovering value and relevance
- Identify gaps in knowledge and skills

YOU WILL NEED TO KNOW  
HOW EVERYTHING HERE WORKS

DIYLOL.COM

Need to know **why** they are being asked to learn something

- Have them state consequences of not knowing
- Clarify what they will be able to do better w/ knowing

why?  
what  
you  
need  
to know

Adults learn through process of discovery...

- Teamwork
- Decisiveness
- Problem solving

Thanks PFD!

**Experiential learning**

Learners use “real world” experiences as a catalyst for learning

Frank and Ernest by Bob Thave

DO YOU PREFER TV OR REAL LIFE EXPERIENCES?

I DON'T KNOW. WHAT TIME DOES "REAL LIFE EXPERIENCES" COME ON?

Use patient calls, case studies, or simulations that require problem-solving activities

Create opportunities for guided reflection and analysis, & idea-sharing

Invite and respond to questions

LEARNING CYCLE

Learn/unlearn

How used in the classroom

- Take competency-based tests
- Individual help from instructors
- Receive immediate feedback on how much they have learned
- Learning is measured according to how well they perform in relation to objectives, not to other students

Benefits of experiential learning

- Match new experiences with previous learning
- Distill new values and knowledge
- Try out new behaviors & acquire confidence and competence to do the job



Staging of skill acquisition



How do they get there?

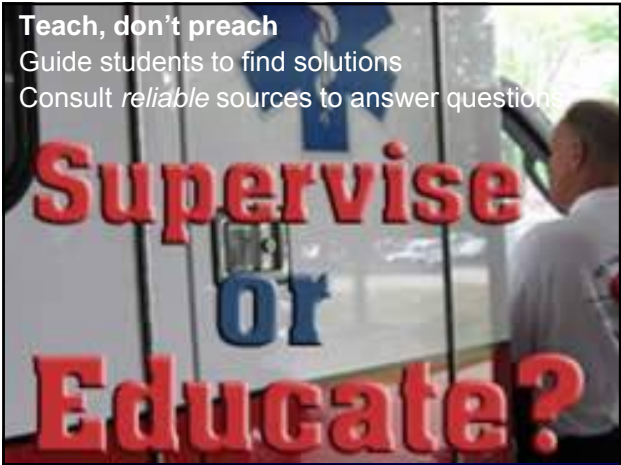


You are their mentor

- Knowledge has depth and breadth
- Demonstrated skill mastery
- Attitudes are patient-oriented
- Seek continuous improvement
- Model the way

Teach, don't preach

- Guide students to find solutions
- Consult *reliable* sources to answer questions





## Strategies for success



## Strategies for success

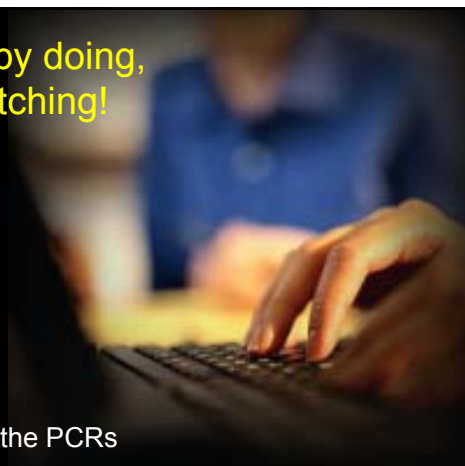
- Individualize instruction
- Discuss goals for each shift
- Coach them to competence!
- Use affirmation when possible
- Timely feedback
- Intervene early if not meeting objectives- use interim evaluation form

## Individualized instruction cont.

- Clarify objectives of each phase before it starts
- Go over paperwork together
- Discuss goals at the beginning of each shift
- Apply theory to practice by having them perform assessments, interpret data, perform skills *with your coaching*, & call OLMC unless pt's condition requires immediate interventions

## Learn by doing, not watching!

Complete the PCRs



Check PCR for accuracy, completeness, appropriate use of terms, abbreviations, & spelling before co-signing




"Research shows that less teaching plus more feedback is the key to achieving greater learning."

Grant Wiggins

Wiggins, G. (2012). *Seven keys to effective feedback*. *Educational Leadership*, 70(1), 10-16.


Providing feedback



Evaluate performance against standards, not your preferences  
Determine other issues student is facing that may impact performance  
Eliminate barriers to communication  
Be discrete; praise in public; correct in private

Focus as a preceptor

Use knowledge to build discourse with student  
Show how to apply theory to patient situations  
After calls, help student reflect on performance  
As internship progresses, assist them to reapply knowledge to new problems, issues, experiences



One minute preceptor

Step 1: Get a commitment


“What do you think is going on with this patient?”  
“What other problems should you consider?”  
“What assessments are needed?”  
“What do you think we should do?”

