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Teaching Procedures – FACE

Teaching Procedures

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February 15, 2024

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Learning Objectives

- Identify obstacles to effective procedural teaching
- Describe the stages of procedural skill development
- Differentiate effective and ineffective teaching methods
- Apply a framework to your procedure teaching

Roadmap

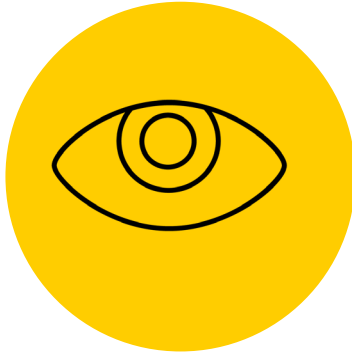
- Self-reflection and discussion
- Discuss importance and challenges to teaching
- Video simulation and debrief
- Review stages of competency
- Explore procedural teaching methods
- Present a framework for procedural teaching
- Make a commitment



Self Assessment

- How are you doing with teaching procedures?
- What needs improvement in your own practice?

Halsted's Classic Model



See One



Do One



Teach One

The Need

- Learners report need for better procedure training
- Teaching of procedures is lacking, neglected
- Needs to occur earlier – medical school
- Competence is difficult to define

Accountability

- Greater concern for patient safety is prompting greater scrutiny of competency in many areas, including procedures
- Competency of the trainer is under scrutiny

Discussion

What challenges to procedural teaching do you encounter in your practice?

Challenges

- Time pressure
- Unwilling patient
- Teacher not completely comfortable
- Learner uncomfortable asking for clarification in the presence of the patient
- Episodic – new staff may not trust skills of learner

Challenges cont.

- Unstable patient
- Assessing learners' ability level
- Assessing learners needs
- Infrequently performed procedures
- Wish to avoid patient pain and discomfort

Ethical Challenges

- Patients may want the most experienced clinician to perform the procedure
- Instructor may feel pressure to mislead the patient about who will be performing the procedure and/or what their level of experience

Procedures Have Risks

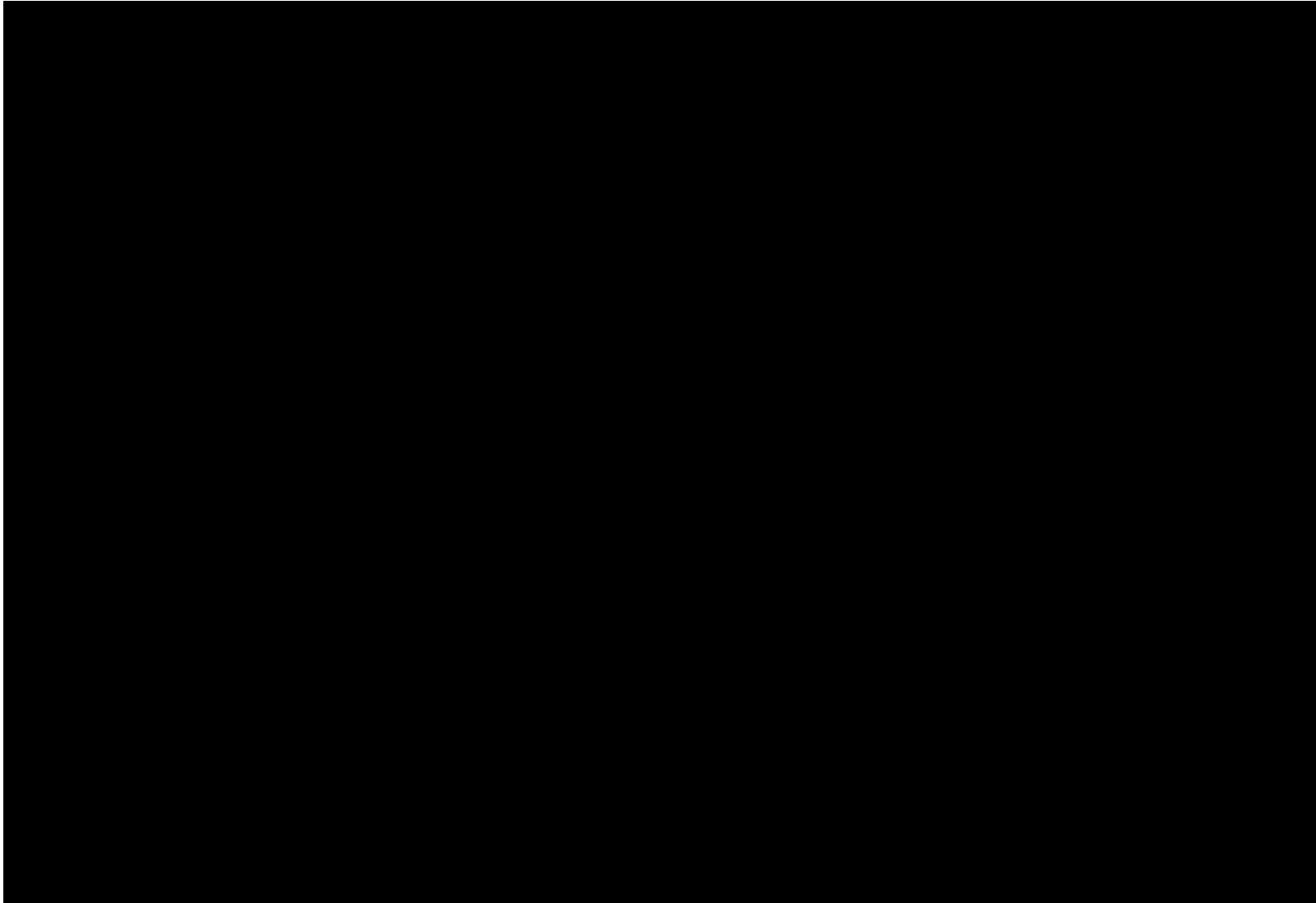
- May involve risk to patient
- May involve risk to learner or teacher
- The way they are performed may affect results

