

# Advanced Competencies: The Challenges of Teaching & Assessment

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# Goals

- The advanced competencies (practice based learning and improvement professionalism, interpersonal & communication skills and system based practice) can be taught
- There are models and curriculum to teach these competencies
- All six competencies are linked and essential for patient care delivery



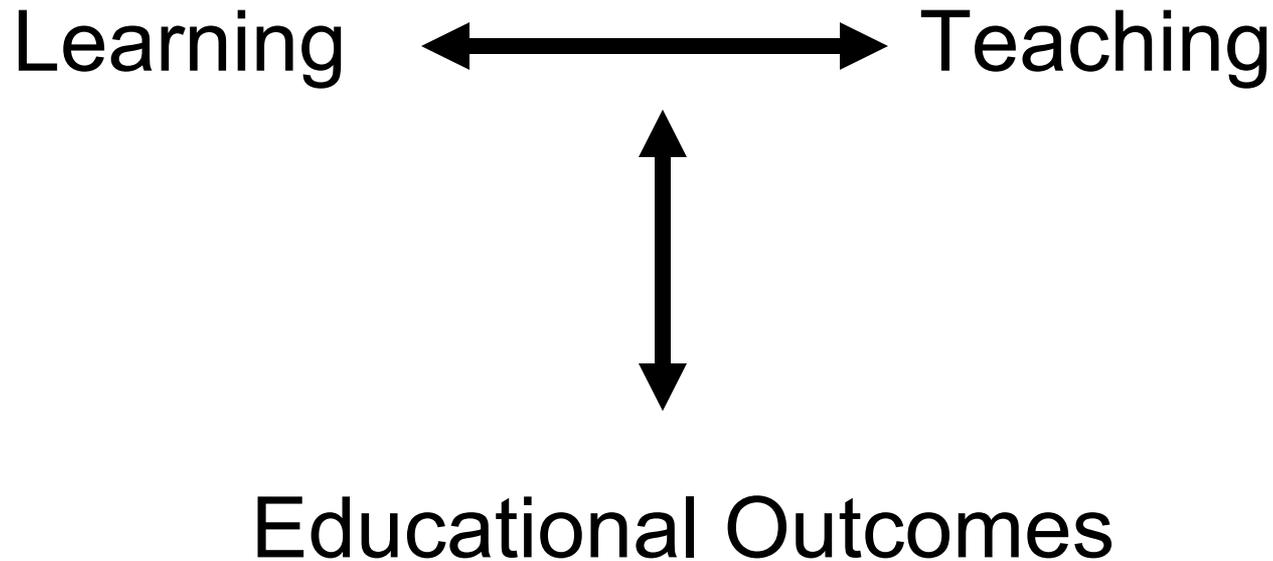
# Competency-based Education

Definition: competency-based education focuses on learner performance (learning outcomes) in reaching specific objectives (goals and objectives of the curriculum).

(Joyce, 2006)



# Competency-based Education



(Joyce, 2006)



