The Transliterate Student

Expanding Literacy Practices Through Design Thinking and Digital Media

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http://mediatransforms.us/Transliteracy

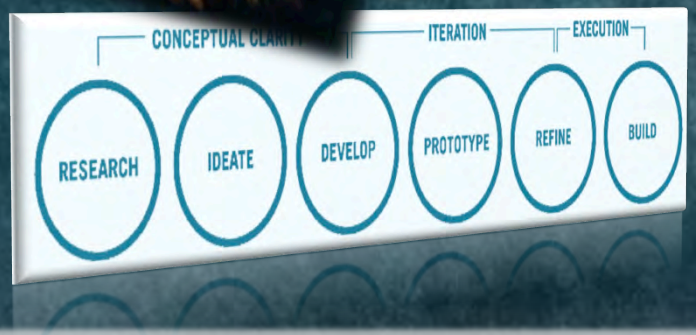
The Plan

- How I think about what I do.
- Why I think it is important.
- Provoke thinking and discussion about media, technology, and design process in school literacy practices.
- What might be in it for you?

Skills and Knowledge

Technical Proficiency:
Skills and content knowledge development

Contextual Relevance:
Traditions and history of symbolic design and aesthetics; personal experience, values, beliefs



Design Thinking:
Rigorous, divergent, creative, and imaginative. Developing Habits of Mind

Environment/Habitat

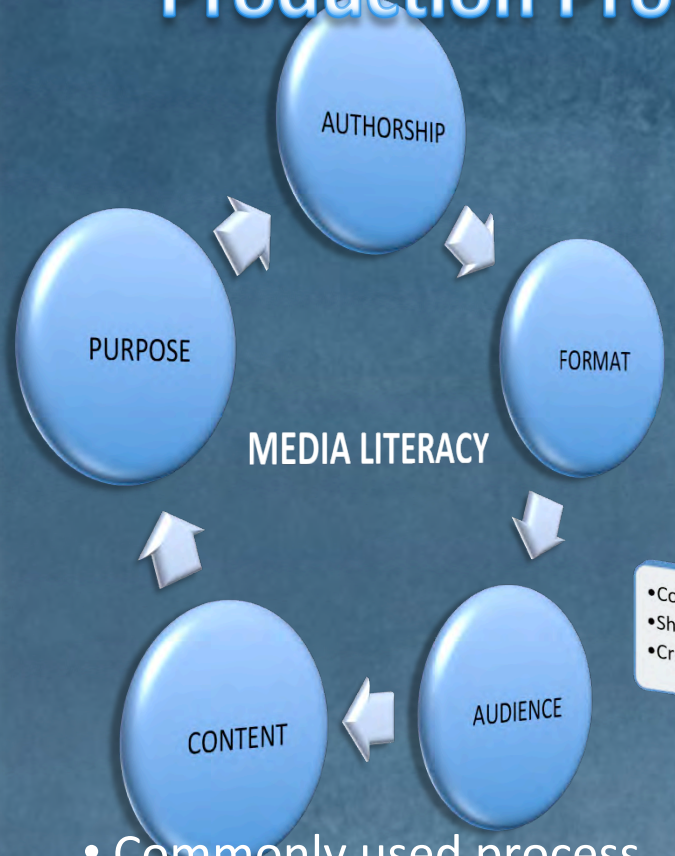
Resources: In the classroom, in the individual, online, and in the community

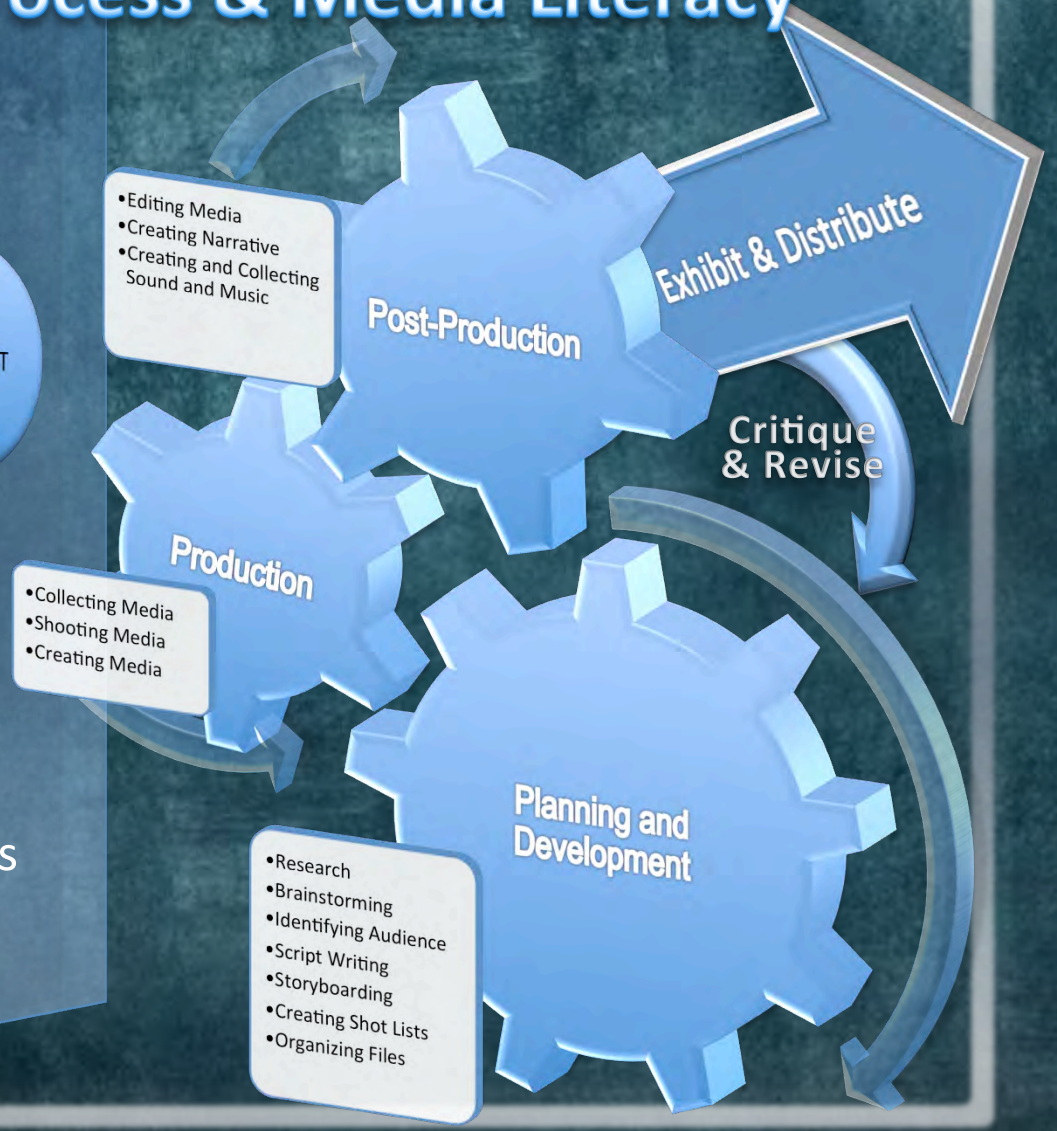
Culture: Co-create a safe place for exploration, play, and creativity

Habitat: A physical space that nurtures and facilitates imagination and creativity

Pedagogy Framework

Production Process & Media Literacy





- Commonly used process
- Collaboration critical
- Process provides rigor
- Goal dictates fidelity

Student Driven Media Example

Some Important Points

- Content standards are met
- Project allows for the construction of many solutions
- Key technical capacities are not necessarily explicitly taught
- Students often choose to respond using digital media tools, asked to or not
- Students find, learn, and use the resources they need to succeed

