

Learning Theory, Developmental Stages, & Educational Outcomes Across the Continuum

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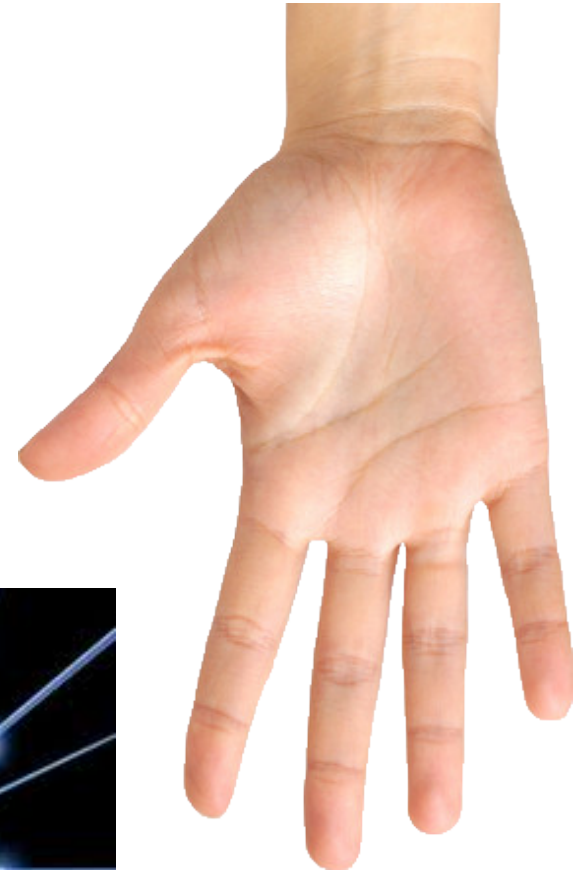
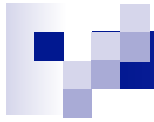
Learning Theory



Bloom's Taxonomy

- Cognitive domain
 - Head / Knowing
- Affective domain
 - Heart / Feeling
- Psychomotor domain
 - Hands / Doing

[Bloom; 1956]





Four Orientations to Learning


- Behaviorism
 - Focuses on observable behavior
- Cognitivism
 - Includes what is occurring within the brain
- Humanism
 - Embraces personal growth and development
- Social and Situational
 - Embraces the importance of context

[Merriam and Caffarella; 1991 and 2001]

Aspect	Behaviorist	Cognitivist	Humanist	Social and Situational
Learning Process	Change in behavior	Internal mental process	A personal act to fulfill potential	Interaction in social contexts
Locus of Learning	External stimuli	Internal cognitive structuring	Affective and cognitive needs	Relationship between people and environment
Purpose of Education	Produce change in behavior	Develop capacity and skills to learn	Become self-actualized; autonomous	Participation in communities of practice
Educator Role	Arranges environment to elicit desired response	Structures content of learning activity	Facilitates development of whole person	Works to establish communities of practice
What is Used in Teaching	Behavioral objectives; desired competencies	Focus on cognitive development; learning & memory as a function of age and biology	Cooperative determination of objectives, content, format, and evaluation	Socialization; social participation; association and conversation
Theme	Skill development and training	Learning how to learn	Self directed learning	Inclusion and participation

[Merriam and Caffarella; 1991 and 2001]





Exercise Number One

(Share/Pair)

- Turn to one of your neighbors and take 3 minutes to discuss the 4 orientations to learning
- Share which one (a) resonates the most and (b) resonates the least with your own internal compass; if possible, explain why



Two Theories of Learning

Pedagogy

- “K-12” Learners
- Dependent learners
- Learner’s experience is not important
- Subject centered
- External motivation

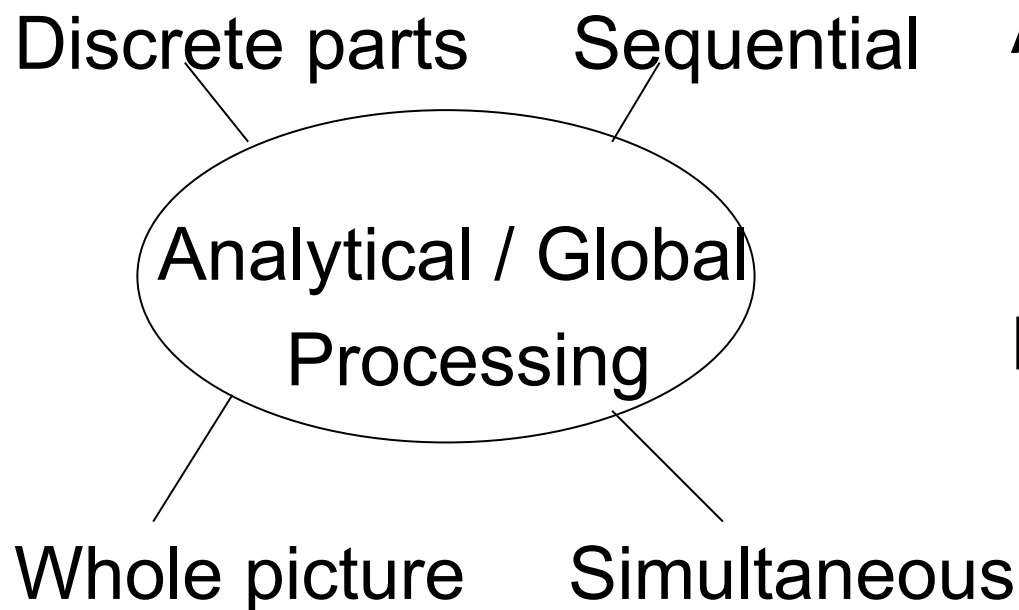
Andragogy

- “Adult” learners
- Self-directed learners
- Learner’s experience is a rich resource
- Task/problem centered
- Internal motivation