Gain insight into student’s reasoning

Step 2 Probe for supporting evidence

“What factors in the history and PE support your conclusions? Which do not?”  
“Why choose that particular drug?”  
“Why do you think it’s important to do that assessment in this situation?”


Allows preceptor to observe skill of critical reasoning and assist student in improving



Be non-judgmental  
Listen  
Reflect  
Avoid temptation to say, “Here is how I do it.”  
*Frustration is inevitable...*

Step 3: Reinforce what was done well

Student may be unaware if they've done something well  
Acknowledge their accomplishments  
Be specific  
Enhances self-esteem and reinforces behaviors you would like repeated





Provide praise

Don't assume excellence is expected so praise is unnecessary

Changing and maintaining new behavior requires praise

Praise, like criticism, should be well timed, well targeted and well said



Be specific about the behavior being praised

Poor:  
"You're good at that."

Better:  
"I like how you used layperson's terms to explain the procedure to the patient. They fully understood what you were going to do."

Reinforce what was done well

"Your diagnosis of probable pneumonia was well supported by your history and physical exam. You integrated them well in reaching the correct field impression."

"Your radio call-in was well organized. You clearly stated the chief complaint, Hx and PE findings as well as our interventions and ETA. Good job!"

Reinforce what was done well

"You included important information about the scene size up in the comments section of the PCR that the hospital needs to know to get a complete picture of this call. Just what we're looking for!"

"Your suspicion of hypoglycemia was right on in this patient even though he presented with signs & symptoms of a stroke. Good pick up!"

Evaluation and feedback

Well timed, targeted and said corrective feedback can direct growth, motivate student and offer relief from confusion

**PRAISE  
MAKES YOU  
FEEL GOOD  
CRITIQUE  
MAKES YOU  
BETTER**

Why crucial?

If necessary criticism is withheld, preceptor-student relationship remains superficial

Lack depth and resiliency needed to tackle sensitive issues



Giving corrective feedback

Good preceptors share thoughts and feelings directly, respect the person and address behavior rather than the student

Judge the person, and you risk the relationship

Judge the behavior, and you take the bite out of criticism



Must be timely

Well-timed criticism should be delivered shortly after error

Longer you wait, less effective it will be

Be fair; don't drop a bomb and run off

Give student chance to respond



Student's preparation

Assess readiness to receive information  
"Is now a good time to talk?"



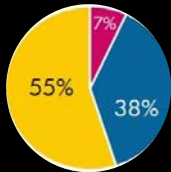
Elements of personal communication

55% body language

38% tone of voice

7% spoken words

Why e-mail messages are often misinterpreted...



Pace learning

Tailor feedback to a particular student performing a particular skill

Too much at once not helpful

"What's the most important point right now?"



If badly timed, student will be too overwhelmed to hear the message even if criticism is valid

Student will keep a safe distance and all future praise will be received with suspicion





### Use STAR-AR approach



Situation or Task  
Action  
Result  
Alternative action  
Result (preferred)

### STAR-AR approach

Change-oriented feedback involves offering corrective, alternative behaviors to replace the problem behavior, or brainstorming solutions with the student

### Focus on continuous improvement

"What would be a better approach next time?"

"What change in technique might be more successful?"

"What could we do better as a team next time?"

### Giving feedback

Be **specific**

Avoid "always", "never," personal-assault words e.g. "lazy", "irresponsible"

Poor: "You never listen to patients."

Better: "I noticed you interrupted the patient 3 times when taking the history. It may help if you listen fully to their answers and then repeat their concerns before moving on to closed-ended questions."

### Use "I" rather than "you" messages

Own feedback you give rather than saying, "People say X about you."

"When you raised your voice, I noticed the patient stepped back. It appeared that they felt threatened and shut down. What communication strategies would have been more effective in this case?"

### Feedback re: errors & omissions

"In the radio report, you mentioned that the patient had crackles but didn't tell the ECRN they were only in the right upper and middle lobes and the capnography waveform had a sharkfin appearance. This left her with the impression that the patient was in pulmonary edema rather than pneumonia."

### Feedback re: errors & omissions

"This patient may not have chest pain, but they are a long standing diabetic and are complaining of severe weakness and shortness of breath. Why is a 12-lead ECG necessary for this person?"

### Feedback re: errors & omissions

"People in pulmonary edema usually need CPAP, but the BP just dropped to 84/56 after the first NTG. What could C-PAP do to this patient?"

### Feedback re: errors & omissions

"I understand that the patient is in pulmonary edema and that NTG is usually indicated, but the ECG shows V-Tach. What is the higher priority right now?"

