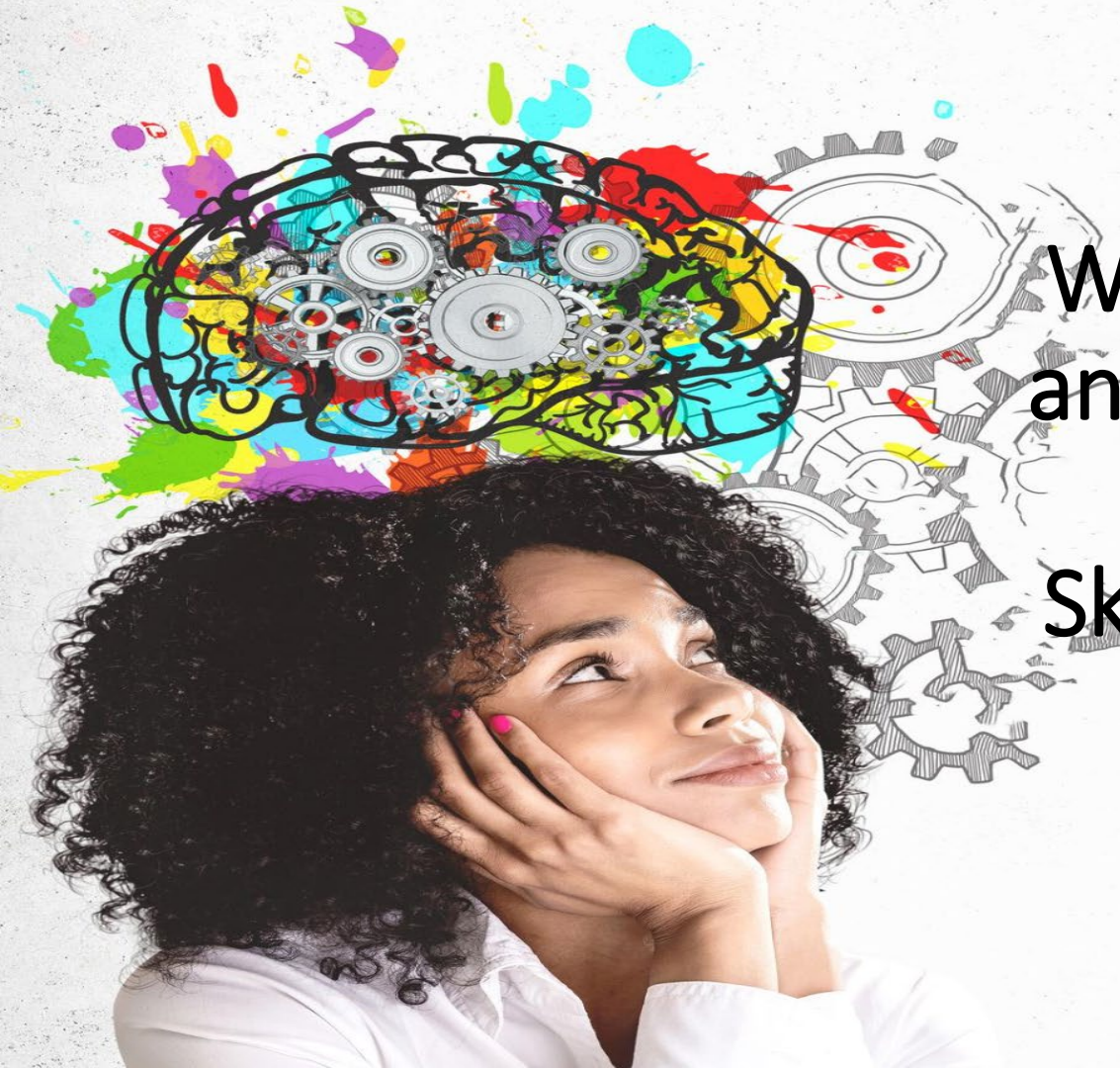

Where are *Creativity* and *Creative Thinking* in Skyline College ISLOs ?

IE Committee
October 11, 2021

This presentation is a continuation of...

Adding *Creative Thinking* to Skyline College ISLOs

IE Committee
May 10, 2021

Why add Creativity and Creative Thinking? - 1

- 21st-century employer demand
- Creativity missing from current ISLOs
- Critical Thinking bullets too narrow in scope

Why add Creativity and Creative Thinking? - 2

- Woven across ALL disciplines, but
  - Not transparent to students
  - Not measured
  - Not shown value

How to measure **Creativity**?

Some traditional methods...