Simulation Video

Discussion following the video:

1. What behaviors were effective?
2. What areas for improvement did you observe?

Simulation Video



“The Bad” Video Debrief

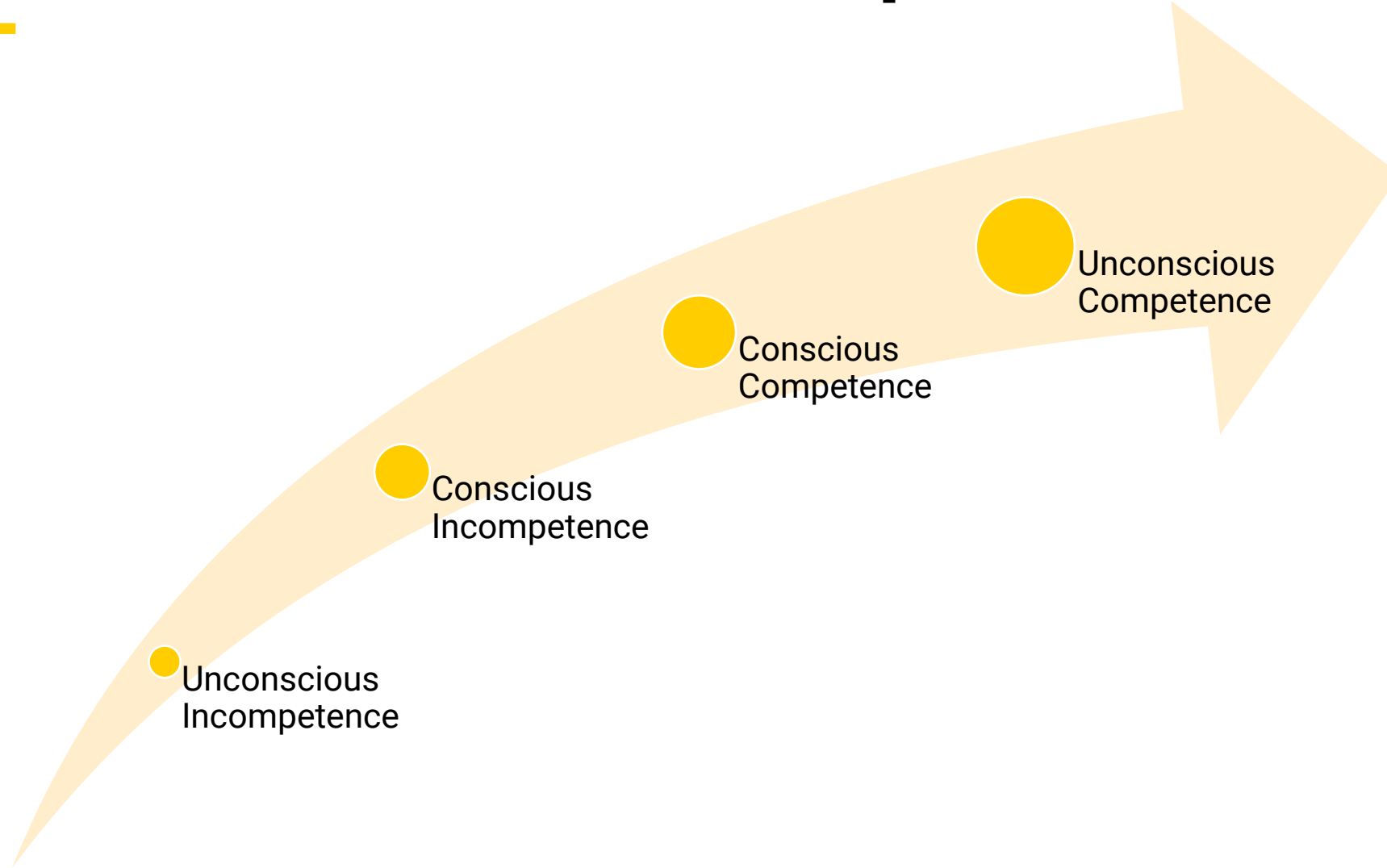
What behaviors were effective?

What areas for improvement did you observe?

