

Language to Include in NTTI Lesson Plans

LEARNING OBJECTIVES

- Write the following statement: **The student will be able to** (...list *measurable* objectives that are addressed in the Assessment section)
- Use verbs identified in Bloom’s Taxonomy to create performance objectives that signify the level of learning from the most basic to the most complex.

Knowledge	Comprehension	Application	Analysis	Synthesis	Evaluation
define	convert	change	break down	categorize	appraise
describe	defend	compute	diagram	combine	compare
identify	distinguish	demonstrate	differentiate	compile	conclude
label	estimate	discover	discriminate	compose	contrast
list	explain	manipulate	distinguish	create	criticize
match	extend	modify	identify	devise	discriminate
name	generalize	operate	illustrate	design	explain
outline	give examples	predict	infer	explain	justify
reproduce	infer	prepare	outline	generate	interpret
select	paraphrase	produce	point out	modify	relate
state	predict	relate	relate	organize	summarize
rewrite	show	select	plan	support	
summarize	solve	separate	rearrange		
	use	subdivide	reconstruct		
			relate		
			reorganize		
			revise		
			rewrite		
			summarize		
			tell		
			write		

Source: Bloom’s Taxonomy, Cognitive Domain

PREPARATION FOR MEDIA INTERACTION

- If using video in the lesson, write the following statement or a variation on it: Focus students’ viewing with a specific responsibility or task they must accomplish during the viewing of the video. This will help to focus or engage students’ viewing attention. Focus the student’s viewing by... (detail a specific task or question).
- If using the Web in the lesson, include a statement that indicates you are preparing the students for their use of the medium, such as: Focus students’ use of the Web by explaining specific tasks they must accomplish and by modeling these tasks beforehand.

LEARNING ACTIVITIES

- If using video in the lesson, for each reference to a segment of tape, remember FPPF: FOCUS-PLAY-PAUSE-FOLLOW UP (or variations on these commands).
- FOCUS or REFOCUS students on a task already begun or on a new task.
- Use the terms BEGIN, START, PLAY or RESUME, followed by a description of the video content.
- When you PAUSE or STOP indicate when this occurs in the tape (“when...specific audio/video cue”). Indicate the rationale for pausing, e.g., to check for comprehension.
- Explain what students do while you are PAUSEd or STOPped. This is where Higher Order Thinking Skills are best integrated into your lesson. (see below)
- As you go back to the tape, ReFOCUS students and begin the pattern again.

(If using the Web, see the Media Rich Lesson Template for more details.)

- For the use of any medium, incorporate Higher Order Thinking Skills (HOTS), which replaces the traditional drill and practice approach with higher order thinking skills activities to improve student performance in thinking skills, social interaction and basic skills.

The HOTS Pedagogical Approach

- Predicated on belief that students don't know how to construct meaning from the materials at hand.
- Combines Socratic teaching and use of instructional materials to stimulate development of four key general thinking techniques:
 - Inference from context (figuring out unknown words and information from the surrounding information)
 - Decontextualization (generalizing ideas from one context to another)
 - Synthesis of information (combining information from a variety of sources and identifying key pieces of information needed to solve a problem)
 - Metacognition (consciously applying strategies to solve problems)

Questioning: The Socratic Method

- State Questions Carefully
- Don't simplify questions and ask them in a way that provides the answer in the wording, or only requires a one-word answer
- Pause before asking follow-up questions
- Wait out the students – when they stare, you stare

Reference: The HOTS Project, College of Education, Department of Teaching and Teacher Education, University of Arizona, Tucson, AZ 85721.