1. How Creative a Person Is - The Guilford Model
   (the Torrance Test of Creativity is based on this)
2. How Creative a Work Is - The Taxonomy of Creative Design
3. Creative Work Against Given Criteria - The Requirements Model
4. Cultural Value of Creative Work - Csikszentmihalyi's Model

Psychologist J. P. Guilford measures of a person's creative responses:

- *Fluency:* number of responses
- *Flexibility:* types of responses
- *Originality:* uniqueness of responses
- *Elaboration:* detail of responses

AACU Value Rubric for Creative and Innovative Thinking

Higher-level thought processes that imagine new possibilities.

Through application of imaginative thought and activity, something novel is conceived and/or produced.

"Creative thinking is both (1) the capacity to combine or synthesize existing ideas, images, or expertise in original ways and (2) the experience of thinking, reacting, and working in an imaginative way characterized by a high degree of innovation, divergent thinking, and risk taking"

CREATIVE THINKING VALUE RUBRIC

CSUEB aligns to AACU

Association of American Colleges and Universities

for more information, please contact value@aacu.org

Definition

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, divergence thinking, and risk taking

Evaluators are encouraged to assign a zero to any work sample or collection of work that doe not meet benchmark (cell one) level performance.

	Capstone 4	Milestone 3	Milestone 2	Benchmark 1
Acquiring Competencies This step refers to acquiring strategies and skills within a particular domain.	Reflect: Evaluates creative process and product using domain-appropriate criteria.	Create: Creates an entirely new object, solution or idea that is appropriate to the domain.	Adapt: Successfully adapts an appropriate exemplar to his/her own specifications.	Model: Successfully reproduces an appropriate exemplar.
Taking Risks May include personal risk (fear of embarrassment or reflection) or risk of failure in successfully completing assignment, i.e. going beyond original parameters of assignments, introducing new materials and forms, tackling controversial topics, advocating unpopular ideas or solutions.	Actively seeks out and follows through an untested and potentially risky directions or approaches to the assignment in the final products.	Incorporates new directions or approaches to the assignment in the final product.	Considers new directions or approaches without going beyond the guidelines of the assignment.	Stays strictly within the guidelines of the assignment.
Solving Problems	Not only develops a logical, consistence plan to solve problem, but recognizes consequences of solution and can articulate reason for choosing solution.	Having selected from among alternatives, develops a logical, consistent plan to solve the problem.	Considers and rejects less acceptable approaches to solving problem.	Only a single approach is considered and is used to solve the problem.
Embracing Contradictions	Integrates alternates, divergent, or contradictory perspectives or ideas fully.	Incorporates alternate, divergent, or contradictory perspectives or ideas in a exploratory way.	Includes (recognizes the value of) alternate, divergent, or contradictory perspectives or ideas in a small way.	Acknowledge (mentions in passing) alternate, divergent, or contradictory perspective or ideas.
Innovative Thinking Novelty or uniqueness (of idea, claim, questions, form, etc.)	Extends a novel or unique idea, question, format, or product to create new knowledge or knowledge that crosses boundaries.	Creates a novel or unique idea, question, format, or product.	Experiments with creating a novel or unique idea, question, format, or product.	Reformulates a collection of available ideas.
Connecting, Synthesizing, Transforming	Transforms ideas or solutions into entirely new forms.	Synthesizes ideas or solutions into a coherent whole..	Connects ideas or solutions in novels ways.	Recognizes existing connections among ideas or solutions.

What's going on at other institutions?

A few examples:

- Salt Lake City Community College SLCC's Learning Outcomes
- Daytona State College Learning Outcomes Assessment
- College of the Canyons Why have Institutional Learning Outcomes? (uses AACU rubric)
- CSU East Bay Cal State East Bay General Education Program & Breadth Requirements - CSU East Bay - Acalog ACMS™
- AACU Essential Learning Outcomes and VALUE rubrics
- CSM and Cañada College

4. Think Critically and Creatively.

A. Reason effectively using available evidence, and are aware that knowledge is dynamic and builds on new evidence and alternative perspectives.
B. Demonstrate effective problem solving.
C. Engage in creative thinking, expression, and application.
D. Engage in reflective thinking and expression.
E. Demonstrate higher-order skills such as analysis, synthesis, and evaluations.
F. Make connections across disciplines/departments or services.
G. Apply scientific methods to the inquiry process.