[Knowles, 1980]


Structuring of Information

Global Example



Analytical Example

- A. Analytical processing
 - 1. Discrete parts
 - 2. Sequential
- B. Global processing
 - 1. Whole picture
 - 2. Simultaneous



Exercise Number Two

(Low Tech Audience Response)

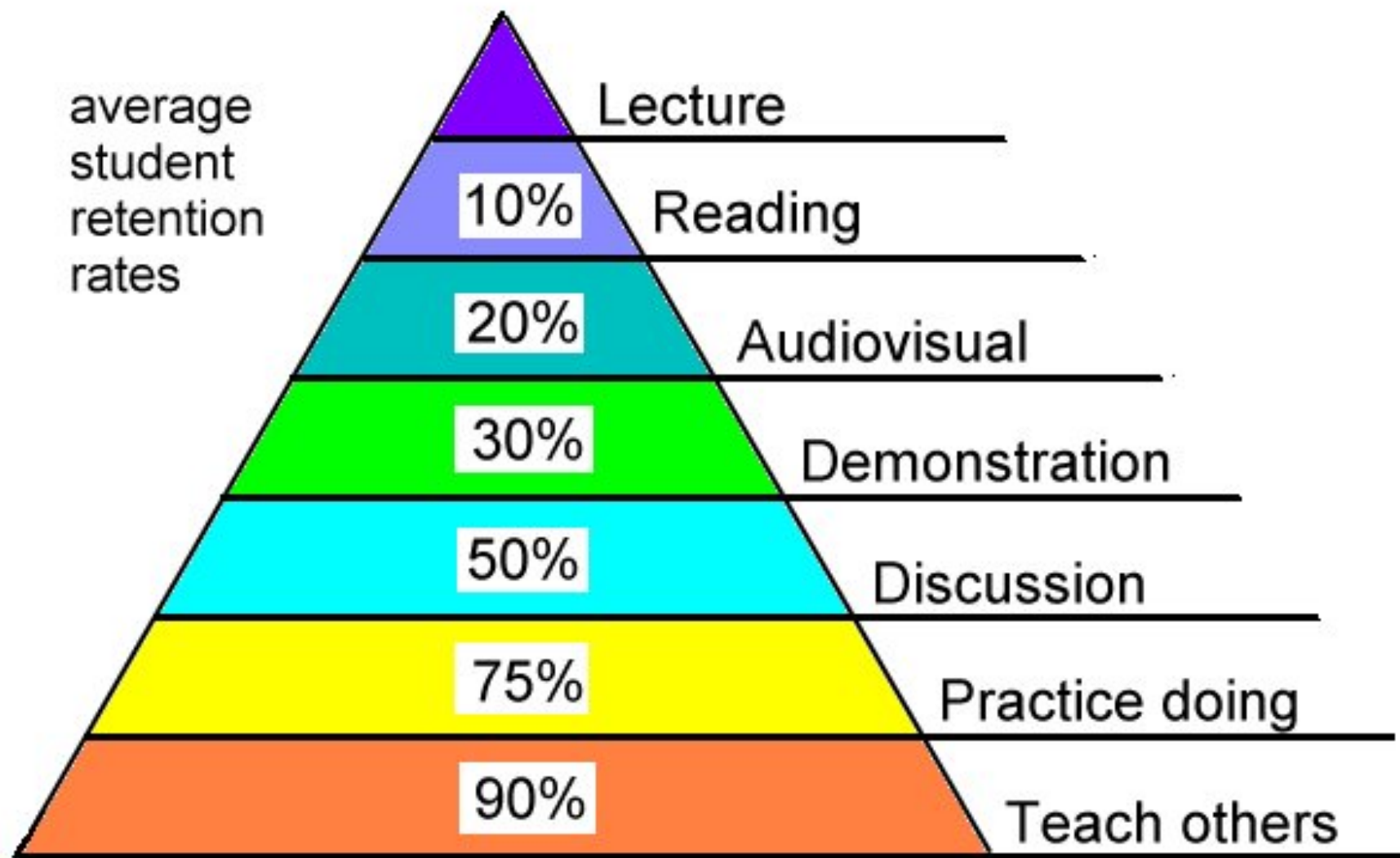
- Which of the previous examples did you find easier to assimilate the information?
 - ☐ A) Global image
 - ☐ B) Analytic outline



*“How is more important
than what”*

- Alan Knox, PhD

Learning Pyramid



Source: National Training Laboratories, Bethel, Maine



A Plea for Active Learning

- Tell me, I will forget
- Ask me, I will remember
- Involve me, I will understand


- Chinese Proverb



Developmental Stages



[Can J Nursing Informatics; 2011; 5(4):967]



Exercise Number Three

(Silent Reflection)

- Which one of the five roles of an educator (i.e., an instructor, coach, facilitator, supervisor, or mentor) do you think is the single most important to emphasize in the new curriculum?
- Why?