# Learning Domains (KSA)

## Knowledge (Cognitive)

- Comprehension
- Application
- Analysis

## Skills (Psychomotor)

- Perception
- Mechanism
- Adaptation

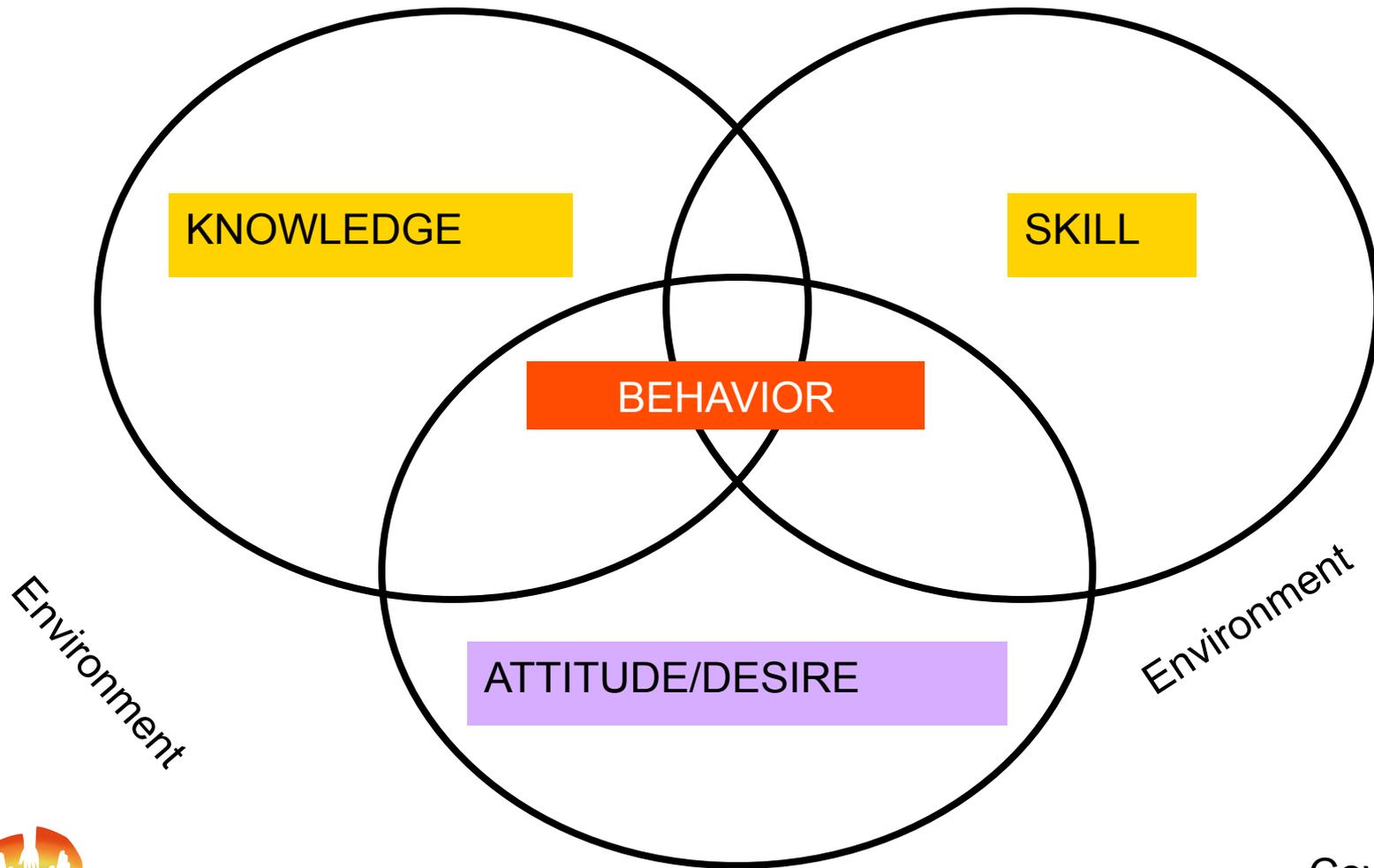
## Attitude (Affective)

- Receiving - (willingness)
- Responding - (confidence)
- Valuing - (commitment)

(Yanofsky and Nyquist,2010)



