

The 21st Century Learning Skill of Creativity Defined:

- Developing, implementing and communicating new ideas to others
- Demonstrating originality and inventiveness in work
- Being open and responsive to new and diverse perspectives
- Acting on creative ideas to make a tangible and useful contribution to the domain in which the innovation occurs

Classroom Application: The following are practical ways that the 21st Century Learning Skill of Creativity can be integrated into the content areas. These examples come from the P21 Content Area Curriculum maps. The full maps for each are are available at www.p21.org. Over time, we will add more of our own activities and lesson as we develop them.

Creativity in the Social Studies Classroom:

- Student Learning Standard (Outcome): Students invent an original piece of work that can be published or presented online.
- Example Current or Historic Event Group Analysis: Working in teams, students create a simulation, role play, or webquest that covers a current social or political issue being covered in the news (e.g., global warming, poverty, global economy) or an historic event (American Revolution, Civil War, WWII). The finished products can be packaged, presented and/or donated to a local school, with an accompanying group analysis and reflection on the most innovative and creative elements in each of the products.

Creativity in the Math Classroom:

- Student Learning Standard (Outcome): Students listen to and evaluate others' reasoning and offer improvements and corrections, with supporting arguments. They listen to others' feedback and modify their own arguments as needed. They learn from mistakes, and make repeated attempts at solving problems.
- Example Comparative Geometric Model Analysis: Students explore different ways of tiling a floor using triangular tiles of a single size and shape. Using geometry software or triangles cut from paper, they experiment with rotations, reflections, and translations of a given triangle. Students compare their tilings with one another, suggest ways to prove that any given triangle can be arranged to cover the floor with no gaps, and respond to each others' propositions. In this process, students examine the relationship between angles formed by a transversal to two parallel lines. They see the connection between this discovery and the fact that the sum of the angles in a triangle is always a straight angle (180 degrees).

Creativity in the English Classroom:

- Student Learning Standard (Outcome): Develop and communicate new ideas to others.
- Example "Movie" Style Critique of a Novel: After reading a dystopian novel such as The Giver, The Lord of the Flies, The Handmaid's Tale, or Fahrenheit 451, students will create a movie trailer that highlights universal questions raised by the novel. Students will view each others' trailers, write up notes critiquing them, and present their feedback in a "Siskel and Ebert" remake.

Creativity in the Science Classroom:

- Student Learning Standard (Outcome): Students explain how scientific understanding builds on itself over time, and how advancements in science depend on creative thinking based on the knowledge and innovations of others.
- Example Concept Mapping Scientific Theories: Students choose a scientific theory and research the history of its development, then use concept mapping or time-lining software to diagram previous discoveries, ideas, and technologies upon which the theory was predicated and the different disciplines from which previous knowledge was drawn. Students report on how this theory represented a creative way of approaching this scientific question.

Creativity in the Arts Classroom:

- Student Learning Standard (Outcome): Students will draw on a variety of sources to generate, evaluate, and select creative ideas to turn into personally meaningful products.
- Example Integration of Interpretive Dance: Students work through the creative process (identify a topic, research, explore options, select and develop ideas, get feedback, revise, refine, perform) and create an original piece of choreography that uses the basic elements of dance body, action, space, time, energy. Students next interview several choreographers to discuss how they personally approach an inspiration for a piece of choreography. Students share with each other the choreographers' insights and compare it to the process they used.

Creativity in the World Languages Classroom:

- Student Learning Standard (Outcome): Students as creators and innovators respond to new and diverse perspectives. They use language in imaginative and original ways to make useful contributions.
- Example Create a Poem or Rap Song: Students create raps and/or poems reflecting a perspective, such as a "coming of age" event in the target culture and compare this with the "coming of age" process in the U.S. such as getting a driver's license or the right to vote. These examples are then shared with peers in the target culture who have completed a similar project and the results are shared on a social media website with comments in the target language.



Looking For More Examples? Click here for links to all the P21 curriculum maps for each content area. Each map has dozens of examples and tips to help us on this journey.