Physician Stages of Learning

Physician Learner

Recognizes that there is an issue with performance

Takes ownership and accepts opportunity for improvement

Commits to learning

Tries out what is learned

Incorporates what is learned where appropriate

Creating Learning Experience

Predisposing

Enabling

Reinforcing

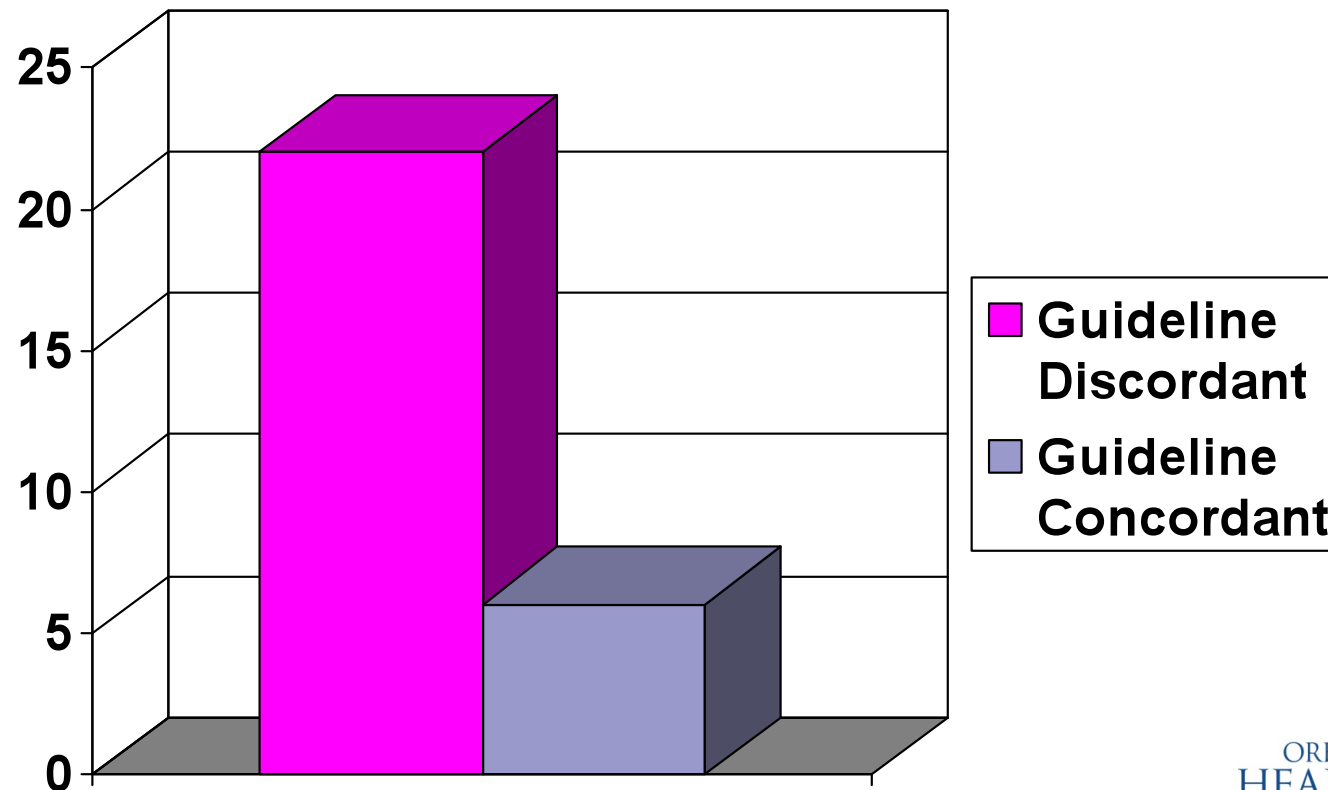
[Courtesy of Don Moore; 2012]



Educational Outcomes Across the Continuum

Following the ATS/IDSA Community Acquired Pneumonia Guidelines

30-day Mortality Rate



[Am J Med 2004; 117:726-31]

The Professional Practice Gap

“What is”

