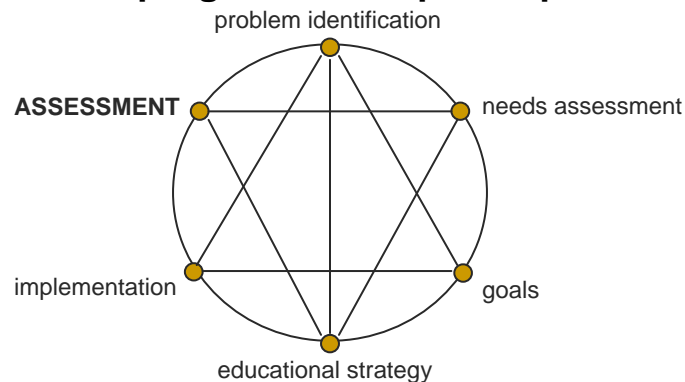


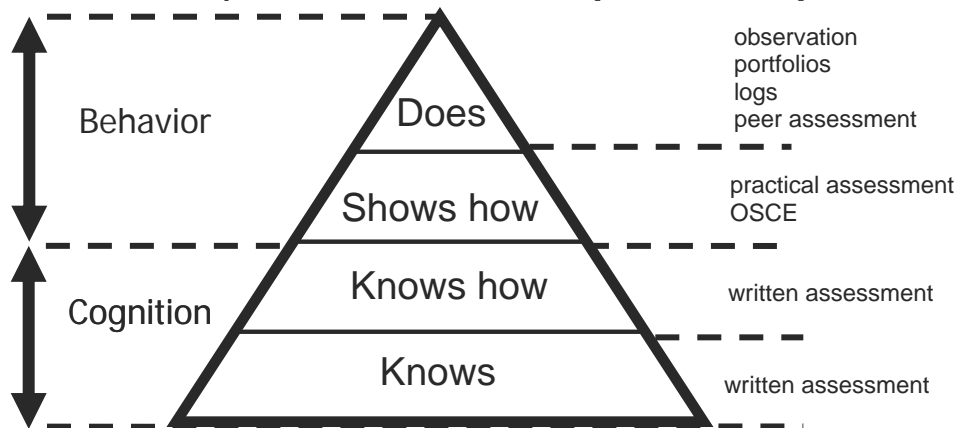
Outcomes Analysis

Assessment is a part of a program development process



Kern DE, in *Curriculum Development for Medical Education*, 2009

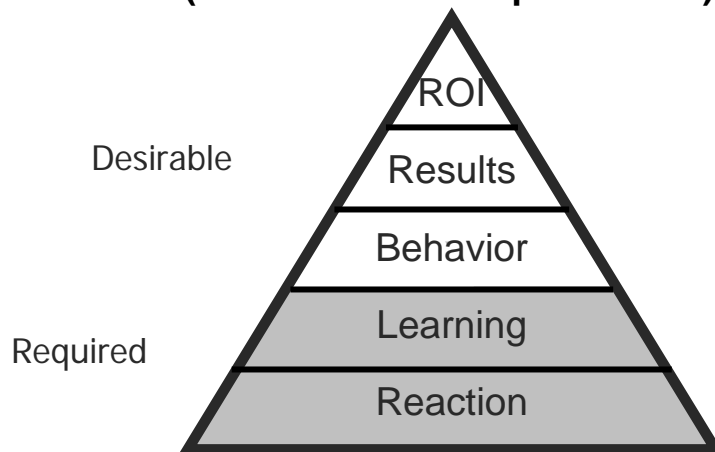
Participant assessment (for individual development & improvement)



Miller GE. The assessment of clinical skills/competence/performance. *Academic Medicine*, 1990

Shumway JM. AMEE Guide No. 25: The assessment of learning outcomes for the competent and reflective physician. *Medical Teacher*, 2003

Program assessment (for continuous improvement)



Kirkpatrick D, in *Evaluating training programs: the four levels*. 1994

Phillips J, in *How much is the training worth?* 1996



Example: Our CPE programs with a local hospital

Measure for pain med. offering	target	baseline	immediate	delayed
Number of participants	60	55	50	40
% participants completing the needs assessment prior to program	>95	90		
% participants achieving >80% on knowledge	>90, >75		93	65
% of participants reflecting on behavior	>90		93	50
% of non-formulary pain meds dispensed	<10	32		15
Average participant reaction	>4.5		4.0	

Measure of the hospital CPE program	target	2007	2008	2009	2010
Average number of participants	60	12	23	40	
Average participant reaction	>4.5	3.8	3.75	3.72	
Average % participants completing a needs assessment prior to program	>90			90	
Average % of programs that evaluate change in behavior	>75			17	