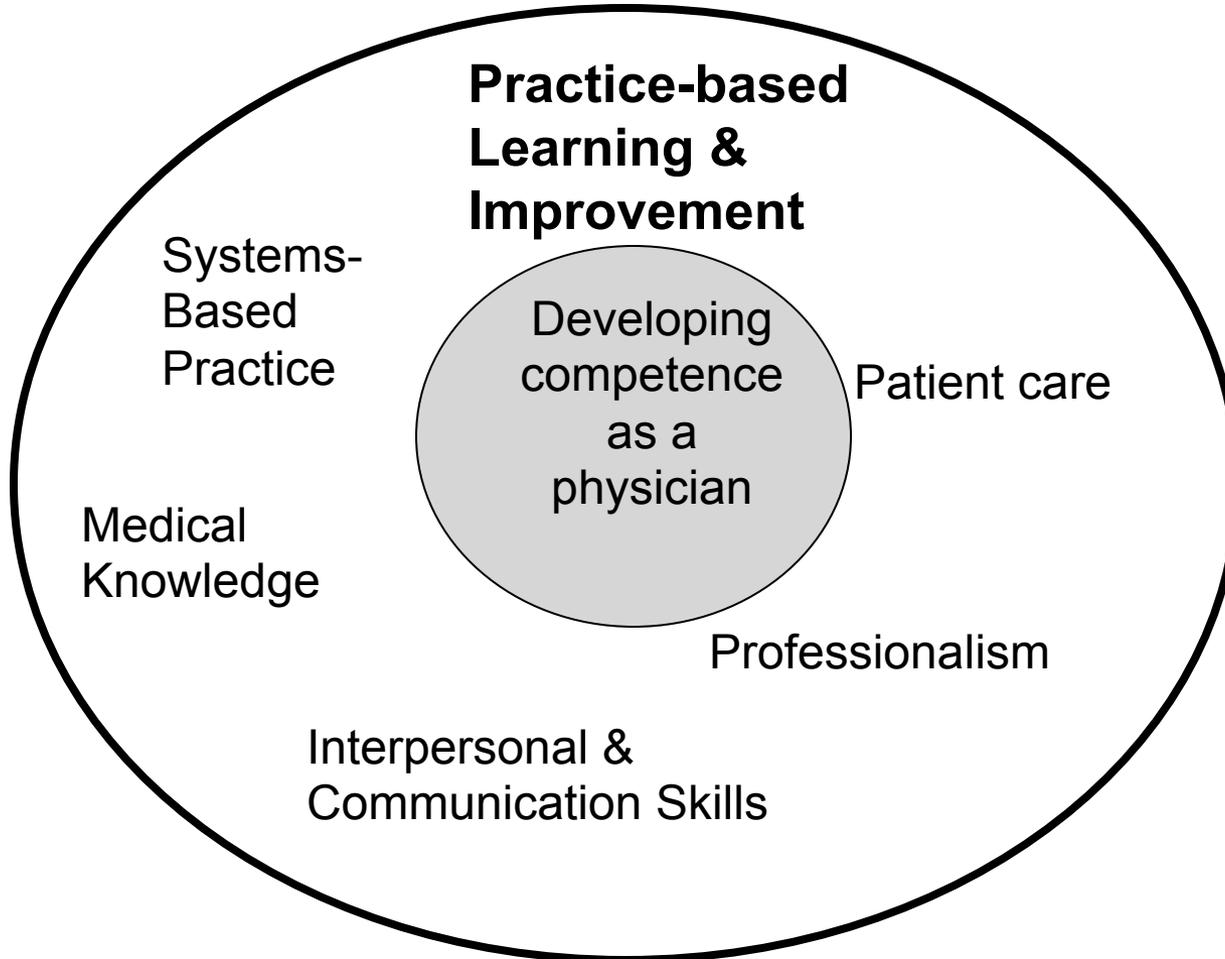
# Competency Components



Covey, 2004



# ACGME Competencies



(Joyce, 2006)



# Teaching the Competencies You Need:

- Plan for formal instruction  
(Why, Who, What, When, Where & How)
- Clear expectations for learners
- Intentional teaching
- Classroom, Independent Study & Clinical
- Select techniques to meet objective/need
- Use a variety - lecture only one of 18



# ACGME Competencies

## Basic vs. Advanced

	ACGME Competency	Teaching Methods	Assessment Methods
Basic	Medical Knowledge Patient Care	Lectures OR Rounds	AKT Orals Checklists
Advanced	PBLI ICS Professional SBP	PBL Brainstorming Portfolio Reflection	360° Simulation SP OSCE



# MK & PC Competencies

- Easily defined
- Well understood
- Familiar to teach
- Customary to assess



# MK & PC Competencies

- Long historical presence in medical training
- Significantly dependant on knowledge and skill
- Less focused on attitude and desire
- Specific to medical specialty