Actual
Patient Care

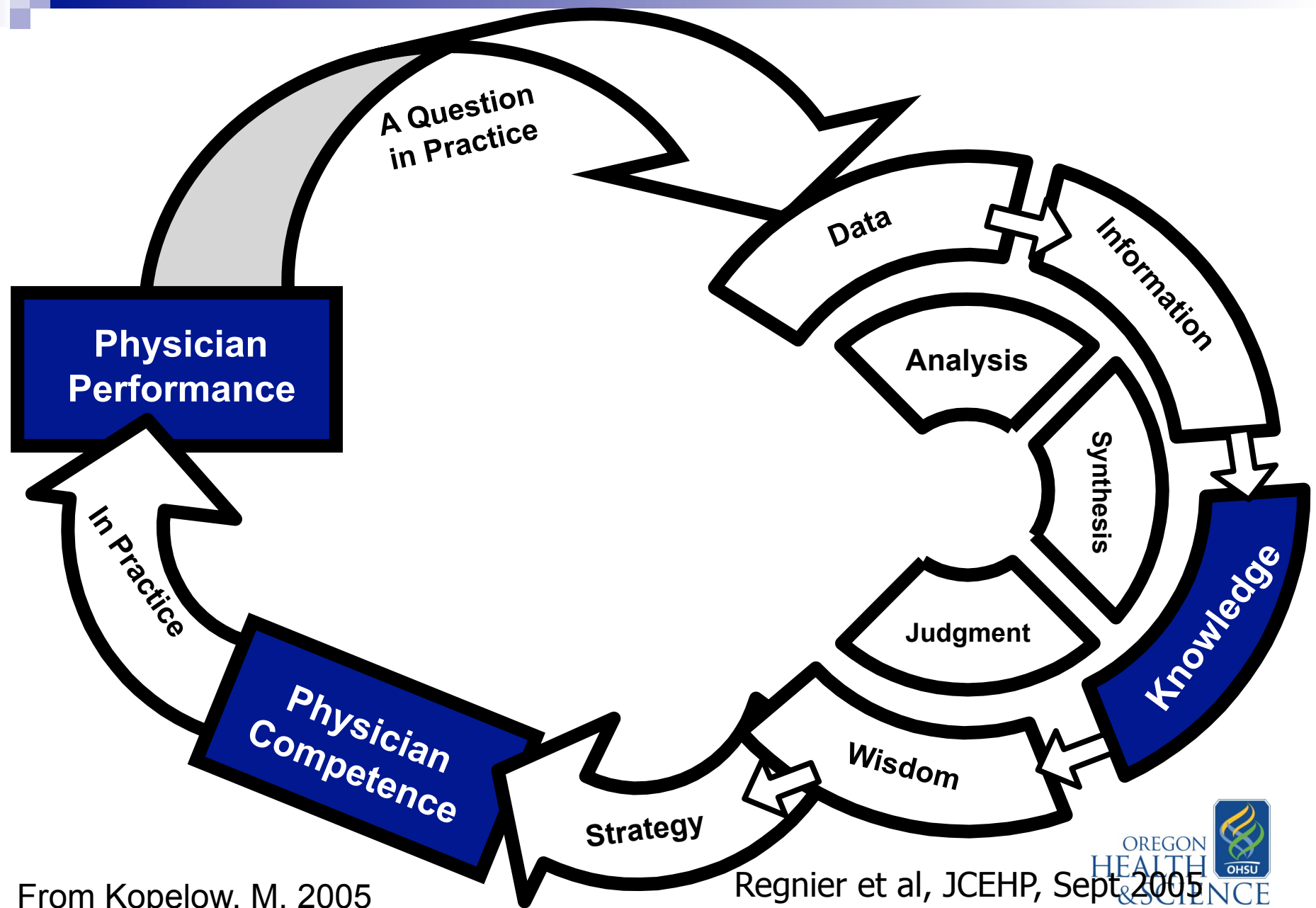
GAP
Knowledge
Skills
Behavior



“What should be”

Optimal Care
As Informed by

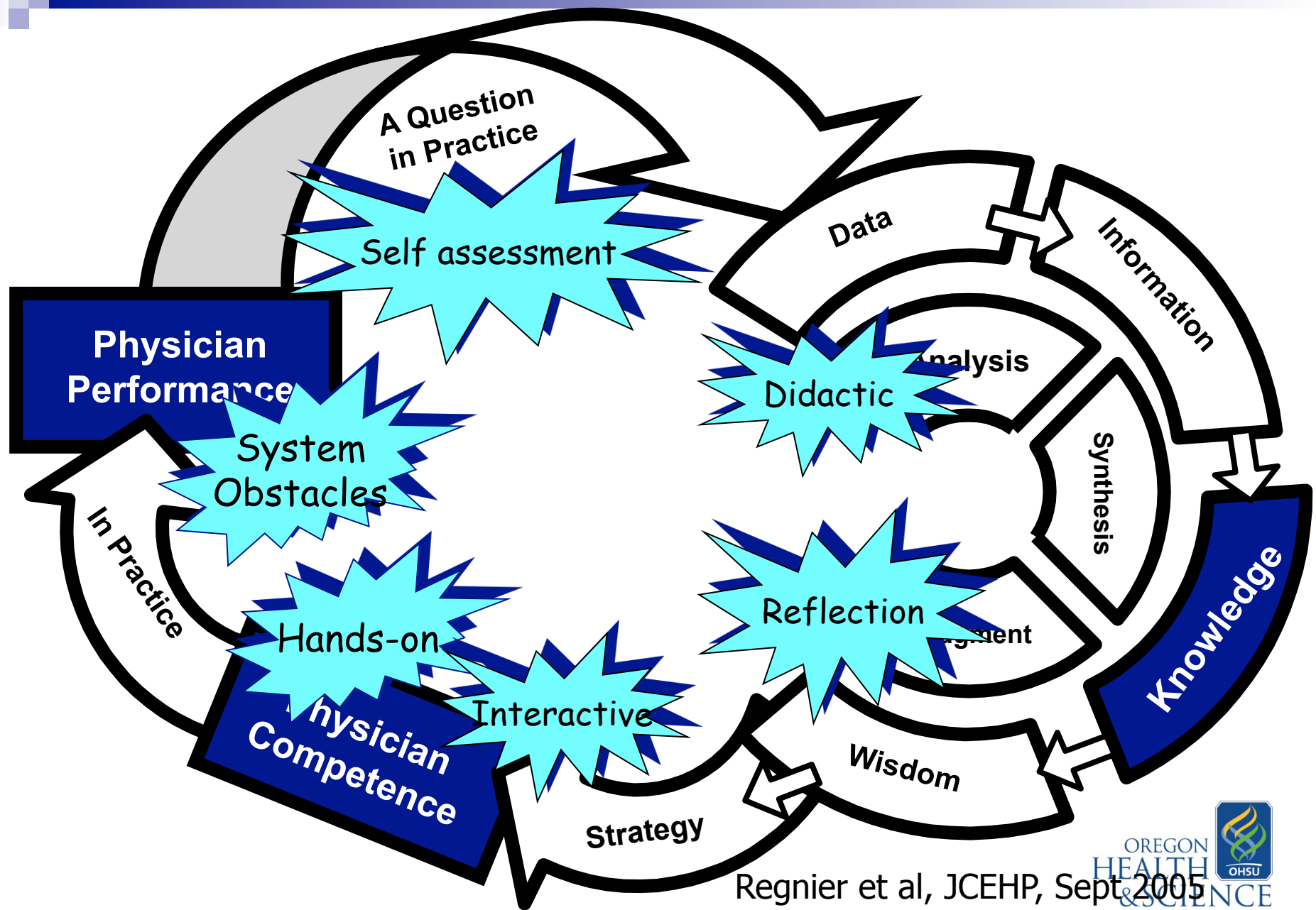
- Evidence-based Medicine
- Guidelines
- Key Opinion Leaders
- Clinical Research



