



# An Educational Perspective

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Preceptor Workshop  
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Version 2.0

# What is a preceptor?

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- A good preceptor is ...
    - An educator
    - A mentor
    - An evaluator
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# What is an educator?

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- A facilitator of information
  - A teacher
  - NOT just a trainer
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# What is a mentor?

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- A role model
  - An “approachable” person
  - An advisor
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# What is an evaluator?

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- A provider of feedback
  - A marker of objective criteria
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# Your educational philosophy will affect your precepting.

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- What is your philosophy?
    - Progressivism
    - Radicalism
    - Liberalism
    - Humanism
    - Behaviourism
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# Progressivism

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- The idea that the preceptor's role is to ensure the advancement of the profession.
  - See themselves as gatekeepers who should limit entrance into the profession.
  - Believe EMS is for the best of the best.
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# Progressivism: Up-side

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- These preceptors are often technically excellent at their job (i.e. perfectionist).
  - They tend to practice what they preach.
  - The goal of professional advancement cannot be argued.
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# Progressivism: Down-side

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- As gatekeepers they may not have the evaluation skills necessary to make a determination that can end a career.
  - The evaluation may focus on personal characteristics; it may not be sufficiently competency based.
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# Radicalism

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- The idea that preceptors can make an impact on the organization of EMS.
  - Effort is spent on recruitment of ideals in order to promote change.
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# Radicalism: Up-side

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- Students are made aware of the “real world.”
    - EMS social structure
      - Compare the benefits: cost of private, municipal, fire based services.
    - Given pointers on how to obtain a job.
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# Radicalism: Down-side

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- Students may become embroiled in local politics.
  - Students may be “indoctrinated” into a way of thought which is “radical.”
  - i.e. preceptors may not appreciate providing a paramedic practicum to a student whose goal is to be a police officer or firefighter.
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# Liberalism

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- The idea that paramedics must be educated and not simply trained.
  - To a lesser extent...the belief in life experience as a prerequisite to proficiency in EMS.
  - Would promote education in things like instructorship, research, management etc.
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# Liberalism: Up-side

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- More amiable to providing a complete educational experience.
  - Tend to dismiss the idea of “black and white.”
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# Liberalism: Down-side

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- May be unduly hard on young students with little life experience.
  - May not sufficiently adhere to the evaluation of competency.
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# Humanism

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- The individual student is the basis of all needs, ideals and goals.
  - There are no teachers, only facilitators of education.
  - Mastery Learning-the idea that anyone can learn almost anything given sufficient time and resources.
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# Humanism: Up-side

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- The preceptor is a mentor to the student.
  - Reduces student anxiety.
  - Provides a role model who is...
    - Caring
    - Enthusiastic
    - Approachable
    - Cheerful
    - Understanding
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# Humanism: Down-side

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- The preceptor may not clarify appropriate priorities regarding student expectations.
    - i.e. the student who does his practicum on the four days he has off from his place of employment.
  - There may not be enough emphasis on the attainment of competency.
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# Behaviourism

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- The idea that education only occurs if there is a change in behaviour.
  - Relies on competencies as a measurement.
  - Evaluation is “more” objective.
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# Behaviourism: Up-side

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- Competency based check lists can be used to determine adequate clinical performance.
  - The standard for medical education and evaluation.
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# Behaviourism: Down-side

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- The human component is often left out.
    - Increased student anxiety.
  - Difficult to measure the “worth” of student patient interaction...may be de-emphasized by preceptor.
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# Identify your philosophy

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- But...incorporate the ideal aspects of the other philosophies.
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# A Problem of Conflict

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- Conflicts arise when a student's philosophy conflicts with his preceptor.
  - A preceptor must accept that a student can have different ideals and goals.
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# The Governing Philosophy...

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- The governing philosophy in medicine is behaviourism.
    - Mandated by the Alberta College of Paramedics
    - Required by the Canadian Medical Association
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# A good preceptor is a teacher!

