

Introduction to Design: Seven Habits of Highly Creative People

Creative Habits	Competencies/Standards	Objectives	Units/Skills	Projects
Habit 1: Creative people ask “Why.”	(H.1.S.1) Students will Identify Problems by thinking critically about sustainability, utility, aesthetic appeal and accessibility of existing designs, processes and products. (Wakefield, 1991; Souriau, 1881)	(H.1.S.1.a) Students will Critique existing products/ designs and will consider how aesthetic value can be added by employing Design Principals.	Proportion Balance Harmony Alignment Repetition Contrast Emphasis	Keep sketch book of design problems/ideas.
		(H.1.S.1.b) Students will critique existing products/ designs and will consider how products can be re-designed for more efficient usage or re-purposed for novel uses.		
		(H.1.S.1.c) Students critique existing designs/ products and will consider the extent to which products are ecologically sustainable .		
		(H.1.S.1.d) Students will critique designs/products and will consider how products and environments are economically and physically accessible to the public.		
Habit 2: Creative people utilize the Design Process to create something new, of value and pertinent to the problem at hand.	(H.2.S.1) Students will understand and routinely employ the steps of the Design Process .	(H.2.S1.a) Students will access knowledge in an effort to thoughtfully define problems/ opportunities .	(CCSS.ELA-Literacy.SL.9-10.1a) Students will come to discussions prepared, having read and researched material under study; explicitly draw on that preparation by referring to evidence from texts and other research on the topic	

			or issue to stimulate a thoughtful, well-reasoned exchange of ideas.	
			Students will deconstruct ideas, processes and products. They will identify its essence or most basic function, and will learn to use such conceptions as a new starting point to take the idea, process or product in a new direction. (Sternberg)	
		(H.2.S1.b) Students will imagine possibilities and generate ideas.	Students will learn to quickly translate ideas from their head onto paper in the form of sketches.	
			Students will learn to visualize possible solutions. Students will employ visual reasoning, rotation, transformation, synthesis etc. (Daniels in Davis)	Represent images in Three dimensions using 2-point perspective.
			Students will learn to combine ideas across varied domains.	(Seelig)
			Students will seek inspiration from exemplars and nature	Golden mean Fibonacci Sequence

			(i.e. form, space and proportion)	
		(H.2.S1.c) Students will plan and develop solutions to design problems.	(B.V.1.3) Students will utilize elements of design (i.e. line, space, color, texture, shape and value) and principles of design.	
			Students will learn to solve problems through the process of modeling. Students will understand the role of modeling in linking "classroom mathematics and statistics to everyday life, work, and decision-making. They will "use appropriate mathematics and statistics to analyze empirical situations, to understand them better, and to improve decisions."	
			Students will access technology to model and refine their solutions	Exposure to Adobe Graphic Design; Exposure to Auto- CAD Exposure to Solid Works. Exposure to Robotics
			Students will	

			collaborate in teams during the planning stage.	
		(H.2.S1.d) Students will analyze and evaluate solutions. They will effectively communicate ideas and defend the value of their design solutions. (Sternberg, 2003; Csikszentmihalyi, 1996)	Students will propel conversations by posing and responding to questions that relate the current discussion to broader themes or larger ideas; actively incorporate others into the discussion; and clarify, verify, or challenge ideas and conclusions. (CCSS.ELA-Literacy.SL.9-10.1c)	Student or group presentations at the conclusion of each project; followed by audience questions and feedback.
Habit Three: Creative people access knowledge (See Design Principles)				
Habit Four: Creative people alter their point of view.	(H.4.S.1) Students will identify relationships analogies, metaphors as a means of increasing flexibility in their thinking.			Novel combinations (Seelig)
Habit Five: Creative people persevere. They identify and surmount obstacles. (Sternberg, 2003; Wagner 2012)	(H.5.S.1) Students will learn to view failure as an inescapable part of the Design Process.			Student presentation, teacher and student critique.
Habit Six: Creative people take sensible risks. (Sternberg, 2003; Wagner, 2012)They buy low and sell high. (Sternberg, 2003) They	(H.6.S.1) Students will learn to see design problems as potential projects that can add value and create wealth.	(H.6.S.1.a) Students will access technology as a means of effectively communicating ideas to the public.		Keep sketch book of design problems/ideas.

pay attention and look for opportunities to add value to existing products or processes.				
Habit Seven: Creative People are self-motivated. (Csikszentmihalyi, 1996; Pink, 2008)		(H.6.S.2.a) Students will learn consider the marketability of Innovative ideas and products and how innovative ideas and products can be used to launch, re-create and/or sustain a business.		