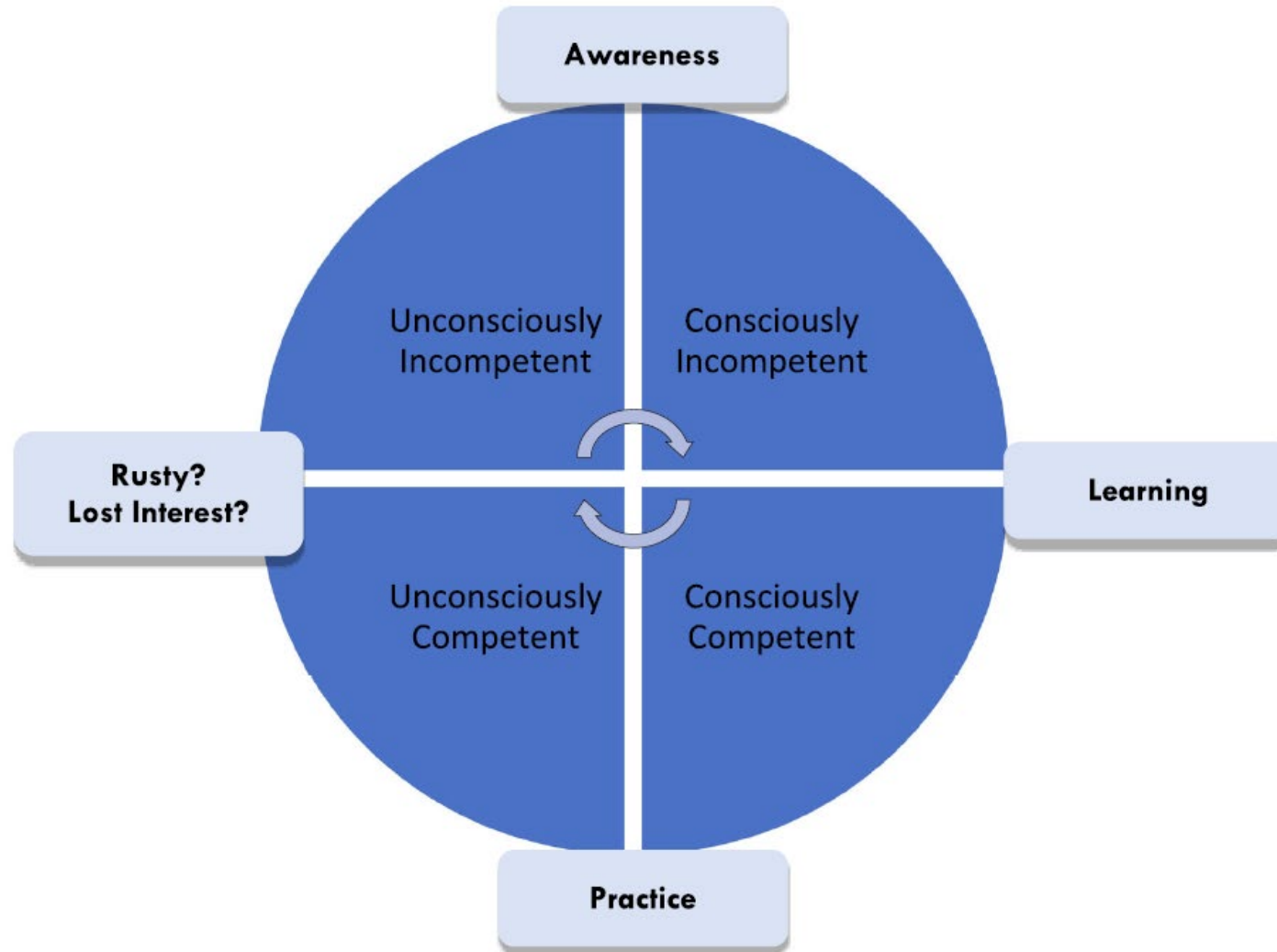
Competency and our Teaching

What behaviors and methods can we use
as educators to move our trainees
towards competency?