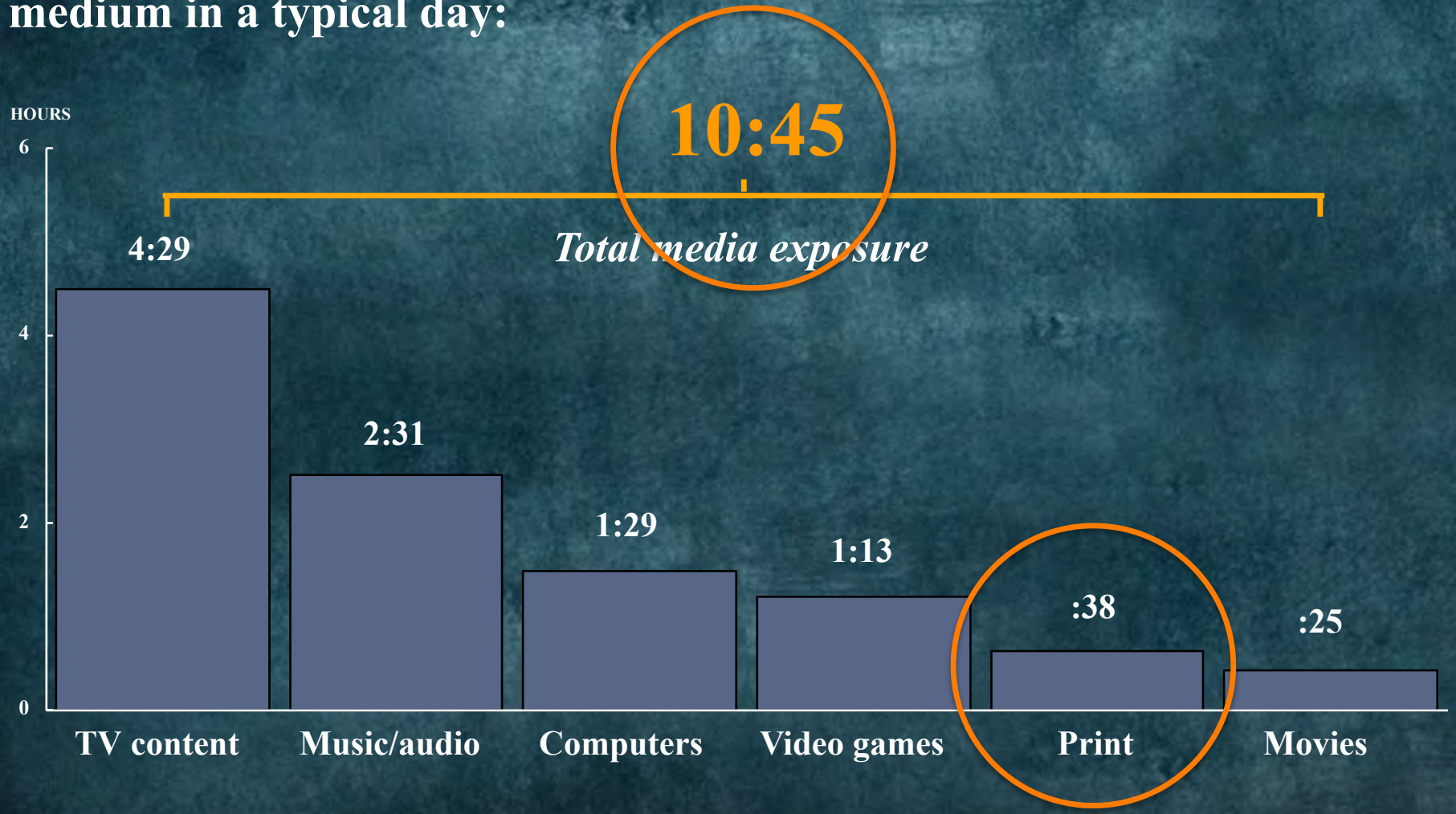
Context

A Multimedia-based Perspective

CHART 1

Media Use, By Platform

Among all 8- to 18-year-olds, amount of time spent with each medium in a typical day:



Source: Kaiser Family Foundation, *Generation M2: Media in the Lives of 8- to 18-Year-Olds,* 2010.

Media Use Goals

Potential for driving questions in content area

Connect to student's various "life-worlds"

Facilitate participation in culture, represent understanding, and construct meaning

Scarcity vs. Abundance

Information: quantity and quality

Accessibility: anytime and anywhere

Networked: added value connections

Sharing: global audience, cognitive surplus

Learning: formal and informal (affinity spaces and MOOCs)

See e.g. "Why School?" by Will Richardson

Adaptability & Informal Learning

blender 3d gun tutorial

Making a gun

This is a beginners guide to making a gun and so does not require great modelling skill but does require a basic knowledge of the blender 3d user interface (blender 2.48). I have also been very rough in my modelling of the gun as I wanted to cover the basics of how you should go about it regardless of the model.

P.S. Sorry for the picture quality

Just follow these steps to make any gun of your choice!

1. Firstly, before you open up blender, got to google image search and look for your favourite gun. You must get a side view pic(it doesn't matter which direction it faces.) Then save it to your computer where you can find it later. For this tutorial im am going to model an AK74u, a shorter sub-machine gun version of your regular AK47.I'm going to use this pic.

2. Next, open up blender and delete the default cube. Then go to the bottom left of the 3d window a... (View)-->[Background Image] as in the picture below.

When the little box appears click "use background image" and then "load" (see image below)

Think Apprenticeship

Qualities of Informal Learning

Valued highly and accessible

Self-directed curriculum

Adaptable and dynamic learning

Supportive habitat, culture, and resources

Iteration required for mastery

Process not just procedure oriented

Community of diverse teachers/mentors

Feedback is immediate and continuous

Risk is a key element

Some of the scary stuff

- shift towards shared working spaces and higher visibility from community (total transparency)
- greater sharing of resources
- more peer and mentor driven, informal learning
- greater autonomy for students
- less control for teachers over subject content
- technophobia or lack of personal interest
- learning curve for instruction
- cost (purchase, updates, repairs, training)

21st Century Goals: Four C's

Critical Thinking (*Design Thinking*): deep learning from rigorous exploration, iterative prototyping, and elaboration and refinement of critical analysis.

Creativity (*Elaboration*): exploration, discovery, innovation, an abundance of imaginative, complex, and diverse ideas through *purposeful play*.

Communication (*Multiliteracy*): extension of literacy to include multiple modes of representation and meaning making.

Collaboration (*Connectedness*): Participatory and connected to an extended, networked or linked learning community.

Critical Thinking

Process of Deep Learning

Four dimensions of Understanding

Purpose: WHY a discipline exists and does what it does

Knowledge: WHAT a discipline addresses; WHAT a discipline "knows"

Method: HOW a discipline comes to know what it knows

Form: HOW that knowledge is represented and conveyed

Observational Sequencing

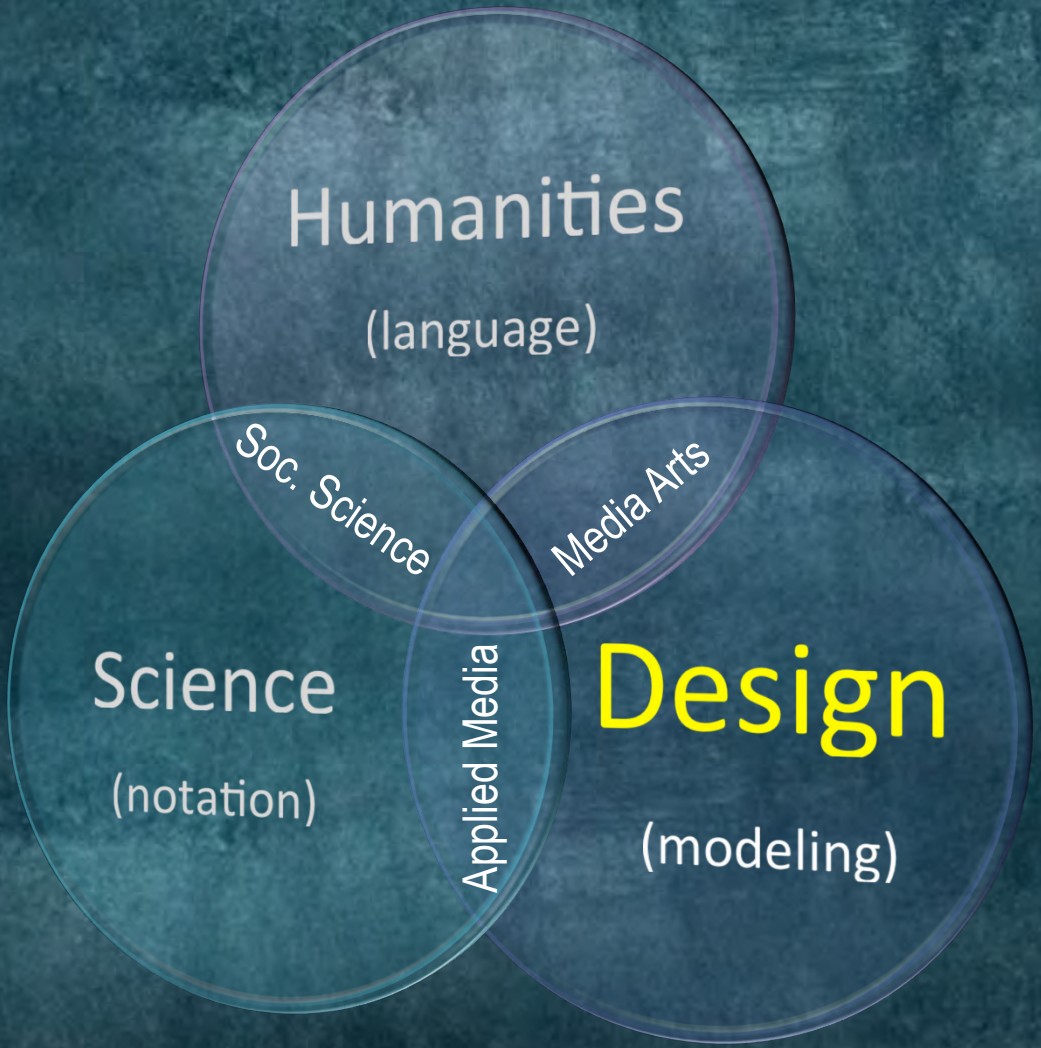
. . . at what point does imagination and creativity (not just observation) kick in?

