Adding Creative Thinking to the Critical Thinking ISLO

By Tiffany Schmierer and Jude Navari

Creative and Innovative Thinking are higher-level thought processes that imagine new possibilities. Through the application of imaginative thought and activity, something novel is conceived and/or produced. "Creative thinking is both the capacity to combine or synthesize existing ideas, images, or expertise in original ways and the experience of thinking, reacting, and working in an imaginative way characterized by a high degree of innovation, divergent thinking, and risk taking" [quoted from Association of American Colleges and Universities (AACU), Creative Thinking VALUE Rubric].

In both options below, two new bullet points are added to the Critical Thinking ISLO:

Option #1 (Creative Thinking is a sub-category of Critical Thinking)

Critical Thinking includes the ability to:

- support claims with relevant and credible evidence.
- develop awareness of and ability to respond to bias.
- apply accurate and logical analysis to achieve desired outcome.
- solve problems by formulating thought processes and applying skills to synthesize ideas, images, forms, sounds, movement, or perspectives.
- think innovatively by imagining new or alternative concepts and expressions in original ways.

Option #2 (Critical and Creative Thinking are related siblings which have interconnections but some distinct emphases; would involve changing ISLO to "Critical and Creative Thinking"

Critical and Creative Thinking includes the ability to:

- (Critical) support claims with relevant and credible evidence.
- (Critical) develop awareness of and ability to respond to bias.
- (Critical) apply accurate and logical analysis to achieve desired outcome.
- (Creative) solve problems by formulating thought processes and applying skills to synthesize ideas, images, forms, sounds, movement, or perspectives.
- (Creative) think innovatively by imagining new or alternative concepts and expressions in original ways.

Draft of Creative Thinking rubric or sub-rubric

	No/Limited Proficiency	Some Proficiency	Proficiency	High Proficiency
Solves Problems: applies skills to synthesize ideas, images, forms, sounds, movement, or perspectives	Applies skills to appropriately model existing ideas, images, forms, sounds, movement, or perspectives.	Applies skills to appropriately model and adapt existing ideas, images, forms, sounds, movement, or perspectives.	Applies skills to appropriately model and adapt existing exemplar, but creates new ideas, images, forms, sounds, movement, or perspectives appropriate to the discipline.	Applies skills to appropriately model and adapt existing exemplar, but creates new ideas, images, forms, sounds, movement, or perspectives appropriate to the discipline, and reflects upon the creative process and product.
Solves Problems: formulates thought processes to synthesize ideas, images, forms, sounds, movement, or perspectives	Recognizes existing connections between ideas, images, forms, sounds, movement, or perspectives	Connects ideas, images, forms, sounds, movement, or perspectives	Synthesizes ideas, images, forms, sounds, movement, or perspectives into a coherent whole	Transforms ideas, images, forms, sounds, movement, or perspectives into coherent whole in original ways
Thinks Innovatively: imagine new concepts or expressions in original ways	Reformulates a collection of available concepts or expressions	Experiments with creating novel or unique concepts or expressions	Creates novel or unique concepts or expressions	Extends novel or unique concepts or expressions to create new knowledge or knowledge that crosses boundaries
Thinks Innovatively: imagine alternative concepts or expressions in original ways (take risks, embrace contradictions)	Considers and uses only a single approach to solve a problem and/or Acknowledges (refers to in passing) alternate concepts or expressions	Considers and rejects less acceptable approaches to solve a problem and/or Includes (recognizes the value) of alternate concepts or expressions in small way	Develops a logical, consistent plan to solve a problem after selecting an approach from alternatives (i.e. makes choices) and/or Incorporates alternate concepts or expressions in exploratory way	Recognizes consequences of a solution and articulates reasons for choices after developing a logical, consistent plan to solve problems. and/or Integrates alternate concepts or expressions fully.

^{*}This rubric was created using the Association of American Colleges and Universities (AAC&U) Creative Thinking VALUE Rubric. Retrieved from https://www.aacu.org/value-rubrics



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CRITICAL THINKING ISLO AND RUBRIC



Office of Planning, Research, and Institutional Effectiveness

STUDENTS WILL BE ABLE TO DEMONSTRATE CRITICAL THINKING SKILLS IN PROBLEM SOLVING ACROSS THE DISCIPLINES AND IN DAILY LIFE.

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- □ support claims with relevant and credible evidence.
- □ develop awareness of and ability to respond to bias.
- □ apply accurate and logical analysis to achieve desired outcome.

SKYLINE COLLEGE CRITICAL THINKING ISLO RUBRIC				
Indicator	No/ Limited Proficiency	Some Proficiency	Proficiency	High Proficiency
Claims Supported: Accurately interprets evidence specific to the discipline (e.g., quotes, graphs, stats, etc.)	Demonstrates little to no understanding of how to interpret evidence specific to the discipline	Demonstrates some understanding of how to interpret evidence specific to the discipline	Interprets a range of evidence specific to the discipline with varying complexity	Accurately and/or thoroughly interprets a range of evidence specific to the discipline with a high level of discernment
Claims Supported: Considers rival theories or opposing views	Demonstrates little to no consideration of any alternate views	Demonstrates some consideration of any alternate views	Considers opposing theories or views with some discernment of	Considers rival theories utilizing appropriate and relevant evidence with a thorough discernment of

SKYLINE COLLEGE CRITICAL THINKING ISLO RUBRIC				
			their strengths and weaknesses	their strengths and weaknesses
Ability to Respond to Bias: Considers the credibility of evidence used	Demonstrates little to no discernment between credible and non-credible sources	Demonstrates some discernment between credible and non-credible sources	Distinguishes between credible and non-credible sources and distinguishes between facts and opinions, with some analysis of expert/ status quo viewpoints or approaches	Demonstrates thorough analysis of all relevant viewpoints and their respective credibility, distinguishes between facts and opinions, and thoroughly questions expert/ status quo viewpoints or approaches
Logical Analysis: Exhibits methodological awareness	Gives little to no consideration to the role of methodology in approaches taken to form arguments and/or reach conclusions	Acknowledges the role of methodology in approaches taken to form arguments and/or reach conclusions	Acknowledges the role of methodology in approaches taken to form arguments and/or reach conclusions, making a case for the approach taken	Acknowledges the role of methodology in approaches taken to form arguments and/or reach conclusions, weighs different methodological approaches, and evaluates alternative approaches not taken
Logical Analysis: Reaches conclusions that are well- supported by the premises or evidence	Demonstrates little to no logical connection between evidence/ premises and conclusions reached	Demonstrates some logical connection between evidence/ premises and conclusions reached; however, displays major shortcomings in connecting evidence/	Demonstrates a logical connection between evidence/ premises and conclusions reached; however, displays some minor shortcomings in connecting evidence/	Demonstrates a clear and strong logical connection between evidence/ premises and conclusions reached

SKYLINE COLLEGE CRITICAL THINKING ISLO RUBRIC				
		premises to conclusions	premises to conclusions	
Logical Analysis: Appropriately chooses and correctly applies formulas or techniques unique to the discipline (such as in algebra, logic, probability theory, chemistry, physics, statistics, etc.)	Demonstrates little to no ability to select and appropriately apply relevant formulas or techniques	Applies appropriate formulas or techniques but with major shortcomings or flawed reasoning in application (e.g., invalid assumptions, circular logic, omissions or other gaps in understanding)	Applies appropriate formulas or techniques but contains some minor shortcomings or flawed reasoning in application (e.g., invalid assumptions, circular logic, omissions or other gaps in understanding)	Appropriately chooses and correctly applies formulas or techniques while recognizing and avoiding using flawed reasoning