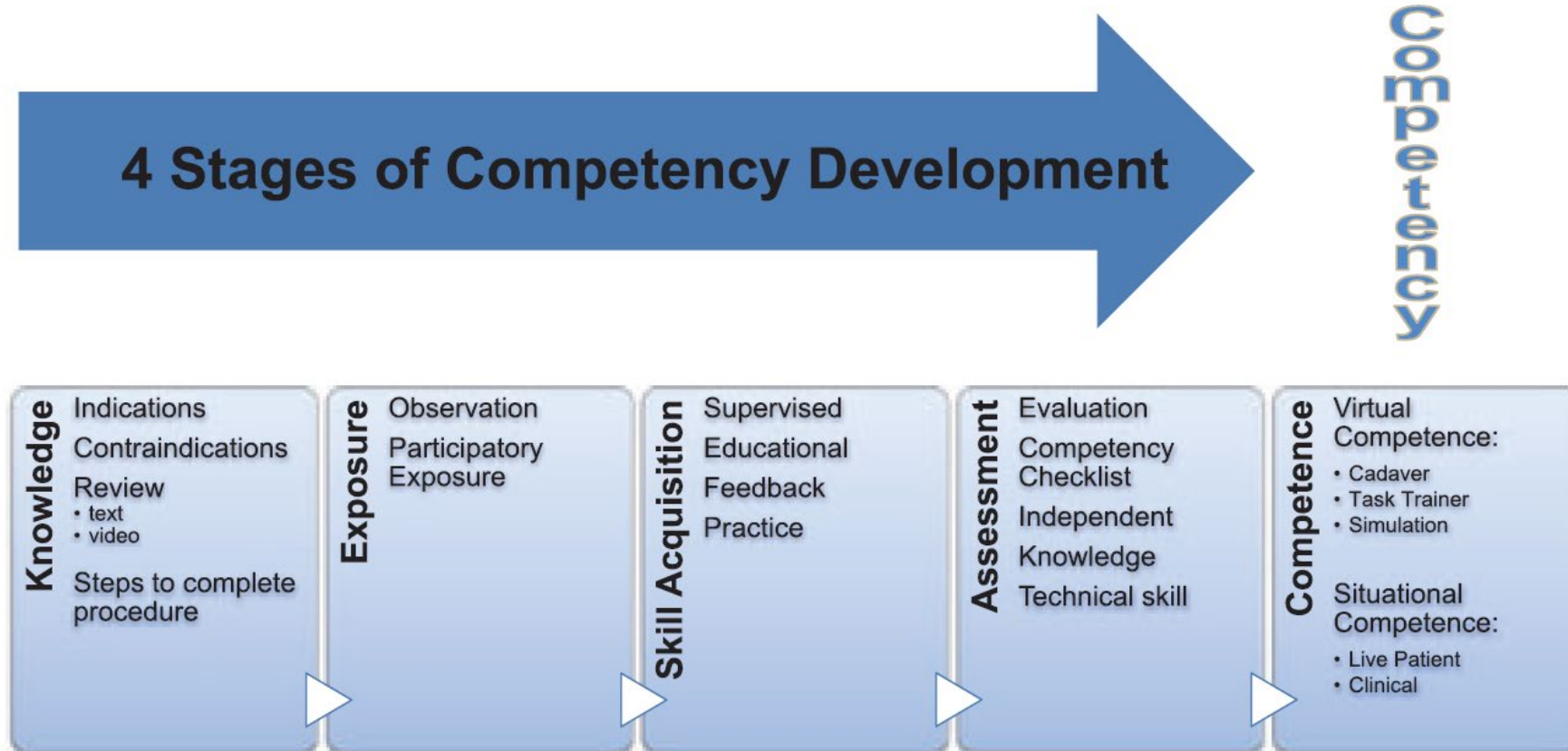
Maslow's Conscious Competence Model



Maslow's Conscious Competence Model



Stages in Developing Competency

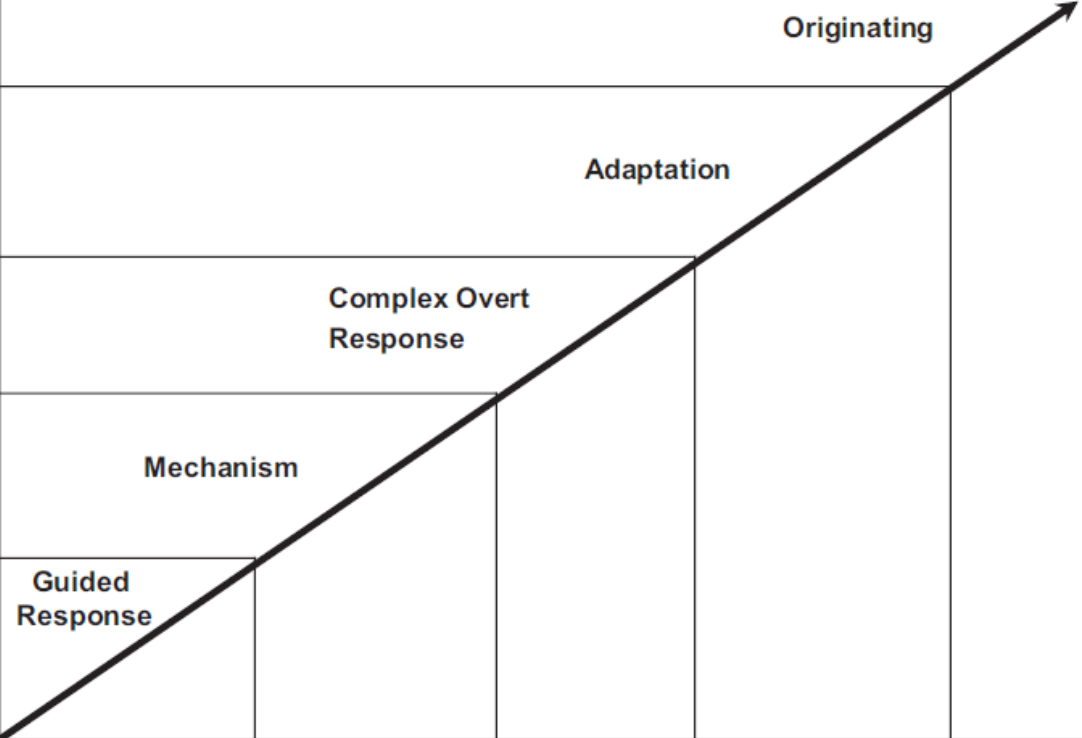


Competency

Procedural Skill Development

- Dreyfus Model
- Simpson's & Harrow's Taxonomy of Psychomotor Domains

Individual able to create new movement patterns to address a unique situation, or specific problems.	Originating				
Skills are well developed and the individual can modify movement patterns to address difficult situations.	Adaptation				