Integrating Curricular Frameworks

Shared purpose of Arts, Science, and Language

Understanding, Interpreting, Representing Ourselves and the World

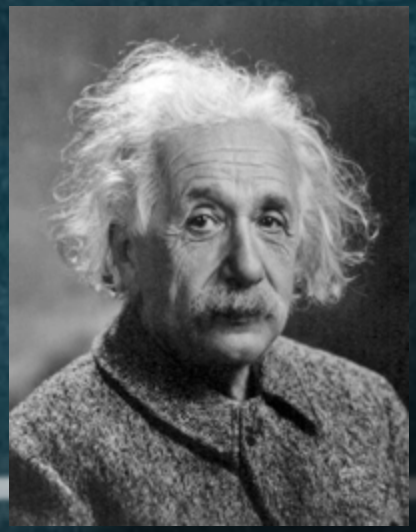
Practice	Math	Science	Art/Design	Literacy
Make sense of problems and persevere in solving them	✔	✔	✔	✔
Reason abstractly and quantitatively	✔	✔	✔	✔
Construct viable arguments and critique the reasoning of others	✔	✔	✔	✔
Use appropriate tools strategically	✔	✔	✔	✔
Develop and use models	✔	✔	✔	✔
Plan and carry out investigations	✔	✔	✔	✔
Analyze and interpret data	✔	✔	✔	✔
Obtain, evaluate, and communicate information	✔	✔	✔	✔
Attend to precision	✔	✔	✔	✔


Humanities
(language)
Soc. Science
Media Arts
Science
(notation)
Applied Media
Design
(modeling)

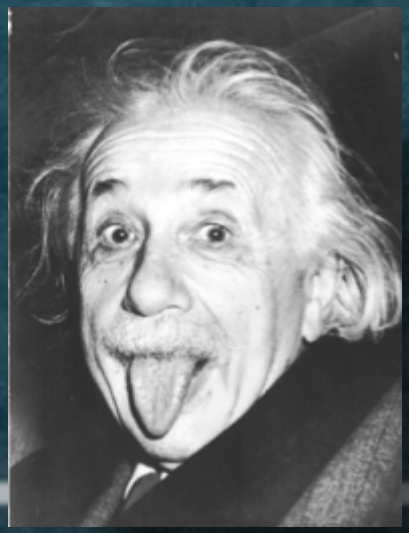
Integrated Methods and Forms

Interdisciplinary Approach with Digital Media

- Bust disciplinary silos
- Creatively elaborate and extend knowledge areas
- Model using visual imagery and tell imaginative stories that help make sense of things
- Re-define complex problems and create aesthetic solutions to them; make the invisible visible



The mere formulation of a problem is far more essential than its solution, which may be merely a matter of mathematical or experimental skills. To raise new questions, new possibilities, to regard old problems from a new angle requires creative imagination and marks real advances in science. –Albert Einstien

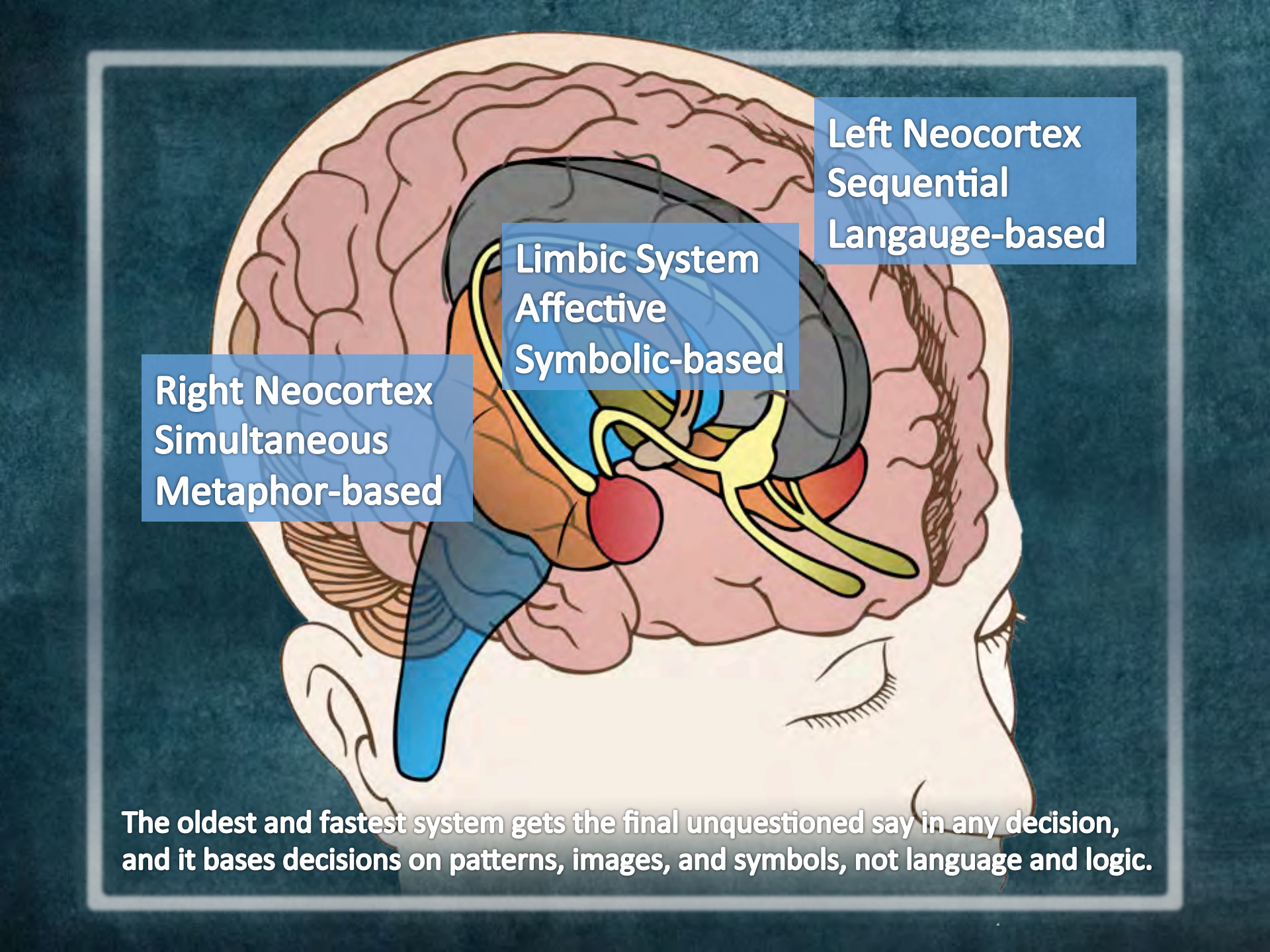


In a world of abundance . . .

Aaron Koblin

. . . how do we construct meaning?