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- Teaching involves a series of “transactions.”
  - At least seven variables affect the quality of the transaction.
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# The Seven Variables in any Educational Transaction

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- Learner
  - Instructor
  - Content
  - Context
  - Methodology
  - Assessment
  - Outcomes
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# Learner

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- Consider...
    - The learner's objectives for taking course.
    - The learner's relevant experience.
    - The learner's prior education.
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# Preceptor “Learner” Tips

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- Consider the student perspective.
  - Attempt to draw connections between aspects of EMS and prior educational and work experience in the student.
    - A former waitress should be able to easily remember a patient history.
    - The diagnostic skill of a mechanic can be applied to medical diagnostics.
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# Instructor

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- Qualifications
  - Objectives for teaching the course
  - Educational philosophy
  - Enthusiasm
  - Voice
  - Culture
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# Preceptor “Instructor” Tips

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- Update your teaching qualifications
  - Be open to novel teaching techniques
  - Think about your precepting objectives
  - Clarify your own educational philosophy
  - Strive to be enthusiastic
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# Content

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- What is the content to be taught?
  - How will this impact the essential teacher-student interaction?
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# Content-a student view

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- The student will have opinions on what the content should be.
  - Hear them! But remember, in the end, the student does not decide content.
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# Preceptor “Content” Tips

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- Be able to say “I do not know” in response to a student question.
  - You should be able to act as a student resource with regard to content.
  - Encourage the student to ask you questions by giving information which will prompt further examination.
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# Content-Retention

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- Students will remember only what they deem to be relevant.
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# Context-Maslow

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- You cannot learn on an empty stomach!
  - The mind can only absorb what the butt can endure.
  - Life has a tendency to “get in the way.”
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# Preceptor “Context” Tips

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- You need to provide a student with a safe place or time (i.e. a place or time where negative criticism does not occur).
  - Attempt to provide a place of study (i.e. a table away from the TV).
  - Clarify at the beginning how much study time is required and how much TV time is allowed.
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# Methodology

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- As a preceptor do you follow an educational model for your teaching?
  - The Kolb model is a good one.
    - It incorporates several educational theories including Bloom, Piaget, Jung & Knowles.
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# The Kolb Model

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- For true learning to occur there must be...
    - concrete experience (hands on)
    - reflection (discussion, journal entry)
    - abstract conceptualization (analysis, interpretation)
    - active experimentation (find your own way)
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# Preceptor “Methodology” Tips

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- Promptly mark PCR's to reinforce the concrete experience obtained on calls
  - Encourage call reflection (i.e. refer to past calls; have the student keep a journal)
  - Provide scenarios to enhance conceptualization
  - Allow the student to find his own way
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# Assessment

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## ■ Formative

- Allows opportunity for student input and improvement
- Suggests areas for improvement

## ■ Summative

- Students will have minimal “say”
  - Can end a career choice
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# Assessment-Feedback Methods

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- Visual
    - Hand signals (a thumbs up)
  - Physical
    - Pat on the back, hand shaking
  - Verbal
    - Speaking praise
  - Written
    - Give written feedback on written assignments!
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# Preceptor “Assessment” Tips

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- Make assessment non-threatening
  - Encourage a dialogue
  - Evaluate in private...NOT in the ER
  - Avoid summative evaluation
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# Outcomes

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- Is there an overriding goal in performing the transaction (i.e. provincial certification of competency)?
  - What are the anticipated and unanticipated outcomes?
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# Preceptor “Outcomes” Tips

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- Remember your role is to determine competence
  - A successful final outcome may require a repeat practicum
  - “Everyone deserves the chance to fail”
  - Don’t teach to the exam
  - But don’t forget the exam...
  - Remember why the students are taking the program!
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# The Critique Sandwich

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- Order critique as Positive-Negative-Positive feedback
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# Rules for Successful Feedback

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- Timing is everything.
  - Choose a safe place...allow your student a safe place.
  - Avoid generalities...Be specific.
  - Focus on the effect of the behaviour.
  - Never give advice. Give an opinion and information.
  - Make certain they understand.
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# Top Gun Training

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- Give some early success to build confidence.
  - Do not put them in a dog fight you know they will lose on the first day.
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# Try periodic “One Minute Evaluations”

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- What did you learn?
  - What are you fuzzy about?
  - What do you want next?
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# Stuff about Learning

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- It is theoretical, practical, and philosophical.
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# Learning Theory-Why?