Proficiency is indicated by a quick, accurate, and highly coordinated performance.	Complex Overt Response				
Skills have become habitual and the movements can be performed with some confidence and proficiency.	Mechanism				
Early stage of learning where skills are learned through imitation and/or trial and error.	Guided Response				
Level of psychomotor skill & Dreyfus level	Novice	Advanced Beginner	Competent	Proficient	Expert



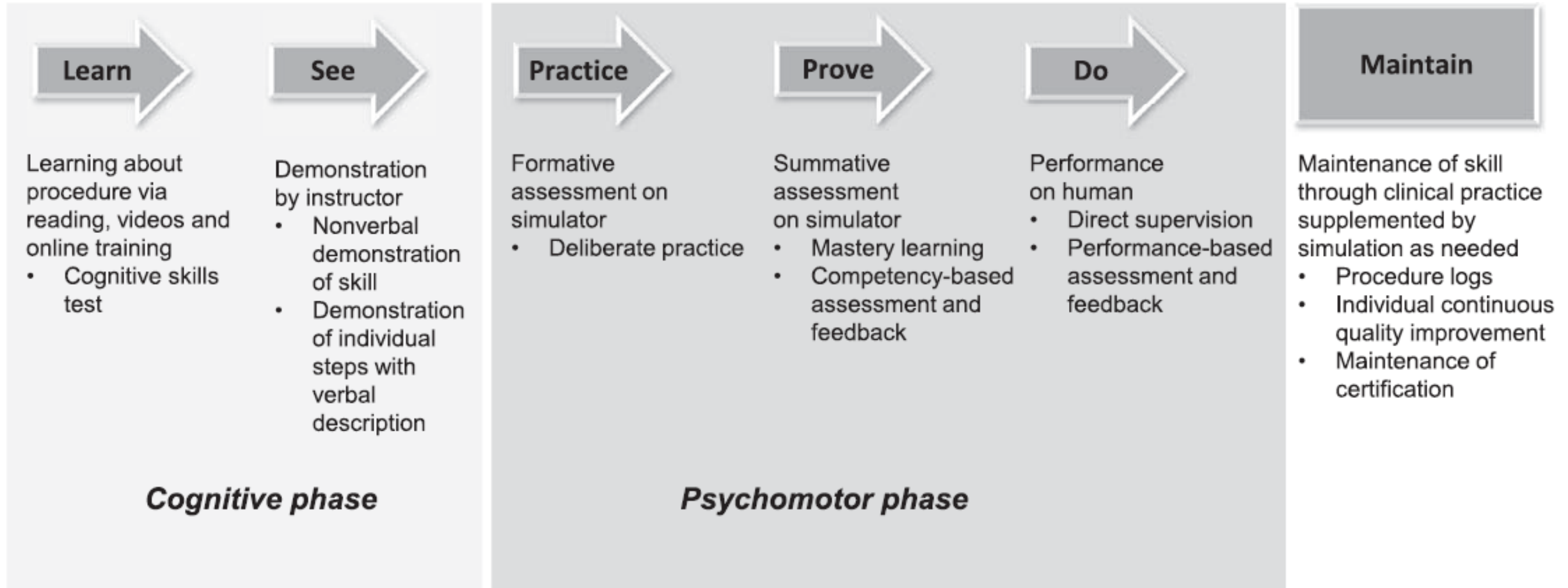
Discussion

What methods do you use in teaching procedures?