Chris Jordan


Left Neocortex
Sequential
Langauge-based
Limbic System
Affective
Symbolic-based
Right Neocortex
Simultaneous
Metaphor-based
The oldest and fastest system gets the final unquestioned say in any decision,
and it bases decisions on patterns, images, and symbols, not language and logic.

Academic	Linked/PBL	Informal
Left Neocortex	Right Neocortex	Limbic System
Logical/Cognitive	Affective/Emotional	Impulsive/Reward
Download	Upload	Connecting
Passive	Experiential	Sensation
Curriculum	Creative	Risk
Roadmap	Discovery/Spontaneous	Unregulated
Allegoric	Participatory	Symbolic
Hierarchical	Social	Autonomous

Expanding the Idea of Outcomes

Goal: Creative Critical Expression

"Personal expression is viewed as an end in itself; it is living at its best and fullest."
Taxonomy of Educational Objectives

COGNITIVE DOMAIN **AFFECTIVE DOMAIN**

Digital Media as Deep Learning Tool

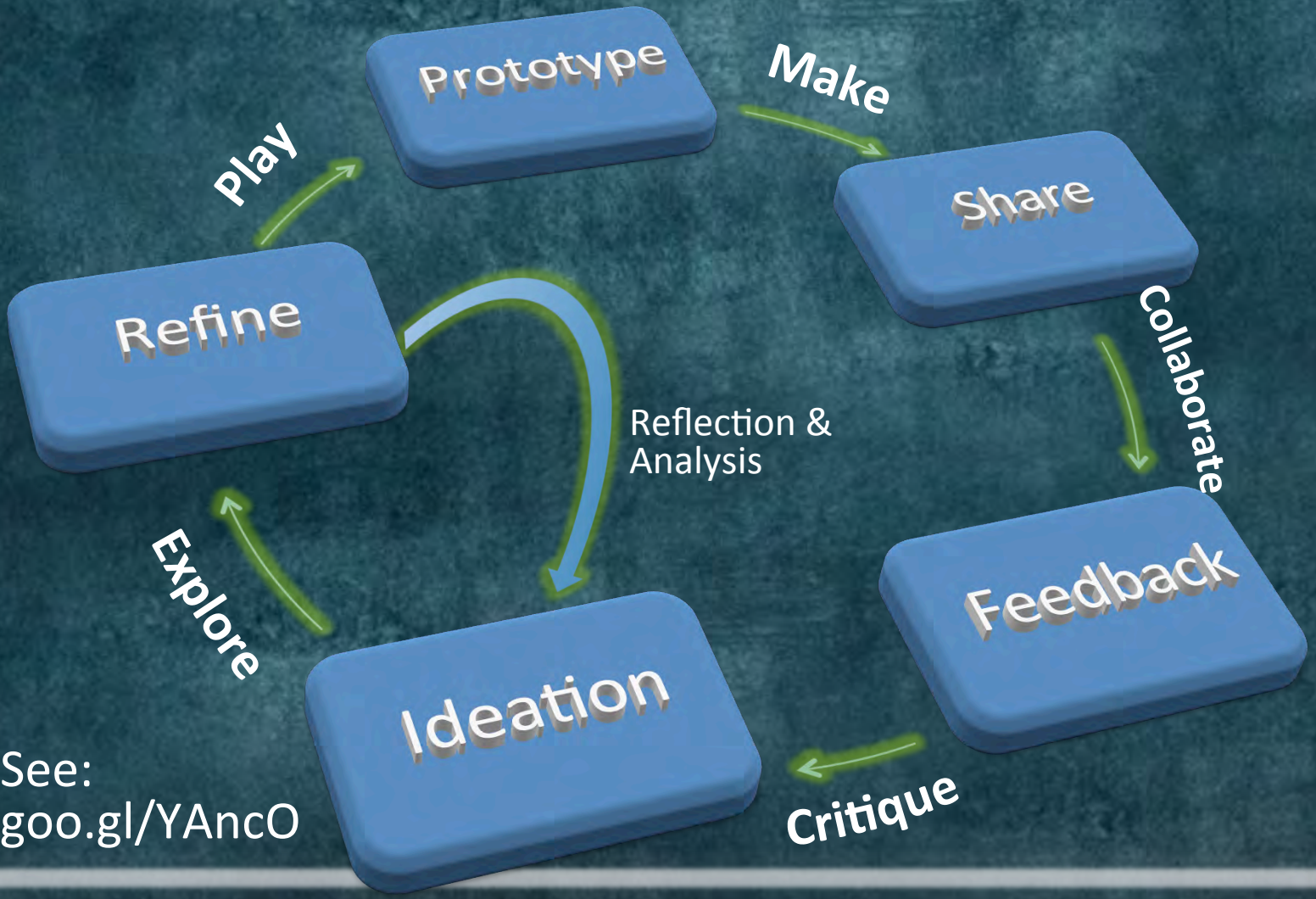
Constructs meaning using multiple systems of representation (i.e., differentiation)

Engages students cognitively *and* emotionally

Is central to the **public and private life-worlds** of students

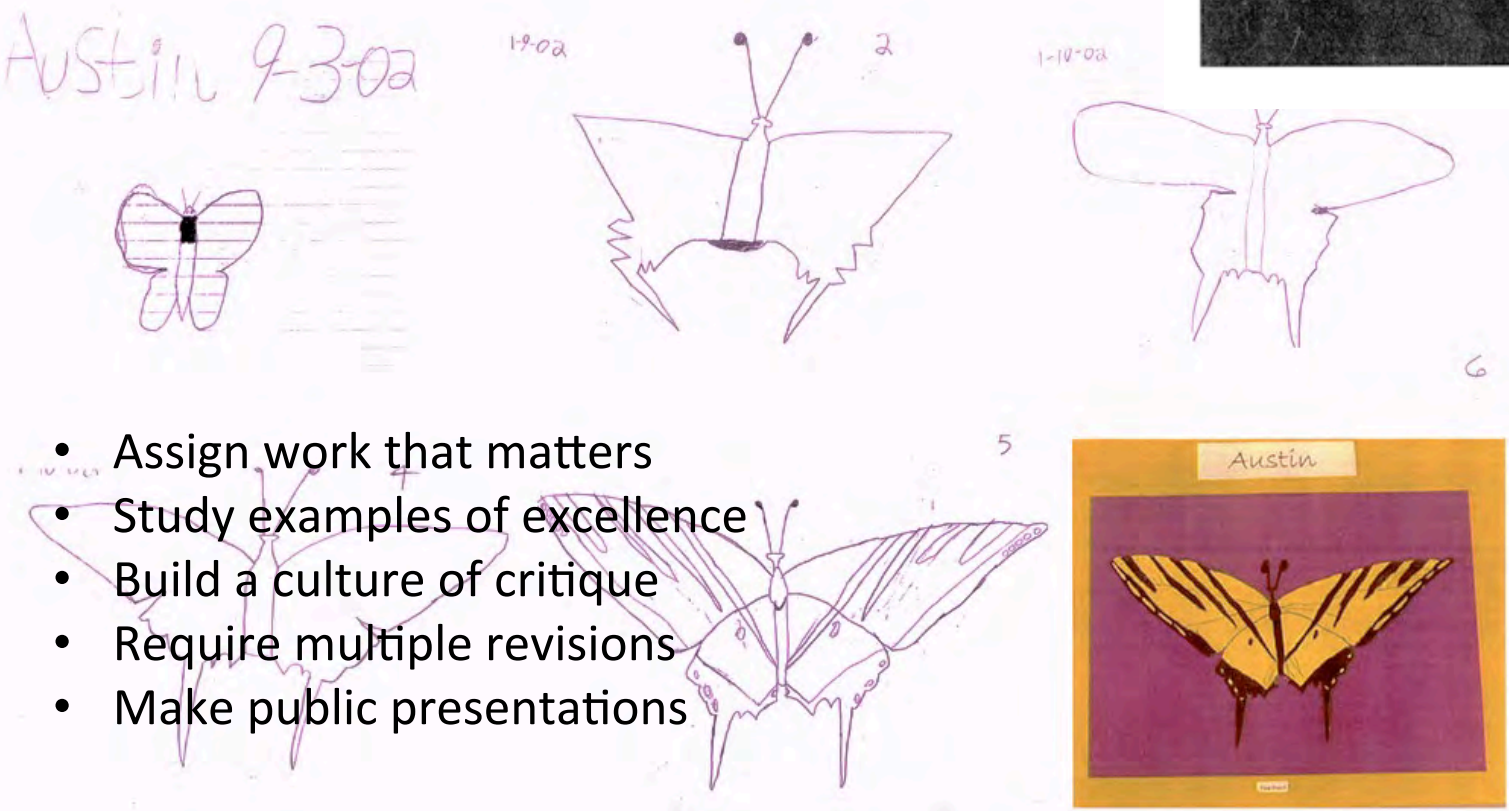
Fulfills **intrinsic motivation** needs of autonomy, competence, and relatedness (self-efficacy and self-determination)