# Prof, ICS, PBLI & SBP Competencies

- Not defined well
- Less understood
- Complex to teach
- Difficult to evaluate

(Yanofsky & Nyquist, 2010)



# Prof, ICS, PBLI & SBP Competencies

- Focused on affective & cognitive
- Less dependent on knowledge & skill
- Highly dependent on the environment
- Non-specific to a medical subspecialty

(Lattore and Lumb, 2005)



# PBLI Skills

- Basic - EMB and use of data
- Advanced -
  - Monitoring own practice
  - Using feedback
  - Planning and making changes
  - Teaching others
- Advanced Skills Needed
  - Reflection and self-critique
  - Accepting need to change & grow



# Interpersonal & Communication Skills

- Maintain records
- Act in a consultative role
- Communicate with
  - patients, families, public, professionals, agencies
- Function as member and leader of team
- **Advanced Skills Needed:**
  - **Effective Interaction with others**
  - **Focus on the other person**



# Professionalism - Skills

- Awareness of self and others
- Emotional self-control and self-regulation
- Commitment/Loyalty beyond self interest to
  - profession, patients and organization
- Empathy with patients and team members
- **Advanced Skills Needed:**
  - Emotional Intelligence (EQ)
  - Leadership



# Systems Based Practice - Skills

- Adapting to a variety of health care settings
- Coordinating care with others
- Integrating of cost & benefit
- ↑ Patient safety, ↓ Medical errors
- **Advanced Skills Needed:**
  - Negotiation
  - Conflict management
  - Collaboration



# Teaching Methodologies (MK&PC Competencies)

- Lecture, seminars, conferences
- Clinical teaching
- Simulation
- Journal club
- Quality assurance projects
- Case-based modules



# Assessment Tools (MK&PC Competencies)

## Medical Knowledge

- Written Knowledge examination
- Oral examination
- Chart review



# Assessment Tools

## (MK&PC Competencies)

### Patient Care

- Patient survey
- OSCE
- Standardized patient
- Observation
- Procedural checklist



# Curriculum Design

## (Prof, ICS, PBLI & SBP Competencies)

- Clarify and define the components of the competencies
- Define a new culture (paradigm shift)
- Faculty buy-in
- Accountability



# Curriculum Design

## (P, ICS, PBLI & SBP Competencies)

- Consult with medical educators (university and/or institution)
- Protected non clinical time
- Group different PGY levels together
- Progressive expansion of curriculum



# Sample Foci

(Prof, ICS, PBLI & SBP Competencies)

- Personal insight - Myers Briggs Type Indicator
- Varying interaction style based on the situation - Lead Self instrument
- Using skills defined by "emotional Intelligence" - insight, control, motivation, etc



# Sample Objectives

## (P,ICS & SBP Competencies)

- Assessing communication and reasons for breakdown and errors
- Developing team interaction skills
- Conflict management - Thomas-Kilman Conflict Mode Instrument



# Teaching Methodologies

## (Prof, ICS, PBLI & SBP Competencies)

- Small group teaching
- Reading & reflective writing
- Psychometric inventories
- 360-degree evaluation

(Drago-Severson et.al. 2001)



# Teaching Methodologies

## (Prof, ICS & SBP Competencies)

- ePortfolio
- Modeling
- Multiple mentoring
- Peer mentoring

(Hochberg et.al, 2010)



# Assessment Tools

(P, ICS, PBLI & SBP Competencies)

- Reflective writing
- 360 global rating
- MSCE
- Patient survey
- Psychometric inventories
- ePortfolio

(Epstein, 2007)



# Institutional Implementation (P,ICS & SBP Competencies @ CHLA)

- Pediatric Anesthesiology Fellowship
- Pediatric Residency
- Pediatric Fellowship
- Anesthesiology & Critical Care Faculty



# Conclusion

- The advanced competencies can be taught
- There are models and curriculum to teach these competencies
- All six competencies are linked and essential for patient care delivery



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