



Canadian Forestry Accreditation Board Bureau canadien d'agrément en foresterie

Bloom's Taxonomy¹ for Learning Outcomes (adapted)

Bloom's levels of educational learning provide a framework to consider what applicants know and where the educational effort should be targeted in order to further promote additional, and more sophisticated, learning. For these standards, Bloom's hierarchical taxonomy has been adapted as given below:

Category	Keywords
<p>Knowledge: remembering information <i>(The learner first must be made aware of the situation)</i></p>	<p>Define identify label state list match <i>(Rote memory)</i></p>
<p>Comprehension: explaining the meaning of information <i>(The learner must then comprehend the value of situation)</i></p>	<p>Describe paraphrase summarize estimate <i>(Translate to your words)</i></p>
<p>Application: using abstracts in concrete situations <i>(The learned must be able to consider what they have learned in one situation and use it in an other different situation)</i></p>	<p>Determine chart implement prepare solve use develop <i>(Apply general principle)</i></p>
<p>Analysis: breaking down a whole into component parts <i>(The learner acquires additional information about the situation, and begins to look at the different pieces of information that comprise the whole story)</i></p>	<p>Point out differentiate distinguish discriminate compare <i>(Break down into parts)</i></p>
<p>Synthesis: putting parts together to form a new and integrated whole <i>(The learner then develops the skills to assemble that information in new ways, rather than simply reflecting back what they have learned)</i></p>	<p>Create design plan organize generate write <i>(Create a whole from parts)</i></p>
<p>Evaluation: making judgements about the merits of ideals, materials or phenomena <i>(The learner is able to judge the information and make decision for him/herself about its (good or bad) value based on criteria)</i></p>	<p>Appraise critique evaluate judge weigh select <i>(Judge according to standards)</i></p>

¹ Bloom B.S. 1956. *Taxonomy of educational objectives: the classification of educational goals. Handbook I: Cognitive Domain.* Longman. White Plains, NY.

Verbs² to Specify Demonstrable Competencies and Performance Indicators

The action verbs listed below are as found in the *Academic Standards for the Accreditation of Degree of Degree Forestry Programs in Canada* of the Canadian Forestry Accreditation Board.

For Knowledge

arrange	define	duplicate	label	list
measure	memorize	name	order	read
recall	recognize	relate	repeat	reproduce
state				

For Comprehension

classify	describe	determine	discuss	explain
express	identify	indicate	locate	report
restate	review	select	translate	

For Application

apply	choose	communicate	demonstrate	dramatize
employ	facilitate	illustrate	implement	operate
perform	practice	schedule	sketch	solve
use	write			

For Analysis

analyse	appraise	calculate	categorize	compare
contrast	criticize	differentiate	discriminate	distinguish
examine	experiment	interpret	question	test

For Synthesis

arrange	assemble	collect	compose	construct
create	design	develop	display	formulate
manage	organize	plan	prepare	propose
write				

For Evaluation

appraise	argue	assess	attach	choose
compare	defend	estimate	evaluate	judge
predict	rate	score	select	support

2 Jenkins, A. and D. Unwin. 2001. *How to write learning outcomes*.
<http://www.ncgia.ucsb.edu/education/curricula/giscc/units/format/outcomes.html>