DESIGN THINKING
Iterative & Reflective Prototyping



See:
goo.gl/YAncO

Austin's Butterfly



- Assign work that matters
- Study examples of excellence
- Build a culture of critique
- Require multiple revisions
- Make public presentations

vimeo.com/38247060

"An Ethic of Excellence: Building a Culture of Craftsmanship with Students," Ron Berger

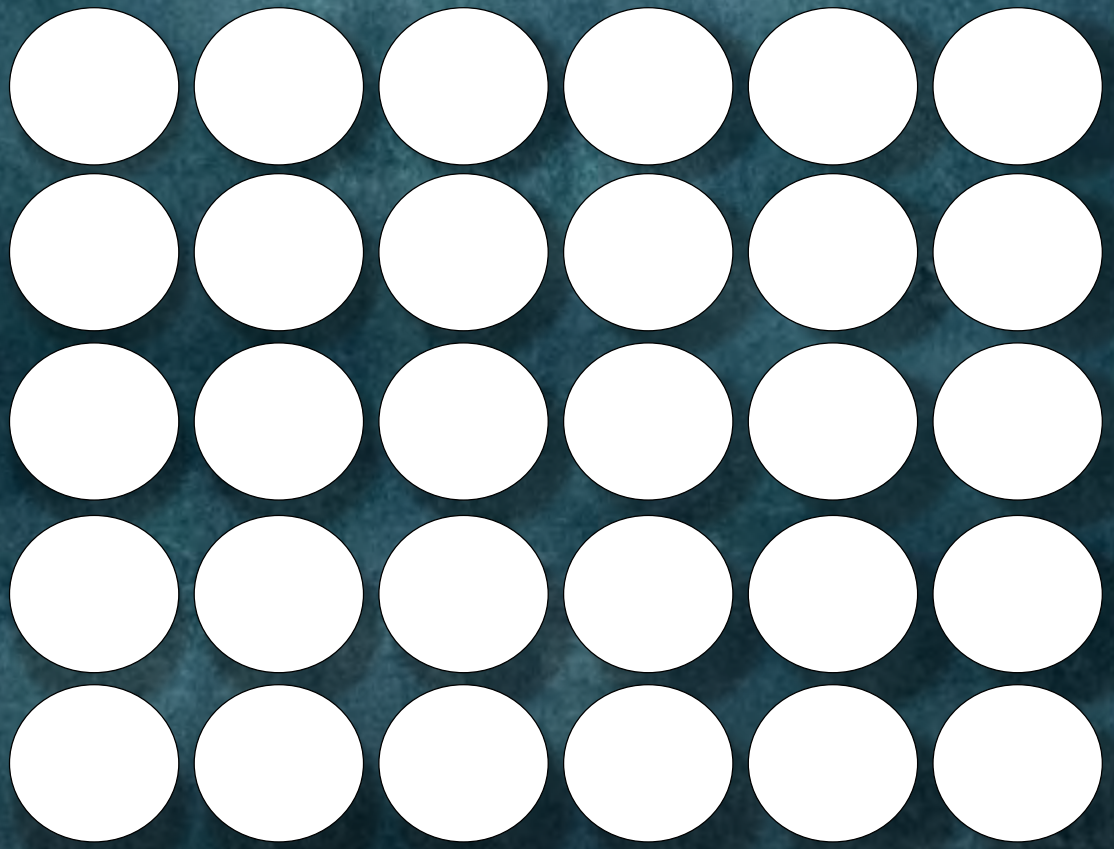
Case Study: New Tech News

Creativity

Purposeful and Relevant Elaboration

30 Circles Exercise

1. Transform each circle into something recognizable, such as a ball, a planet, bicycle wheels, etc.
2. It's OK to draw outside the lines.
3. The goal: transform all **30** circles in the time allotted.



How did you do?

- Overcome blocks
- Low resolution
- Many ideas
- Playful
- Divergent ideas
- Therapeutic

Next Step:
Pick and refine

Creative Strategies for Integrated Modeling

Anything NOT Reductive or Literal

Depiction: rendering or making visible

Reformatting: borrowing formats from other disciplines

Layering: superimposing multiple concepts and lenses

Mimicry: enacting or assuming the role of . . .

Projection: speculating or predicting; prequel/sequel

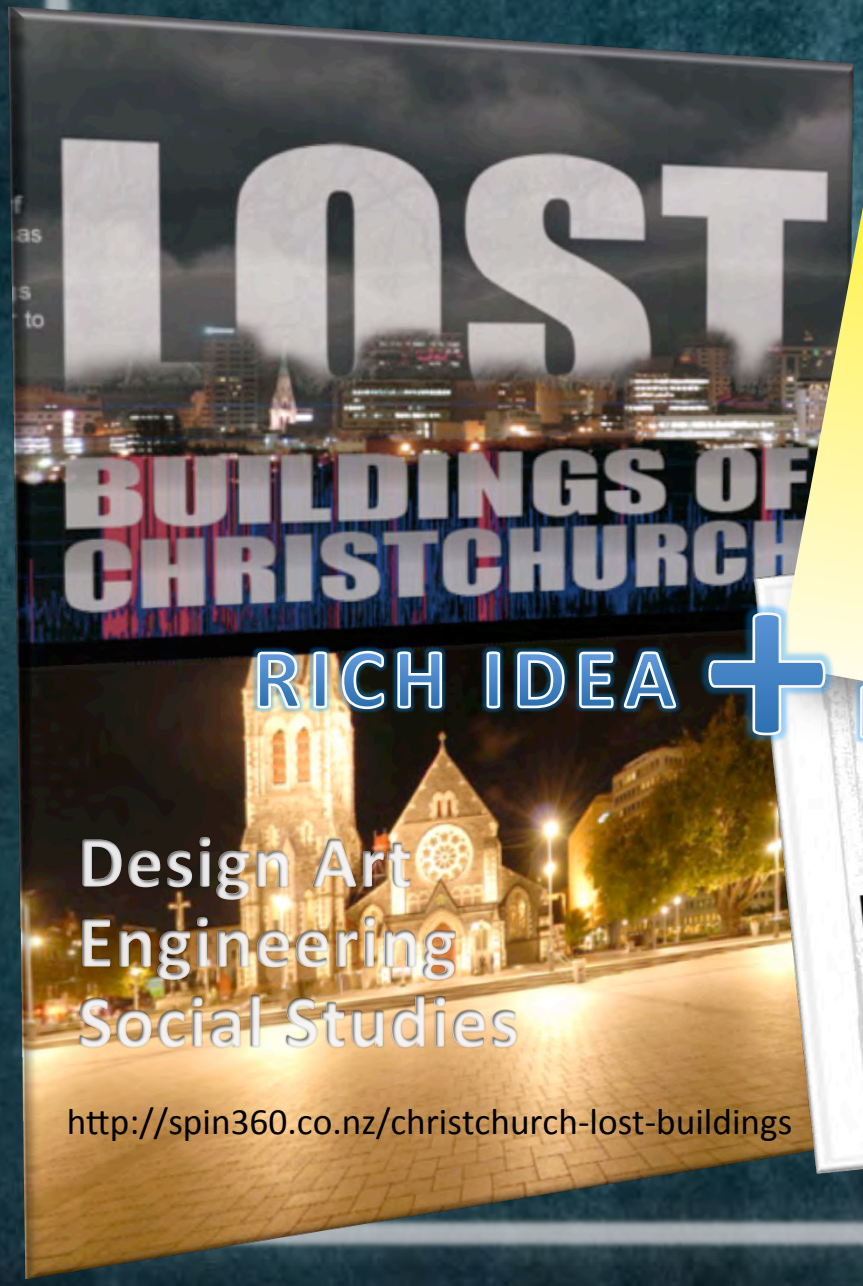
Metaphor: making analogous associations, casting as . . .