From Kopelow, M. 2005

Regnier et al, JCEHP, Sept 2005
Mazmanian & Davis, JAMA Sept 2002





Regnier et al, JCEHP, Sept 2005
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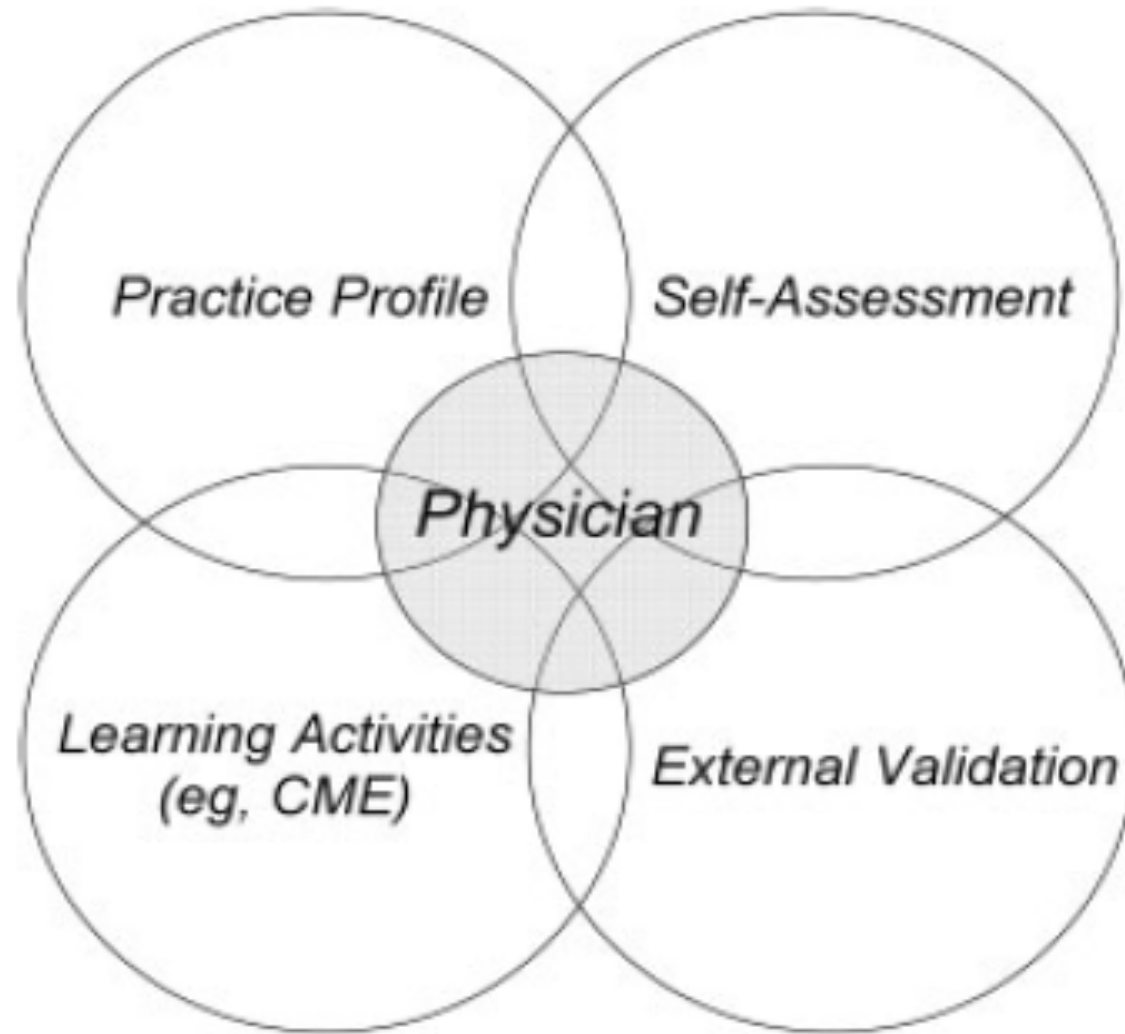