SLCC

1. **Critical/Creative Thinking:** Students will use systematic and creative thinking skills to analyze and evaluate issues and arguments, to solve problems, and/or to make decisions. Critical/Create Thinking may include but not limited to:
   - Logical reasoning: The ability to evaluate arguments for their logic, validity, relevance and strength.
   - Problem-solving and decision-making skills: The ability to identity and define problems/issues, recognizing their complexity, and considering alternative viewpoints and solutions.
   - Scientific reasoning: The ability to use the critical skills of observations, analysis, evaluation.
   - Quantitative reasoning: Computation, application and inference.
   - Qualitative reasoning: Incorporates personal experience, human perception and human values (i.e., creative thinking, aesthetic reasoning, and ethical reasoning).

Daytona State

Mapping Course or Program SLOs to Institutional Learning Outcomes (ISLOs)

Note: You can use the ISLO rubrics for additional information about the criteria listed below.

Course of Program SLO
Critical Thinking 1. Explanation of Issues 2. Evidence 3. Influence of Context and Assumptions 4. Student's Position (Perspective / Thesis/ Hypothesis) 5. Conclusions and Related Outcomes
Effective Communication: Oral 1. Organization 2. Language 3. Delivery 4. Supporting Material 5. Central Message
Effective Communication: Written 1. Context of and Purpose for Writing 2. Context Development 3. Genre and Disciplinary Conventions 4. Sources and Evidence 5. Control of Syntax and Mechanics
Collaboration 1. Contributes to Team Meetings 2. Facilitates the Contributions of Team Members 3. Individual Contributions Outside of Team Meetings 4. Fosters Constructive Team Climate 5. Responds to Conflict

Creative and Innovative Thinking 1. Acquiring Competencies 2. Taking Risks 3. Solving Problems 4. Embracing Contradictions 5. Innovative Thinking 6. Connective, Synthesizing, Transforming
Information Literacy 1. Determine the Extend of Information Needed 2. Access the Needed Information 3. Evaluate Information and Its Sources Critically 4. Use Information Effectively to Accomplish a Specific Purpose 5. Access and Use Information Ethically and Legally
Quantitative Literacy 1. Interpretation 2. Representation 3. Calculation 4. Application/ Analysis 5. Assumptions 6. Communication

Community Engagement 1. Diversity of Communities and Cultures 2. Analysis of Knowledge 3. Civic Identity and Commitment 4. Civic Communication
Global Responsibility 1. Global Self-Awareness 2. Perspective Taking 3. Cultural Diversity 4. Personal and Social Responsibility 5. Understanding Global Systems 6. Applying Knowledge to Contemporary Global Contexts

College of the Canyons

Institutional Learning Outcomes

CSM

For Accurate, up-to-date learning outcomes for courses and programs, please check CurricUNET.

The Institutional Learning Outcomes (ILOs) describe the knowledge, skills, abilities and attitudes that students should develop through any sustained experience with the college – whether courses, degree or certificate programs, pre-transfer general education pattern, or academic and support services.

1. **Independent Learning and Development** – The ability of students to develop, evaluate, and pursue personal, academic, and/or career goals. Students will be able to:
   - Demonstrate effective study strategies;
   - Articulate realistic and achievable academic and/or career goals;
   - Identify and make sure of college and community resources (academic and student support services)

2. **Effective Commination** – The ability of students to write, read, speak, and listen in order to communicate effectively. Students will be able to:
   - Comprehend, interpret, and analyze written and oral information;
   - Express ideas and provide supporting evidence effectively in writing and in speaking;
   - Express ideas creatively through verbal and non-verbal media (e.g. music, art, dance, etc.)
   - Communicate effectively in a group or team situation

3. **Quantitative Reasoning** – The ability of students to perform quantitative analysis, using appropriate resources. Students will be able to:
   - Solve a variety of problems that require quantitative reasoning;
   - Interpret graphical representations of quantitative information

4. **Critical Thinking** – The ability of students to think creatively, analytically, and logically, in order to assess ideas, formulate arguments, develop multiple perspectives, and solve problems. Students will be able to:
   - Demonstrate effective study strategies;
   - Analyze, synthesize and evaluate ideas as part of the creative process;
   - Assess the validity of both qualitative and quantitative evidence;
   - Apply diverse disciplinary approaches and perspectives;
   - Employ the scientific method

5. **Social Awareness and Diversity** – The ability of students to recognize cultural traditions and to understand and appreciate the diversity of the human experience, past and present. Student will be able to:
   - Identify the benefits of diversity and respect the range of diversity;
   - Work effectively with others of diverse backgrounds;
   - Recognize the importance and analyze the interconnectedness of global and local concerns, both past and present;
   - Identify and analyze a diversity of artistic and cultural traditions

6. **Ethical Responsibility/Effective Citizenship** – The ability of students to make judgements with respect to individual conduct, based on systems of values. Student will be able to:
   - Recognize ethical principles;
   - Identify possible courses of action in response to ethical dilemmas and evaluate their consequences;
   - Behave ethically and respectfully when working with students, instructors, and the campus community

(Adopted by the Academic Senate Governing Council, May 9, 2017)

Institutional Learning Outcomes

Cañada College

1. **Critical Thinking**
   Select, evaluate, and use information to investigate a point of view, support a conclusion, or engage in problem solving.