Enumeration: constrain, amplify, extend, randomize

Imaginal: stream, fantasy, anthropomorphize, distort, reversal

Adapted from Dr. Julia Marshall, San Francisco State University

FILL IN THE STORY


LOST
BUILDINGS OF
CHRISTCHURCH
RICH IDEA
Design Art
Engineering
Social Studies
http://spin360.co.nz/christchurch-lost-buildings

Design Thinking for Educators
Version One
DESIGN PROCESS
bootcamp bootleg
d.

PBL
Publicly Presented Product
Driving Question or Challenge
Need to Know
Inquiry & Innovation
21st Century Skills
Student Voice & Choice
Feedback & Revision

Just Remember: Zombies Work

Theme Oriented

Cross-curricular

Communication

Development of Multiple Literacies

Literacy Competency Framework

The Four Resources of New Literacy Competency

adapted from Freebody, 1992

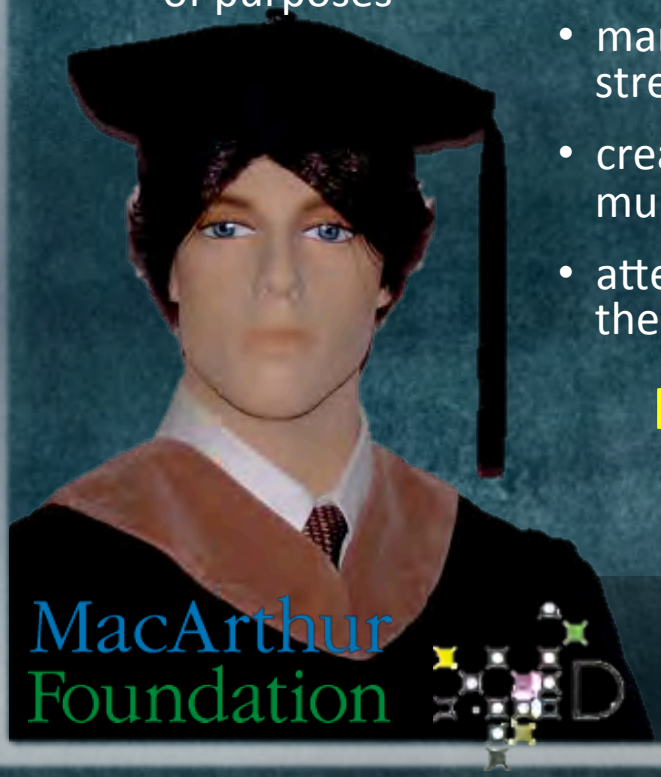
Common Core Literacy Connections

- Use technology to produce, publish, and update
- Make strategic use of digital media and visual displays
- Integrate and evaluate multiple sources of information presented in diverse formats and media
- Synthesize information from a range of sources
- Web 2.0 tools are required components for students to be successful with new standards
- Supports the reading, writing, speaking and listening strands

California ICT Digital Literacy Policy: Information Literacy Standards for Student Learners

National Council of Teachers of English: Set of "21st-century literacies" for everyone:

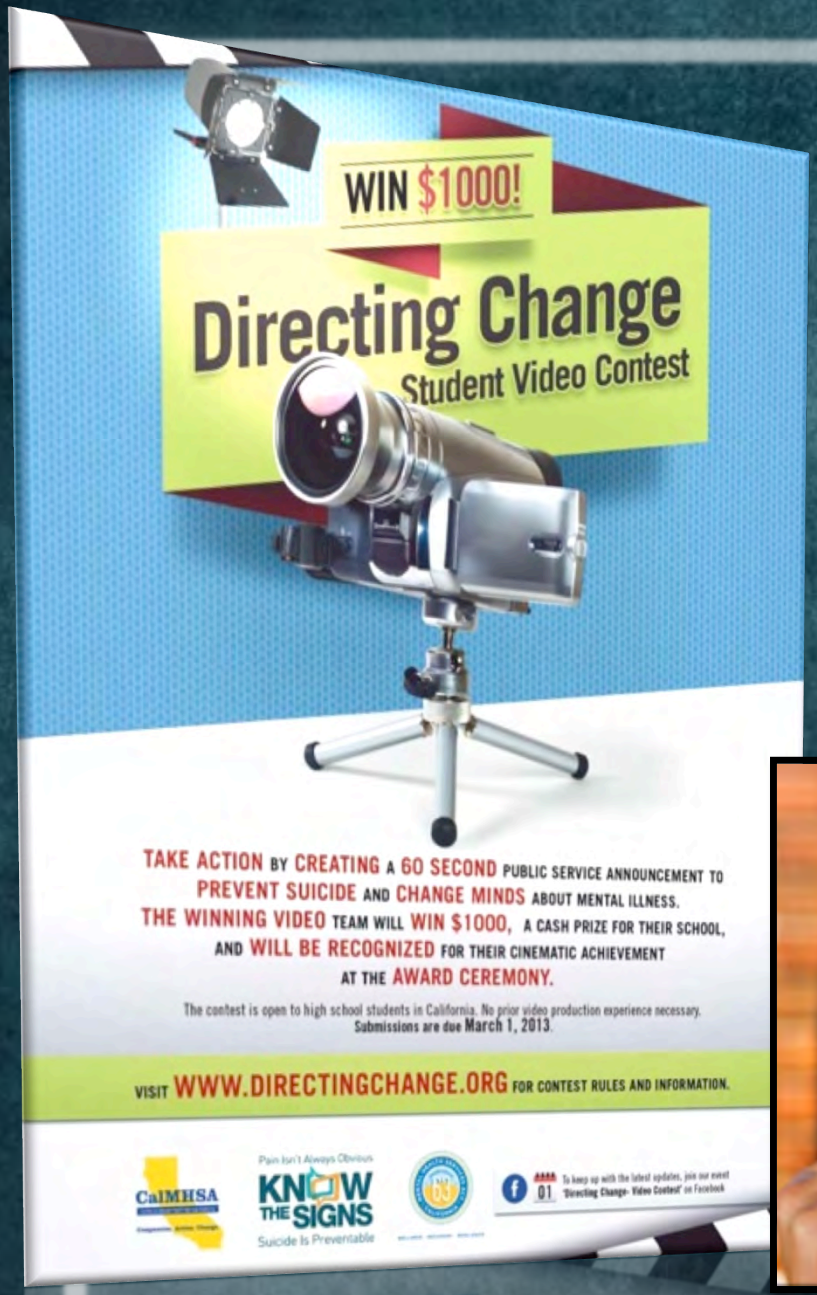
- develop proficiency with the tools of technology
- pose and solve problems collaboratively and cross-culturally
- design and share information for global communities to meet a variety of purposes
- manage, analyze and synthesize multiple streams of simultaneous information
- create, critique, analyze and evaluate multimedia
- attend to the ethical responsibilities required by these complex environments



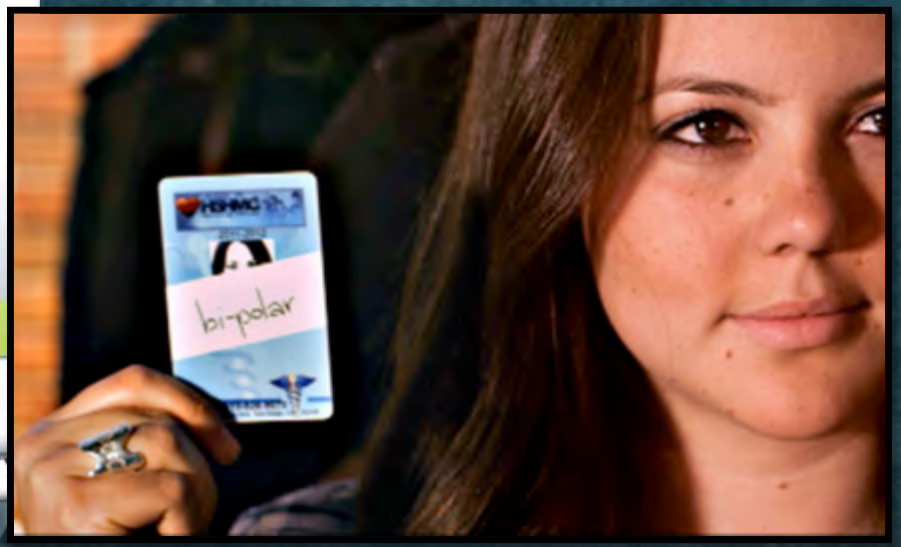
Integrated Design Academies and Academic Research