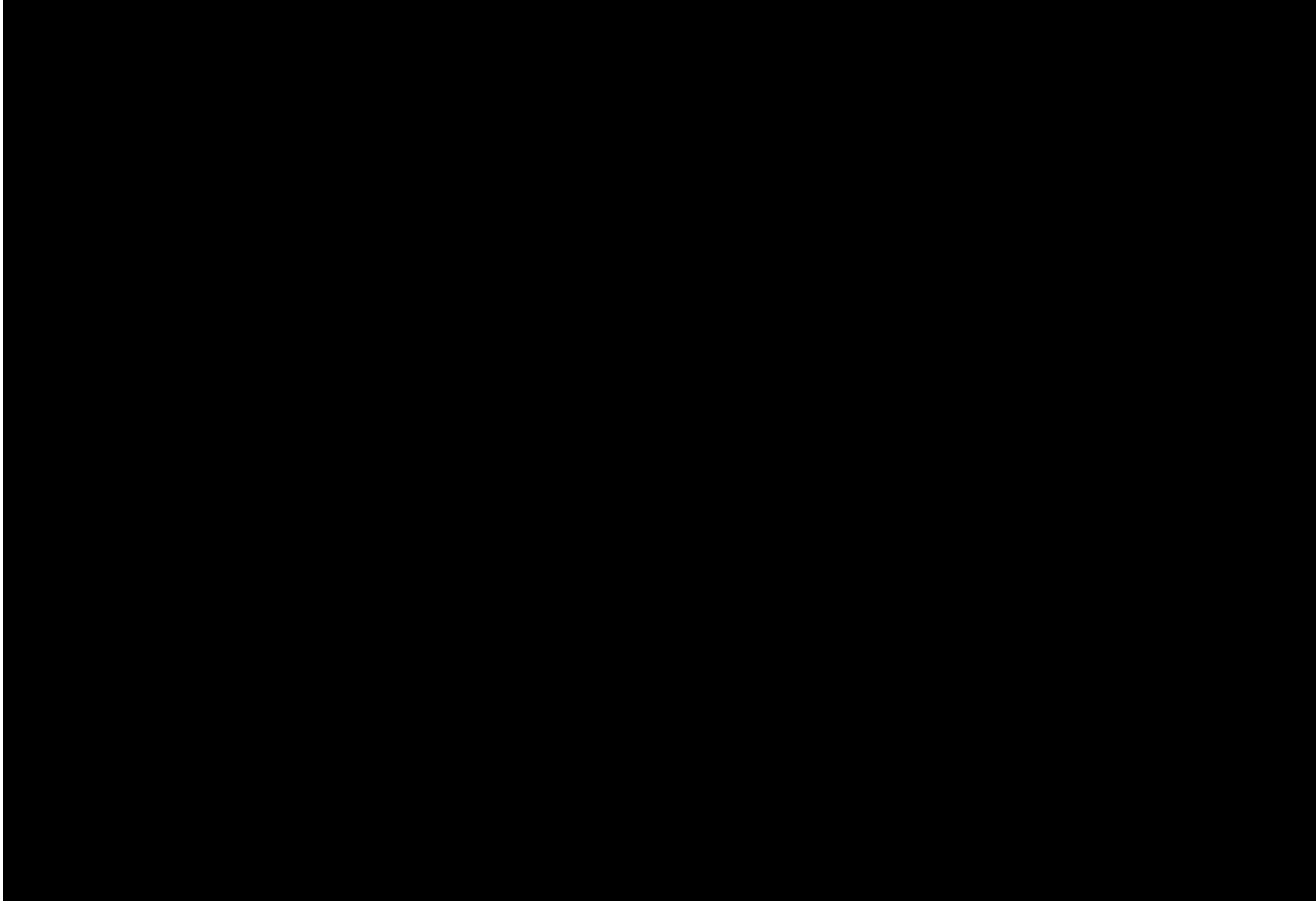
Peyton's 4 Step Approach

- 1. *Demonstration*:** Instructor demonstrates the skill at normal speed and without additional comments.
- 2. *Deconstruction*:** Instructor demonstrates the skill by breaking it down into simple steps, while describing each step.
- 3. *Formulation*:** Instructor demonstrates the skills whilst being 'talked through' the steps by the learner.
- 4. *Performance*:** Student demonstrates the skill, while describing each step.

Sawyer's Pedagogical Framework



Simulation: “The Good”



Five Principles – “The 5 P’s”

Adapted from McLeod, et al

1. Proficiency assessment
2. Preliminary didactic session
3. Perform procedure – learner or teacher
4. Provide feedback
5. Plan for practice and documentation

1) Proficiency Assessment

- Assess the learner's level of competence
- Elicit experience and comfort level
 - Ask, “Have you encountered any problems when doing this procedure?”
- Assess the learners needs
- Assess learner preparation
 - Read about procedure
 - Suggest web site
 - Provide handout with procedure steps

2) Preliminary Didactic Session

- Discuss indications and contraindications
- Review anatomy
- How to obtain informed consent
- Step-by-step explanation of the procedure
 - Ask learner to verbalize the steps
 - Use explicit language
- Encourage visualization
- Discuss complications and management
- Address meeting the learner's needs

3) Perform the Procedure

- Gather supplies
 - Learner gathered
 - Checked by instructor
- Ensure completion of pre-procedural checklist items
 - Informed consent
 - Time Out
- Perform procedure with step-by-step explanation
- Documentation and follow-up

Tips- *Teaching while performing*

- Prepare patient for your narrative
- Allow unobstructed view for learner and others in the room
- Identify critical steps and pitfalls
- Encourage learner to verbalize his/her actions
- Break complex tasks into simpler components