2. **Creativity**
   Produce, combine, or synthesize ideas in creative ways within or across disciplines.

3. **Communication**
   Use language to effectively convey an idea or a set of facts, including the accurate use of source material and evidence according to institutional and discipline standards.

4. **Community**
   Understand and interpret various points of view that emerge from a diverse world of peoples and cultures.

5. **Quantitative Reasoning**
   Represent complex data in various mathematical forms (e.g. equations, graphs, diagrams, tables, and words) and analyze these data to draw appropriate conclusions.

The Institutional Learning Outcomes parallel our General Education Learning Outcomes which the Curriculum Committee APPOVED 11/18/11. The Institutional Learning Outcomes were revised and adopted by the ASGC (11/14/13) and Planning and Budgeting Council (11/20/13).

Adding Creativity to Skyline College ISLOs

1. Critical *and Creative* Thinking - Students will be able to demonstrate critical ***and creative*** thinking skills in problem solving across the disciplines and in daily life.

Critical *and creative* 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 synthesizing ideas, images, forms, sounds, movement, or perspectives.*
- *think innovatively by imagining new or alternative concepts and expressions in original ways*

Draft of Creative Thinking Rubric or Sub-Rubric

Creative and Innovative Thinking are higher-level thought processes that image 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).

	Emerging	Progressing	Meeting	Exceeding
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
Think Innovatively: Imagines new concepts or expressions in original ways	Reformulates a collection of available concepts of 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
Think Innovatively: Imagines alternative concepts or expressions in original ways (takes risks, embraces contradictions)	Considers and users only a single approach to solve a problem And/or Acknowledges (refer 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	Develop 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 problem 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

2. Effective Communication - Students will be able to communicate and comprehend effectively. *[Text-based output is implied, but maybe should be specified here]*

Effective communication includes the ability to:

- analyze and comprehend oral, written, and other ***non-verbal media (e.g. art/images, dance/movement, music/sound, etc.).***
- effectively construct and deliver a message to express ideas through speaking or writing
- provide appropriate responses to establish shared meaning.
- demonstrate appropriate social skills in group settings, being receptive to alternative ideas and feelings.

3. Citizenship - Students will be able to use knowledge acquired from their experiences at this college to be ethically responsible, culturally proficient citizens, informed and involved in civic affairs locally, nationally, and globally.

Citizenship includes the ability to:

- demonstrate an understanding of their individual role in an interconnected world about a range of global issues.
- demonstrate an understanding of how global, national and local organizations, ideas, and issues are interconnected (e.g., social, cultural, economic, political, and environmental).
- demonstrate scientific literacy concerning a range of global issues.
- demonstrate awareness and sensitivity about how their perspectives are shaped by their experiences and cultural values [continues on next slide]

3. Citizenship (bullets continued from previous slide)

Citizenship includes the ability to:
articulate similarities and contrasts among cultures, demonstrating knowledge of and sensitivity to various cultural values and issues.

- ***engage with and contribute to community/society through the sharing and exchange of artistic expression (e.g. public exhibitions/performances, visiting guest artists/artists in residence, off-campus exhibitions/performances, arts festivals, creative service learning projects, etc.)***
- recognize and apply ethical perspectives.
- facilitate a positive, supportive group environment through demonstrated collegiality, leadership, ***and cooperative skills.***
- demonstrate commitment to active citizenship.

4. Lifelong Wellness - Students will be able to demonstrate an understanding of lifelong wellness through physical fitness and/or personal development across the disciplines.

Lifelong wellness includes the ability to:

- demonstrate an understanding of physical fitness and its role in lifelong wellness.
- demonstrate creative expression and artistic practice for self-discovery, personal development, and self-advocacy of emotional well being.
- take responsibility for identifying personal needs, determining resources, and accessing appropriate services for academic success.
- exhibit resilience by embracing effort as a path to mastery, persisting in the
- face of setbacks, and acknowledging and overcoming challenges.
- develop attitudes central to lifelong learning: openness, flexibility, intellectual
- curiosity, and a broad perspective that values diversity of thought.

Where are *Creativity* and *Creative Thinking* in Skyline College ISLOs ?

Thank you! :)