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- We need to know something about this because it has implications for precepting.
  - And...it has implications for our own learning.
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# Learning Theory-Who?

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## ■ Adult Learners

- are motivated & self-directed.
  - seek information that will impact their daily lives.
  - are driven by a desire to better themselves.
  - want to immediately apply their new knowledge.
  - always bring enriching experiences to the classroom.
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# Learning Theory-How?

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- All learners have different processing styles, strengths, weaknesses, and preferences.
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# Learning Theory-What?

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- Cognitive Patterning
    - Visual
      - Slides, drawings...takes lots of notes
    - Auditory
      - Listens intently...uses audio tapes
    - Kinesthetic
      - Learns by doing, touching
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# It has been said that students retain...

- 10% of what they read.
- 20% of what they hear.
- 30% of what they see.
- 40% of what they see and do.
- 70% of what they say.
- 90% of what they say and do.

# Learning Practice-Ask your students

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- ...to close their eyes and think about the beach...then have them describe their thoughts.
  - If they talk about the sand tickling their toes they may be primarily kinesthetic.
  - If they describe the sunset...visual
  - If they describe the sounds...auditory
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# Learning Theory-What?

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- Right vs. Left Brain Dominance
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# Left Brain Learners

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- Analytical
- Sequential
- Linear
- Structured
- Goal-Oriented

Love those algorithms!

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# Right Brain Learners

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- Intuitive
- Playful
- Spatial
- Non-verbal

May do better if you define the end product and let them work.

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# Learning Theory-Practice

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- Make the left and right brain work together.
    - Left learns the steps for a skill and the signs and symptoms of a disease.
    - Right tells you when to do a skill by grasping the big picture.
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# How do I know the student is competent?

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- Must evaluate three domains of learning.
    - Affective
    - Psychomotor
    - Cognitive
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# Affective Domain

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- Acquisition of Values
    - Attitudes
    - Interests
    - Judgments
    - Decision-making
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# Levels of Affective Learning

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- Five steps...
    - Receiving (listening)
    - Responding (willingness to participate)
    - Valuing (ranking of worth)
    - Organizing (resolves conflict between values)
    - Characterizing (internalizes behaviour)
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# Psychomotor Domain

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- The mechanics of doing a skill
  - The “how” of doing a skill
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# Levels of Psychomotor Learning

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- Reflex movement (reflexes)
  - Fundamental movement (coordination)
  - Perceptual abilities (discriminates senses)
  - Physical abilities (endurance of fatigue)
  - Skilled movements (complex movements)
  - Fluidity of communication (can teach)
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# Student psychomotor skill

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- Graduate students should be at the top two levels, exhibiting skilled movements and fluidity of communication.
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# Cognitive Domain

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- Bloom's taxonomy
    - Knowledge (memorization)
    - Comprehension (formulate ideas)
    - Application (apply knowledge)
    - Analysis (dissect or reduce the knowledge)
    - Synthesis (combine knowledge groups)
    - Evaluation (make determination of worth)
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# How to precept affectively!

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- Role model
  - Group discussion
  - Role play
  - Situational play
  - Case studies
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# Measurement of Affective Behavior

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- Direct observation by preceptor...YOU!
    - Document...yes/no
    - Legally defensible
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# Measurement of Psychomotor Skills

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- Follow the skill checklists
  - Make the student perform the skill “PERFECTLY” the first time
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# Precepting the Cognitive Domain

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- Consider all aspects of Bloom's taxonomy.
  - Written and oral tests can examine all levels.
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# Important Definitions

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- Task
  - Skill
  - Competency
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# A Task is...

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- “a piece of work”
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# A skill is...

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- “a human doing a piece of work”
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# What makes up a competency?

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- It refers to a skill which is composed of elements from the affective, psychomotor and cognitive domains
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# A competency is...

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- “a human doing a piece of work to an established standard”
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# Who establishes the standard?

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- A professional organization
  - A government
  - It is derived from “common standards” of established practice
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# What part of a skill do you teach first?

- Traditionally it has been the cognitive domain
- Traditionally the affective has been left out
- No reason why you cannot teach the psychomotor domain first

# When have they learned it?

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- Typically a skill will be performed competently and incompetently for several times until a point where the student “gets it”
  - After the “Eureka” point the student will have consistent competent performance
  - For intubation 10-12 times are required
  - For IV starts about 25 times are required
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# Teaching Psychomotor domain first may...