MacArthur Foundation

BERKELEY CENTER FOR NEW MEDIA



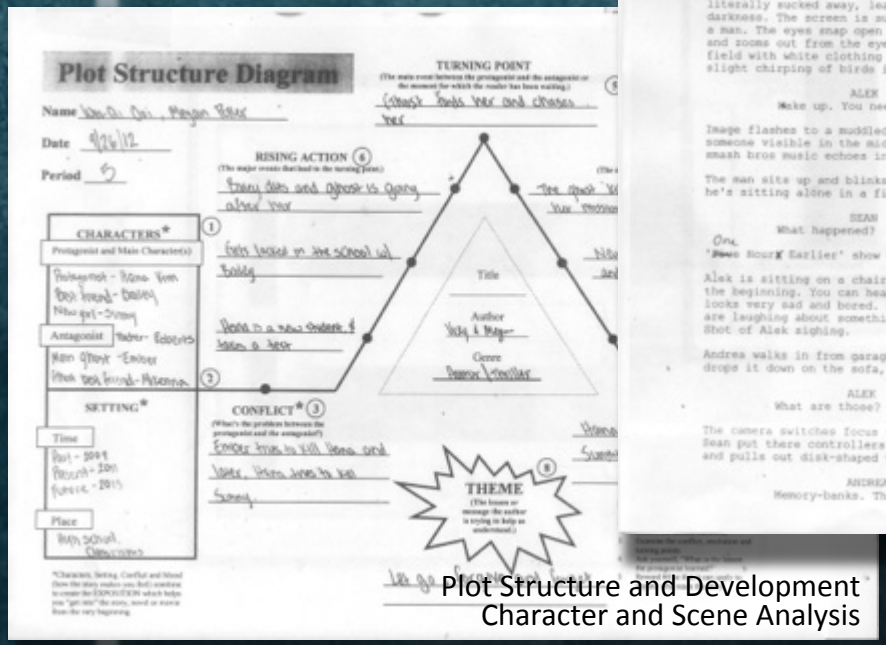
Outside Mentor/Evaluator
Tangible benefit to school
Relevant Topic
Personal reward
Explore empathy & ethics



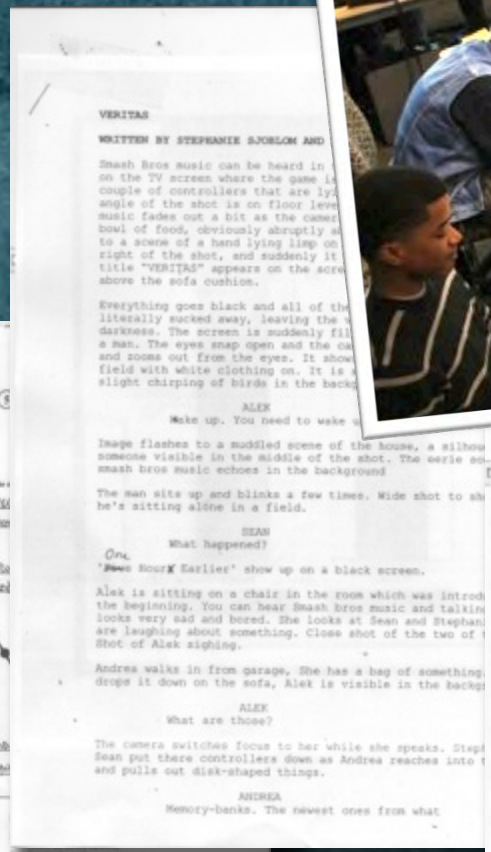
Narrative and Documentary Film

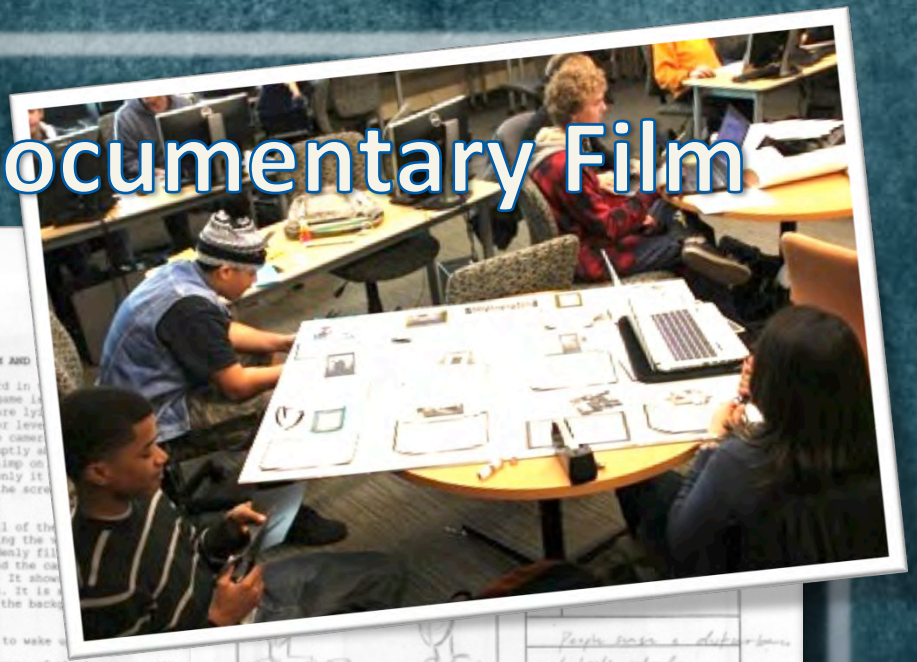
CCS Strands

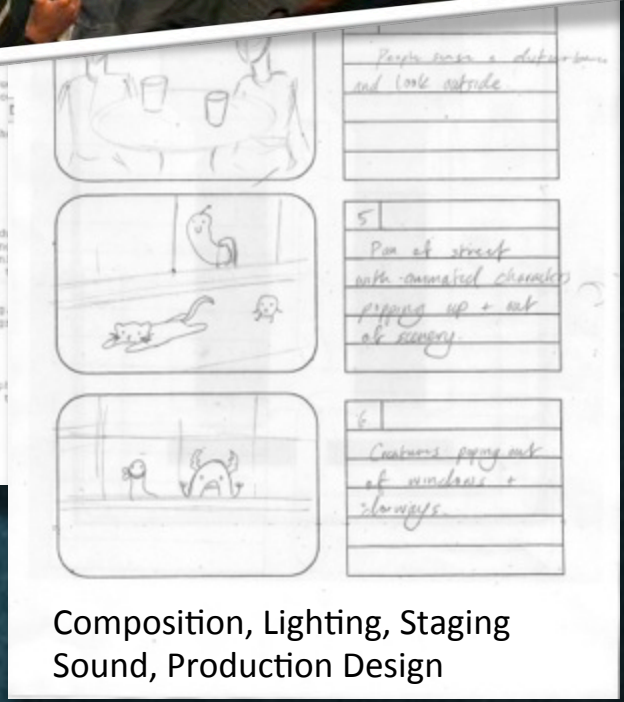
- Reading
- Writing
- Speaking
- Listening