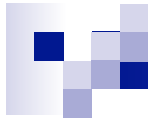
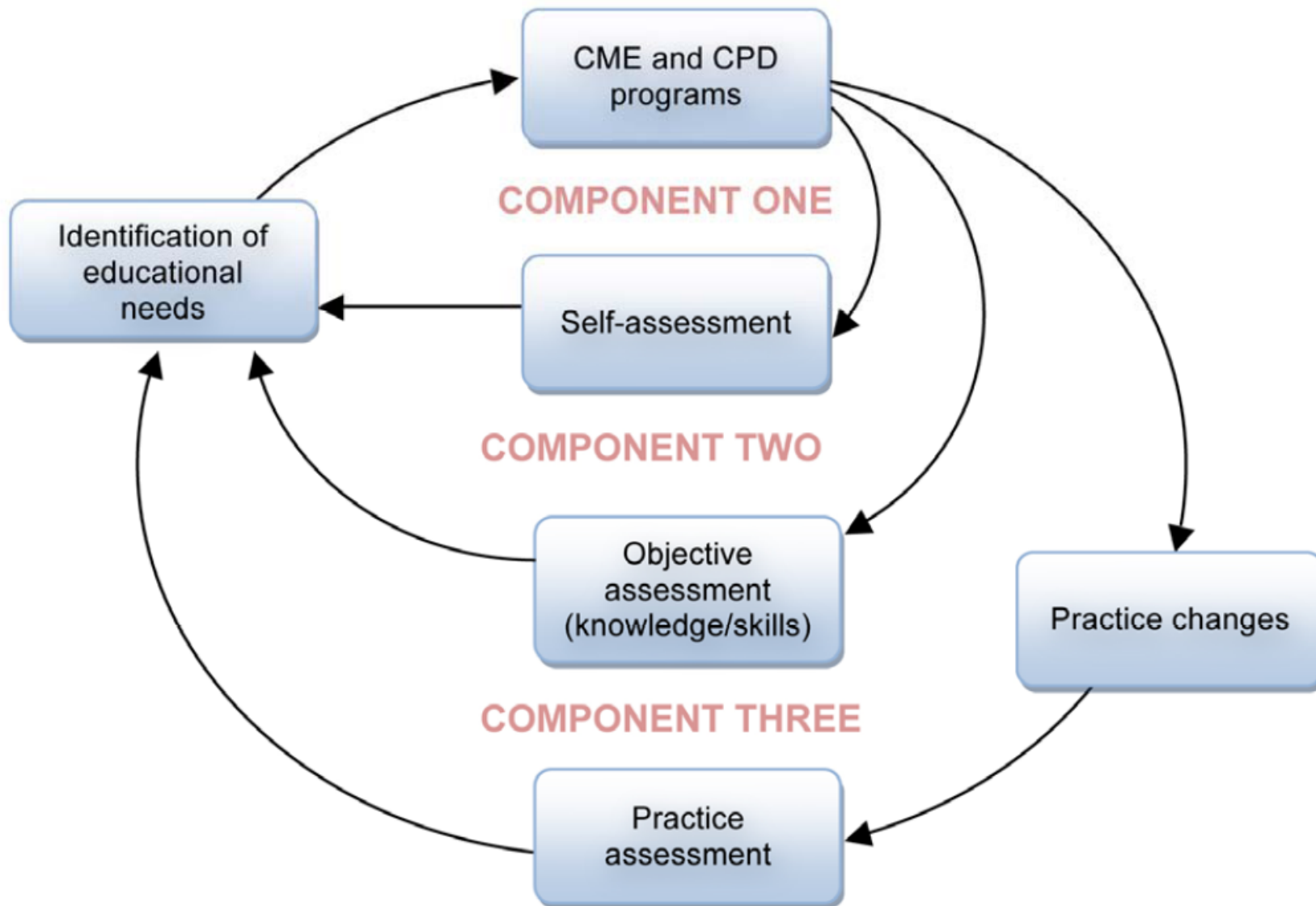


FIGURE 1. Proposed interactions between a physician and his or her practice profile, self-assessment, external validation, and learning activities (eg, CME).