Tips- *Teaching while performing*

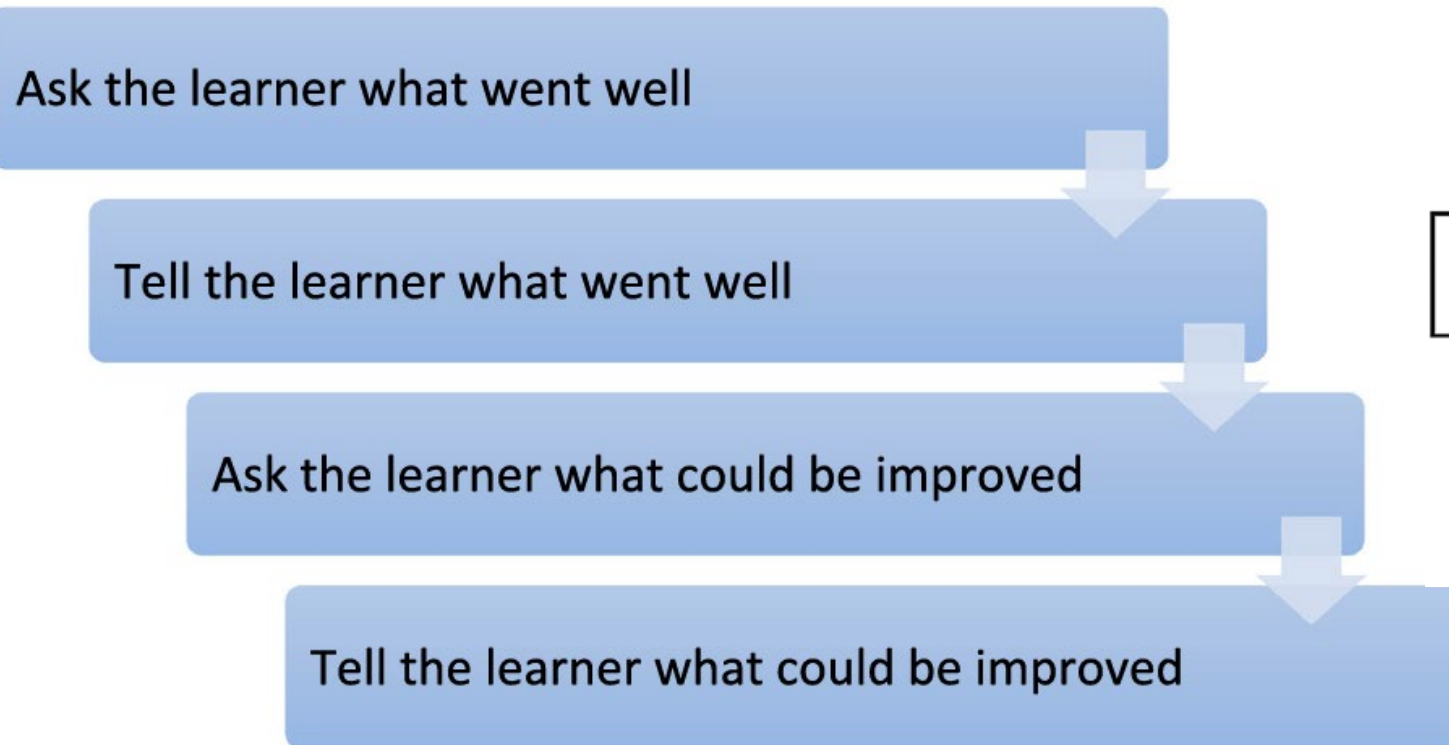
- Patient safety is always your #1 priority
- Allow for graded responsibility
- Be patient
- Be a good assistant
- At the bedside, focus on “how”, not “why”

4) Provide feedback to the learner

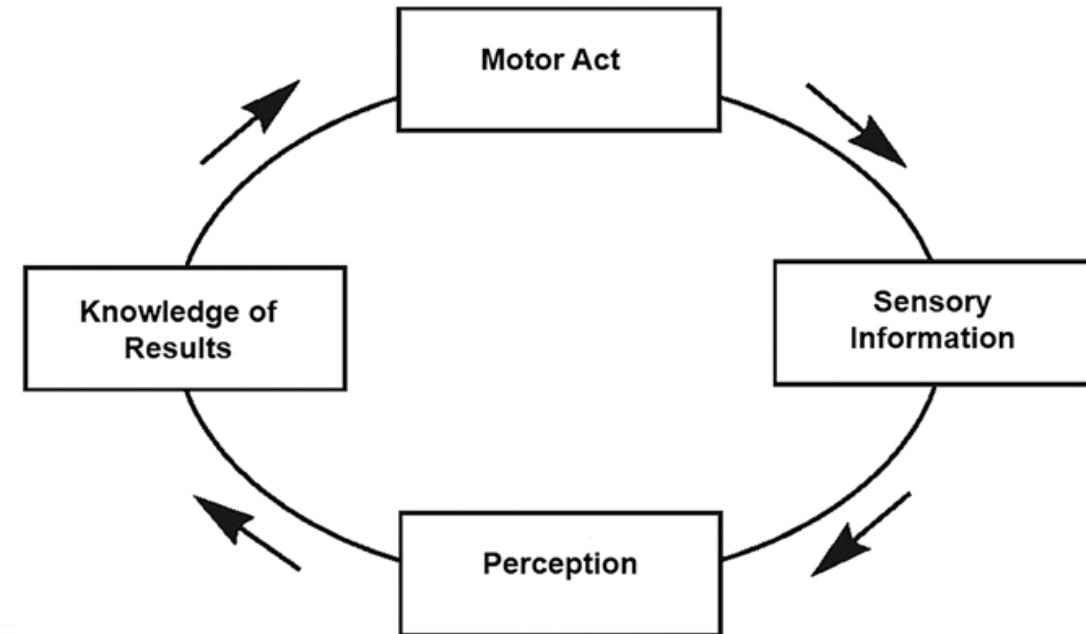
- Specific but limited
- Not personal, but directed at explicit behaviors
- Allow learner self-assessment
- Give a global assessment
 - “You should be supervised again next time”
 - “You can perform this procedure independently in the future”