### Step 5: Teach a general principle

"Selecting a receiving hospital based on travel time can be challenging. We have already done transport time tests from all over town and have found these guidelines to work well."

"If you don't remember a drug dose or typical 12-lead changes with ischemia, use the SOP appendix as a quick reminder."

### Conclusion of teaching encounter

Reclarify roles and expectations to facilitate further learning

"I'll restock the ambulance while you finish the CARS report. Come and get me when you are done so I can go over it with you before it is checked for validation and uploaded."

### Intervene early

If student fails to meet objectives, don't allow them to fall hopelessly behind

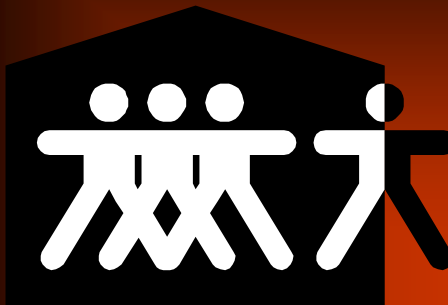
Contact PEMSC & hospital EMSC/educator; design individualized education program to overcome gaps

You don't own responsibility for their learning... you are their coach





How should you deal with outliers?



### Student 1

26 y/o f is riding with your agency  
She tries to fit in but is sometimes better able to dish it out than take it.  
Her skills are marginal but safe, but she dissolves into tears when she is teased and the crew members are not happy with her being there.  
Action needed?

### Student 2

27 y/o employee is preparing for medical school. He is very intelligent and challenges everything he believes is incorrect or inconsistent with what he read or was taught in class.  
He sometimes teeters on crossing the line between disrespect and asking a heart question.  
What's the best approach to this student?

### Student 3

24 y/o employee has been an EMT-B with a private agency for 4 years  
He is very quiet and usually stands in the background at every call. He must be told to do any ALS assessments or interventions, but performs competently when instructed.  
How should you coach this student?

### Student 4

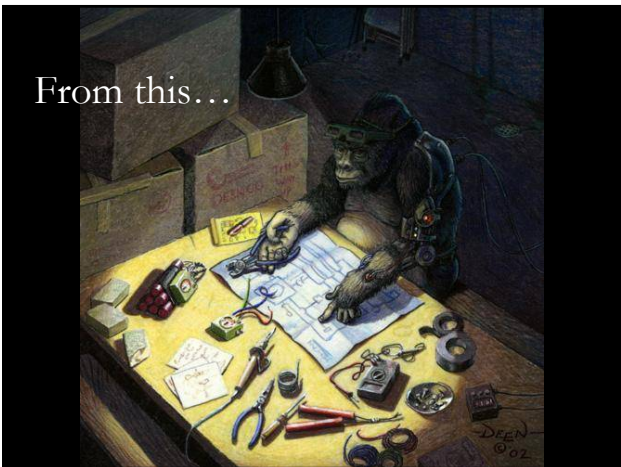
32 y/o employee who's ticket finally came up and he had to come to PM class. Not happy about being here. He demonstrates a great deal of confidence and a take charge attitude, but instincts are not always correct and some skill techniques are marginal.  
He becomes very defensive when you attempt to correct his errors  
How should you coach this student?

### Student 5

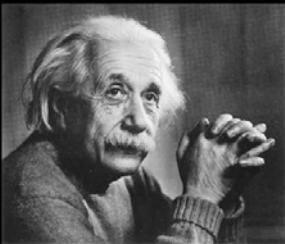
25 y/o male is riding with your agency  
He has been late 3 times and has called off twice. Talks a good game, but seems to have significant knowledge gaps. Has a part time job at an area hospital. Does not follow through on paperwork as directed. When confronted about his behavior he claims frequent illness.  
It's 4 weeks into the internship and he is not progressing in the affective objectives.  
What is the best approach with this student?

Student 6

28 y/o rider is strongly motivated to become a PM  
He is first out to the ambulance, volunteers to assist with cooking, housework, and is very respectful of agency members  
He has minimal recall of class concepts and gets ECG rhythms totally confused. When asked what fentanyl is, he stares at you blankly.  
What is the best approach with this student?



To this...in 384+ hours



“The world will not be destroyed by those who do evil, but by those who watch them without doing anything.” – Albert Einstein

Do not pass a student until they have earned the title, paramedic!

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[www.nwcemss.org](http://www.nwcemss.org)

Questions?  
Comments?  
Concerns?  
Suggestions?  
Send me a  
note(e-mail)



“Courage and perseverance have a magical talisman, before which difficulties disappear and obstacles vanish into air.”

John Adams