[Journal of Continuing Education in the Health Professions 2008; 28(1):20–24]



Maintenance of Licensure Implementation Group: A MOL Proposal Template
(FSMB, November 12, 2010)



Moore's Evaluation Framework

- 1) Participation
- 2) Satisfaction
- 3a) Learning (declarative knowledge = knows)
- 3b) Learning (procedural knowledge = knows how)
- 4) Competence (shows how)
- 5) Performance (does)
- 6) Patient Health
- 7) Community Health

[Moore D, Green J, Gallis H. JCEHP 2009; 29(1):1-15]



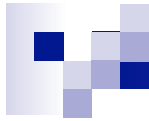
Some Assessment Methods

- Medical record review
- Chart stimulated recall
- Checklists
- Global ratings
- Standardized patients
- OSCEs
- Neuropsychiatric screen
- Script concordance test
- Clinical case simulation
- Site review
- Simulations & models
- Procedure or case logs
- 360 degree global ratings
- Portfolios
- MCQ examinations
- Oral examinations
- Patient surveys
- Bender Gestalt
- Searching the literature
- Analysis of EMR data

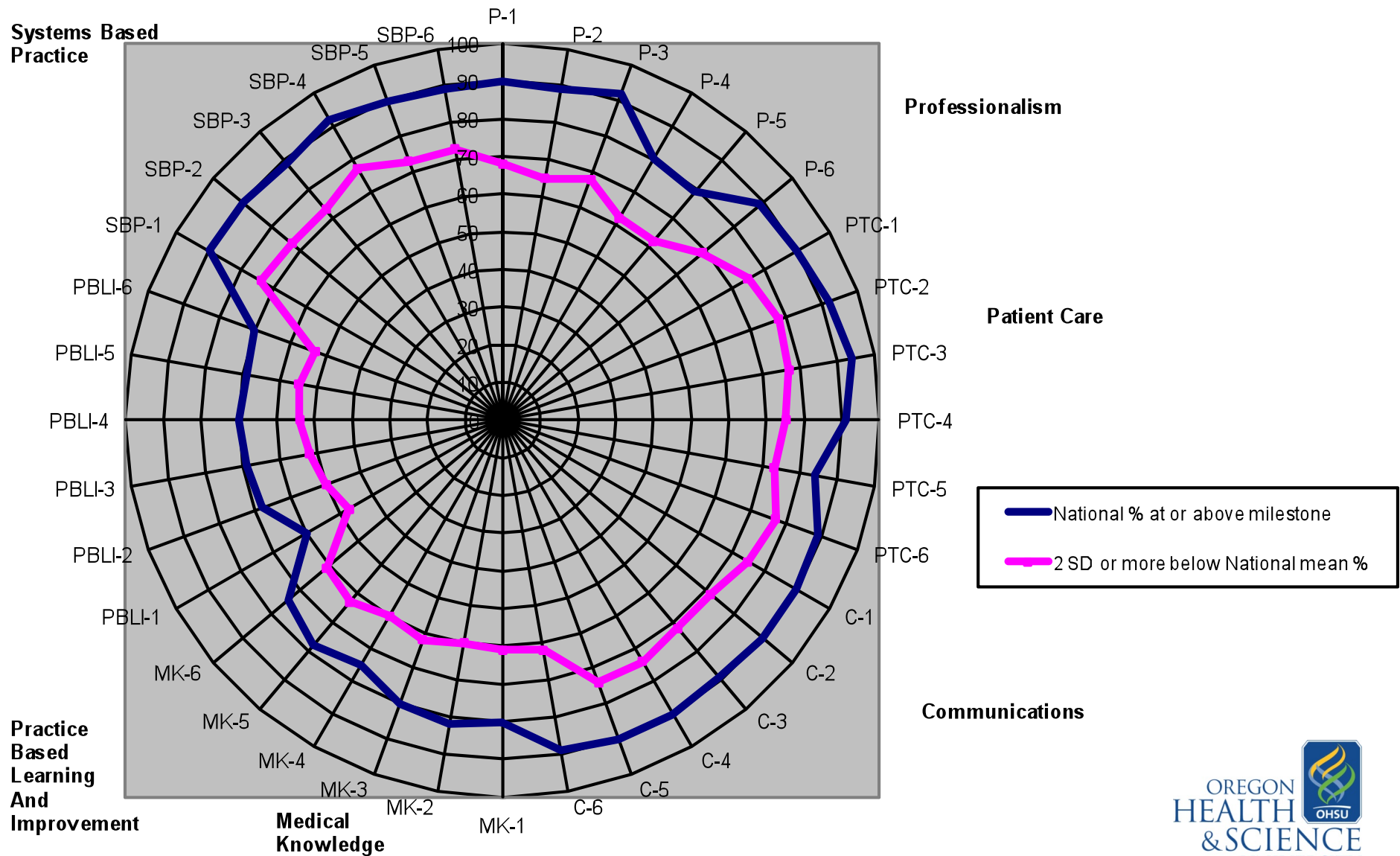


ACGME/ABMS Competencies

- Patient Care and Procedural Skills
- Medical Knowledge
- Practice Based Learning & Improvement
- Interpersonal and Communications Skills
- Professionalism
- Systems-based Practice