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- Establish relevancy for the student.
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# Understanding the Competency Journey.....

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- Leads from awareness to understanding to competence and ends (for some) with expertise
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# From Novice to Expert

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- Patricia Benner
    1. Novice
    2. Advanced Beginner
    3. Competent
    4. Proficient
    5. Expert
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# A confident novice will say...

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- “It seems clear to me”
  - “I know this”
  - “I can do this”
  - “I will meet the standards”
  - “I’ll show them”
  - “I’m the best”
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# An Expert will say...

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- “I’m not sure...”
  - “I wonder...”
  - “I will try...”
  - “It sounds possible...but...”
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# Novices

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- Need recipes for action...even though the recipes will fail them in real life
  - Require “exactness” along with “black and white” examples from “experts” (spoon feeding)
  - Learn via reductionism
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# Advanced Beginners

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- Require algorithms to learn
  - Tend toward over-confidence
  - Are beginning to grasp concepts but still cannot adequately perform on their own
  - Cannot correlate case study analysis with reality due to lack of experience
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# Competent

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- Can perform all required skills to an acceptable standard (i.e. new graduates)
  - Have minimal experience upon which to base decisions
  - Rely largely on algorithms (crutch)
  - Benefit from case study analysis which allows them to fill in for their lack of experience
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# Proficient

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- Tacit knowledge demonstrated
    - “Common Sense”
  - Algorithms no longer the basis of decision making.
  - Rely on illness scripts and paradigm cases for learning.
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# Expert

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- 15 + years of experience??? It's not really about time!
  - The realization that you have...after all your travels...arrived back at your starting point...and now know it...for the first time
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# PAC Definition of Competence

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We must subscribe to the following guidelines in assessing competence in Lakeland EMS students:

- Competence involves the demonstration of skills, knowledge and abilities in accordance with the following principles:
  - consistency (the ability to repeat practice techniques and outcomes)
  - independence (the ability to practice without assistance from others)
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# Def'n of Competence, Cont'd.

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- timelines (the ability to practice in a time frame that enhances patient safety)
  - accuracy (the ability to practice utilizing correct techniques and to achieve the intended outcomes)
  - appropriateness (the ability to practice in accordance with clinical standards and protocols outlined within the practice jurisdiction)
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# Teach Over and Over

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- Tell them what you're going to tell them
  - Tell them
  - Tell them what you told them
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# Use War Stories Appropriately

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- First ask yourself, “Why should I tell this story?”
    - It should illustrate an educational objective
    - Or it should increase the desire to learn
    - Avoid self-glorifying stories
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# Trouble Shooting Precepting Problems

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- Identify the problem
  - Take decisive action
  - Call the school: 1-800-590-9984
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# Preceptor Problem: The Know-It-All student

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- Does he really know it all?
  - If yes...take him aside and work on attitude
  - If no...give him enough rope to hang himself then save him at the last moment
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# Preceptor Problem: The Distracted Non-Learner

- This is the fellow watching too much TV
- Set the rules...quietly but clearly
  - Specify study time
  - Specify TV time
- Provide options which make the student decide on behaviours which you can live with

# Preceptor Problem: “What-If-fers”

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- You can “what if” yourself to death
  - It is characteristic of a novice that a recipe should be given for every conceivable aspect of a situation
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# Preceptor Problem: The Knowledge Challenge

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- Don't be scared to say you don't know
  - Focus student on the learning of new material
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# Move beyond memorizing to understanding

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- Link material together when you can
  - Don't jump the gun with case studies
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# Points To Ponder

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- Take learning seriously
  - Watch your language and your jokes
  - Focus on the learner's concerns
  - Know your abilities and your weaknesses
  - Support the learner
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# Build Confidence

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- Display positive preceptor attitude
  - Establish a “safe” area
  - Decrease anxiety
  - Alleviate fears
  - Keep it simple
  - Practice makes perfect???
  - Perfect practice makes perfect
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# Finally...

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- Strive to be proud of ALL of your students!
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# Questions? Contact Us...

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## Lakeland College Fire & Emergency Training Centre

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