4) Provide feedback to the learner

Pendelton's Feedback Model



Adams' "closed loop theory" of motor learning



5) Plan for Practice & Documentation

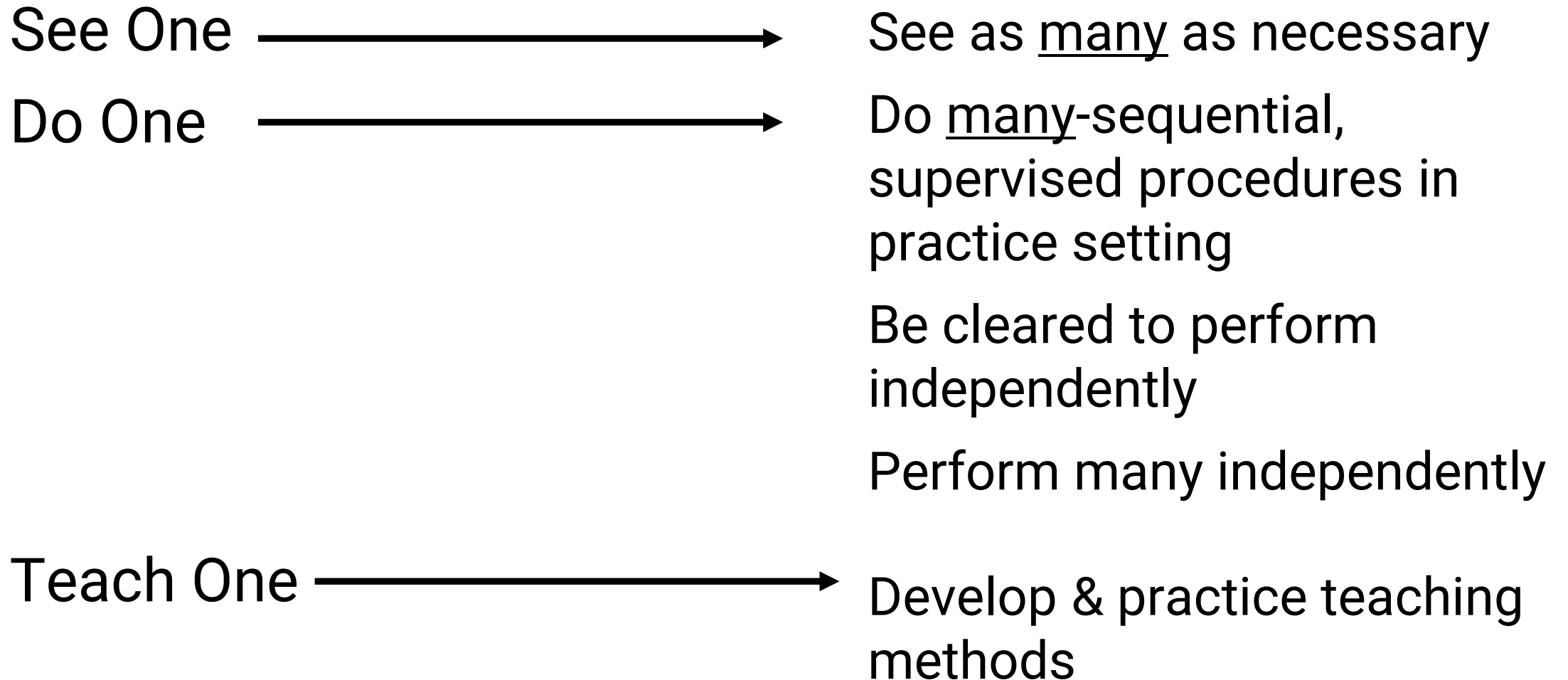
- Learner rehearsal in adverse circumstances
- Identify goals for next time
- Training programs or CCOM may have processes for documentation/logging
- Review and provide feedback on documentation

Five Principles – “The 5 P’s”

Adapted from McLeod, et al

1. Proficiency assessment
2. Preliminary didactic session
3. Perform procedure – learner or teacher
4. Provide feedback
5. Plan for practice and documentation

New Paradigm



Make A Commitment

Identify one technique, tip, or method
you would like to try next time you
teach a procedure

Take Home Points

- Many challenges exist which can impede our ability to deliver effective procedural skills teaching
- Learners progress towards competency at different rates. They will have different needs.
- Pedagogical models of procedure teaching can improve your procedural teaching skills.
- Five Principles (“5 P’s”)– *proficiency, prelim, perform, provide, and plan* – is framework you can use in your procedural teaching



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Questions?

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Thank you

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