

Designing a Curriculum

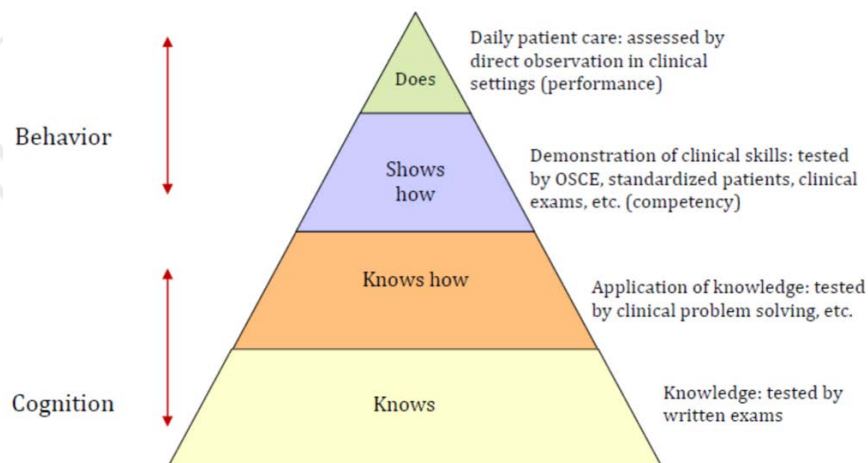
BACKGROUND – A well-designed course or program involves four key elements: needs assessment/rationale, objectives, evaluation, and teaching/learning methods. Intentionally considering each element helps ensure you are meeting your goals and are employing effective and efficient methods.

Steps to consider in developing a curriculum



Needs Assessment/ Rationale

What is the overall purpose of the course and who are the key stakeholders? A course often has more than one purpose (e.g., assist learner in passing a competency exam, preparing learner for a more advanced activity later) and more than one stakeholder (e.g., learner, curriculum director, administration, public)



Objectives

Identify specific learning outcomes (i.e., By the end of this course, the learner will be able to ...) paying attention to whether the outcome is about understanding content or demonstrating application (e.g., knowing the purposes of various laparoscopic instruments, performing a laparoscopic biopsy in simulation center, completing an appendix removal via laparoscopy.)

Domain	Verbs for Writing Objectives “Learner will be able to...”					
Knowledge	Count Define Identify	Indicate List Name	Point Quote Recognize	Recall Recite Read	Record Repeat State	Tabulate Trace Write
Comprehension	Associate Compare Compute	Contrast Describe Differentiate	Discuss Distinguish Estimate	Extrapolate Interpret Interpolate	Predict Translate	
Application	Apply Calculate Classify	Complete Demonstrate Employ	Examine Illustrate Practice	Relate Solve Use	Utilize	
Analysis	Order Group	Translate Analyze	Detect Explain	Infer Separate	Summarize Construct	
Synthesize	Arrange Combine Construct	Specify Create Design	Develop Formulate Generalize	Integrate Organize Plan	Prepare Prescribe	Produce Propose

Evaluation

How you will assess learner progress or completion of an objective? Match evaluation method to objectives. (e.g., satisfaction surveys, written exams, observe and evaluated demonstrations)

Outcome Method	Knowledge	Comprehension	Application	Analysis	Synthesis	Evaluation	Cognitive Development	Shift in Models
Lecture	X							
Interactive lecture	X	X	a	a	a	a	a	
Recitation	X	X						
Directed discussion		X	a	a	a	a	a	a
Writing/speaking exercises		X	X	X	X	X		
Classroom assessment techniques		X	X	X		X		
Group work or learning		X	a	a	a	a	a	
Student-peer feedback		X		X		X		
Cookbook science labs		X	X					
Just-in-time teaching	X	X						X
Case method			X	X	X	X	X	
Inquiry based or inquiry guided	X ^b	X	X	X	X	X	X	X
Problem-based learning	X ^b		X	X	X	X	X	
Project-based learning	X ^b	X	X	X	X	X		
Role plays and simulations		X	X	X		X		X
Service-learning with reflection			X	X	X	X		X
Fieldwork/clinical	X		X	X	X	X	X	X

From Teaching at Its Best, Nilson, ch. 11

Teaching/Learning Methods

Select teaching methods that best fit your objectives and evaluation options. E.g., A lecture may provide information to large groups but is less effective at developing learners' procedural skills. Some examples are below:

1. Lecture
2. Interactive lecture
3. Directed discussion
4. Writing exercises (reflections)
5. Group work
6. Peer feedback
7. Case-based learning
8. Role plays
9. Simulation
10. Clinical practice (fieldwork)

WANT MORE?

Promoting Active Learning

RESOURCES