Plot Structure and Development
Character and Scene Analysis

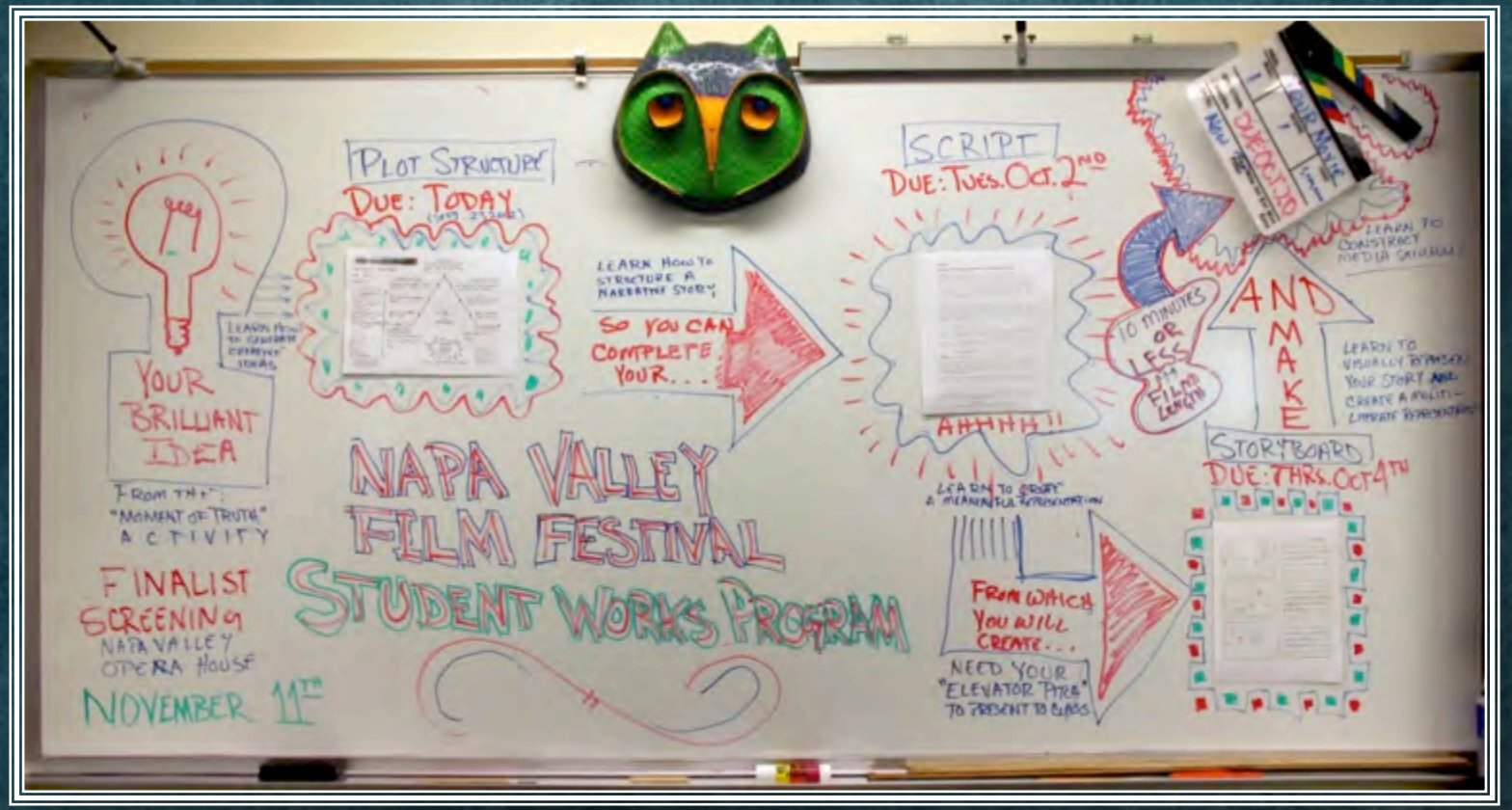






Composition, Lighting, Staging
Sound, Production Design

Creative Approach to Curriculum Invites Creativity

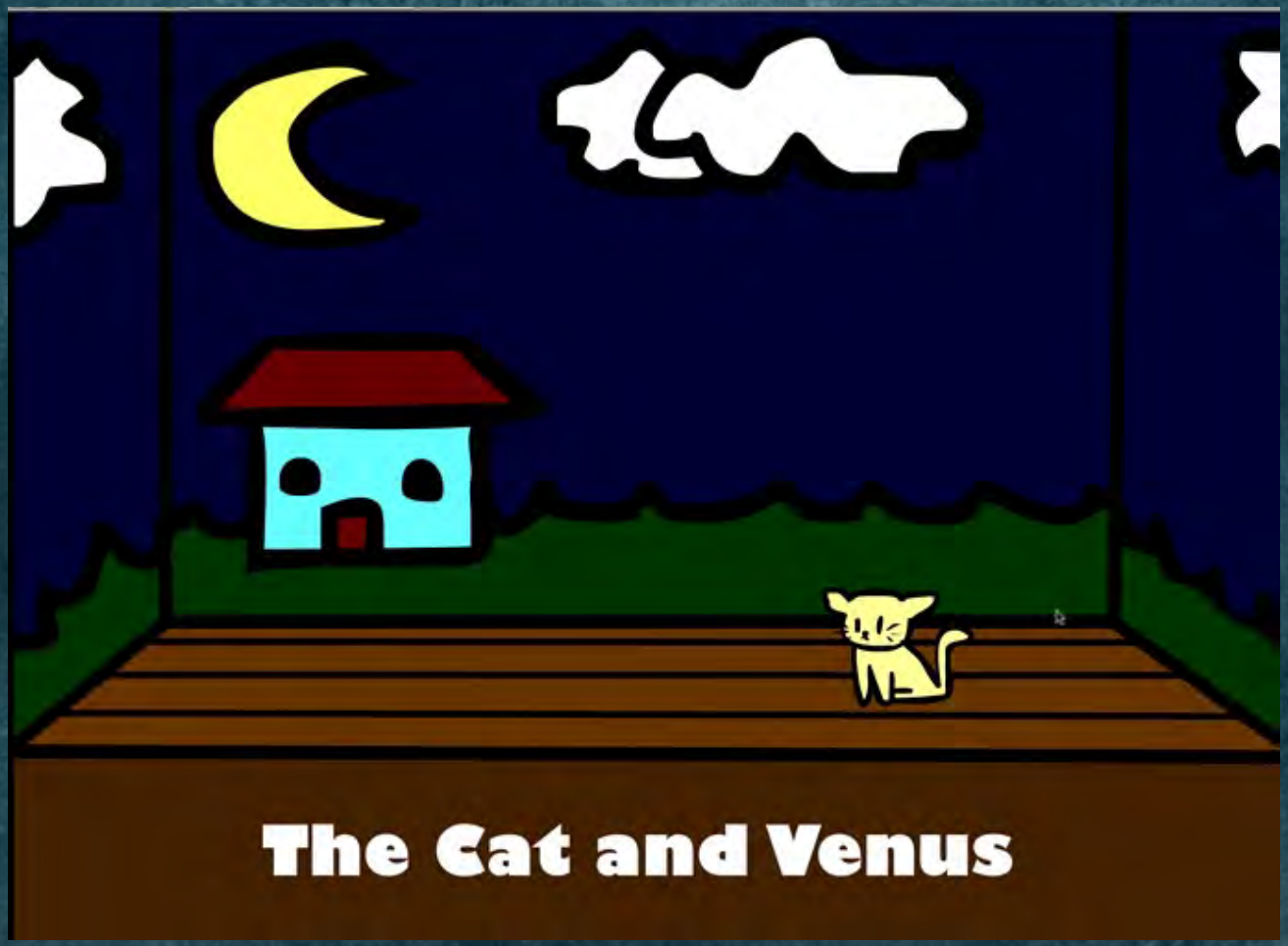


Directing Change Student PSA

Multiliteracy

Ability to access and utilize various forms of media and technology to communicate (understand and construct meaning) in a diverse, globalized community.

Multiple Modes



Making Connections/Mashing Up

Challenges

Participation Gap: unequal access or ability to use the necessary tools and resources

Capacity Building

Transparency Issues: understanding how media shapes perception

Media Literacy

Ethics Challenge: training and socialization that prepares students as media makers.

Copyright, Fair Use, Privacy, Safety, Ethics

Collaboration

Connecting the individual, the content, and the community

Emerging Practice

Level of Participation (*intensity*) →

Genre of Participation (**motivation**) →

Institution Driven	Peer/Social Driven	Interest Driven
		Geeking Out
	Messing Around	
Hanging Out		

Rigor
Relevance
Authenticity

MacArthur Foundation, *Living and Learning with New Media*

NAPA VALLEY FILM FESTIVAL

Student Driven
Crazy Deadline
High Profile (risk of failure)
Community Integration
Professional Community
Industry Assessment

Results

Document Your Process
(both teachers and students)

1000 memories

CAL VET VETERANS HOMES

NATIONAL ARCHIVES

Sharing is Caring

Are you sharing your good stuff with both students and other teachers?

How do you share your good stuff?

Diigo, Pinterest, Delicious, Facebook, etc.

Are you developing a professional practice of accessing and sharing resources and technology in a learning community or affinity group?

Task: Creating affinity learning groups as a coconspirator (knowledgeable peer) rather than authoritative source.