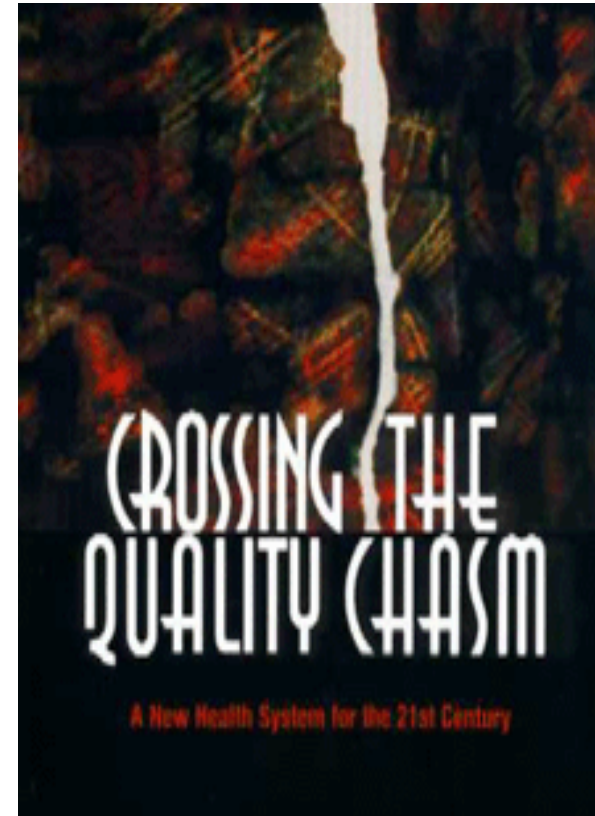


Theoretical Competency Report Card Summary, Program X

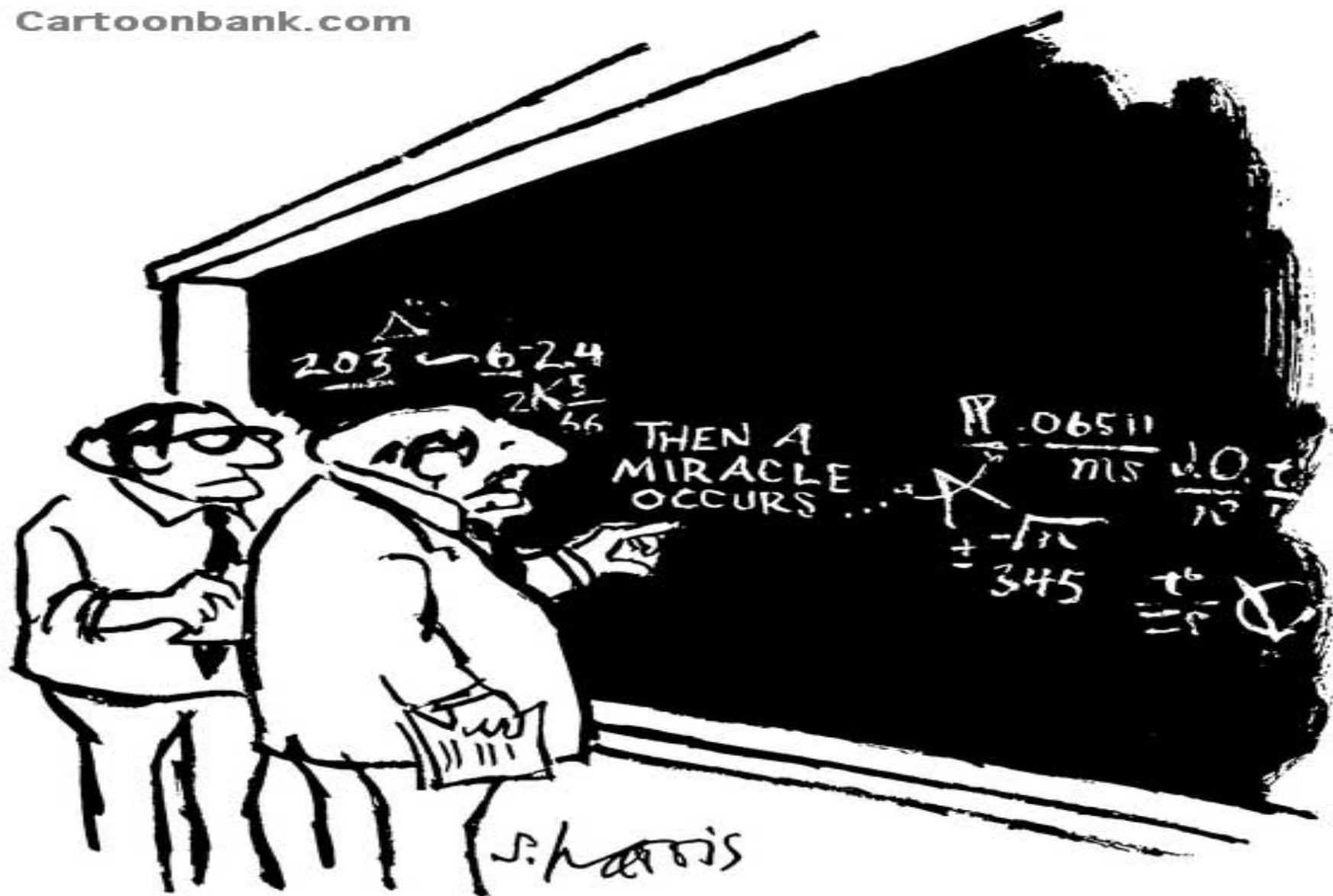


Six Dimensions of Quality

1. Safe
2. Timely
3. Effective
4. Efficient
5. Equitable
6. Patient-centered



[Source: IOM, Crossing the Quality Chasm (2001)]



"I think you should be more explicit here in step two."





Thank you!!