

# *The Transliterate Student*

EXPANDING LITERACY PRACTICES THROUGH  
DESIGN THINKING AND DIGITAL MEDIA

JAMES D BROWN, PH.D.

NEW TECHNOLOGY HIGH, NAPA

[JBROWN@NEWTECHHIGH.ORG](mailto:JBROWN@NEWTECHHIGH.ORG)

[HTTP://MEDIATRANSFORMS.US/TRANSLITERACY](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?



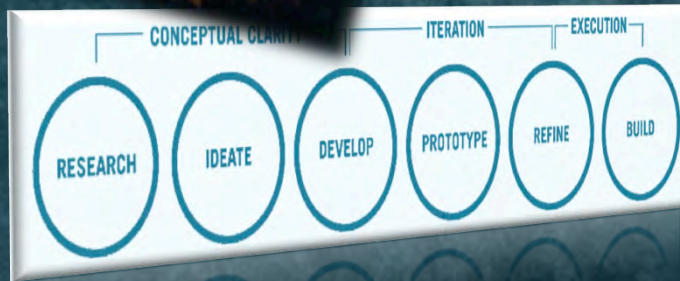
# Skills and Knowledge



**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

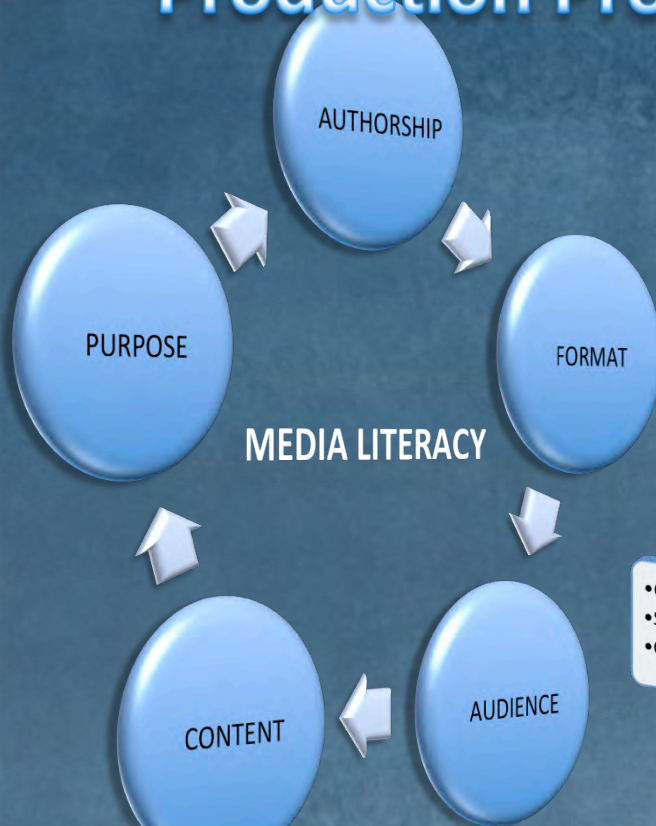


**Resources:** In the classroom, in the individual, online, and in the community

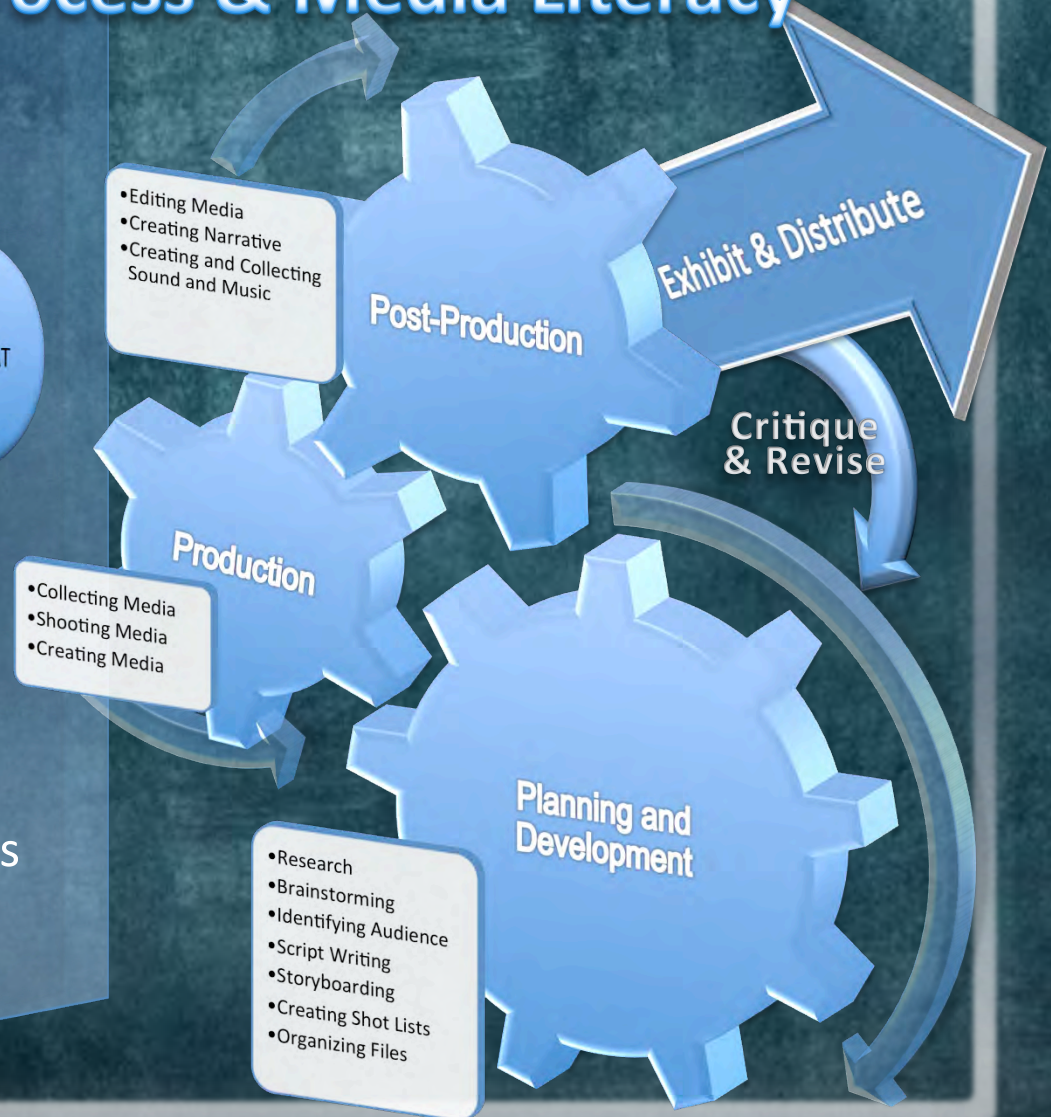
**Culture:** Co-create a safe place for exploration, play, and creativity

**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

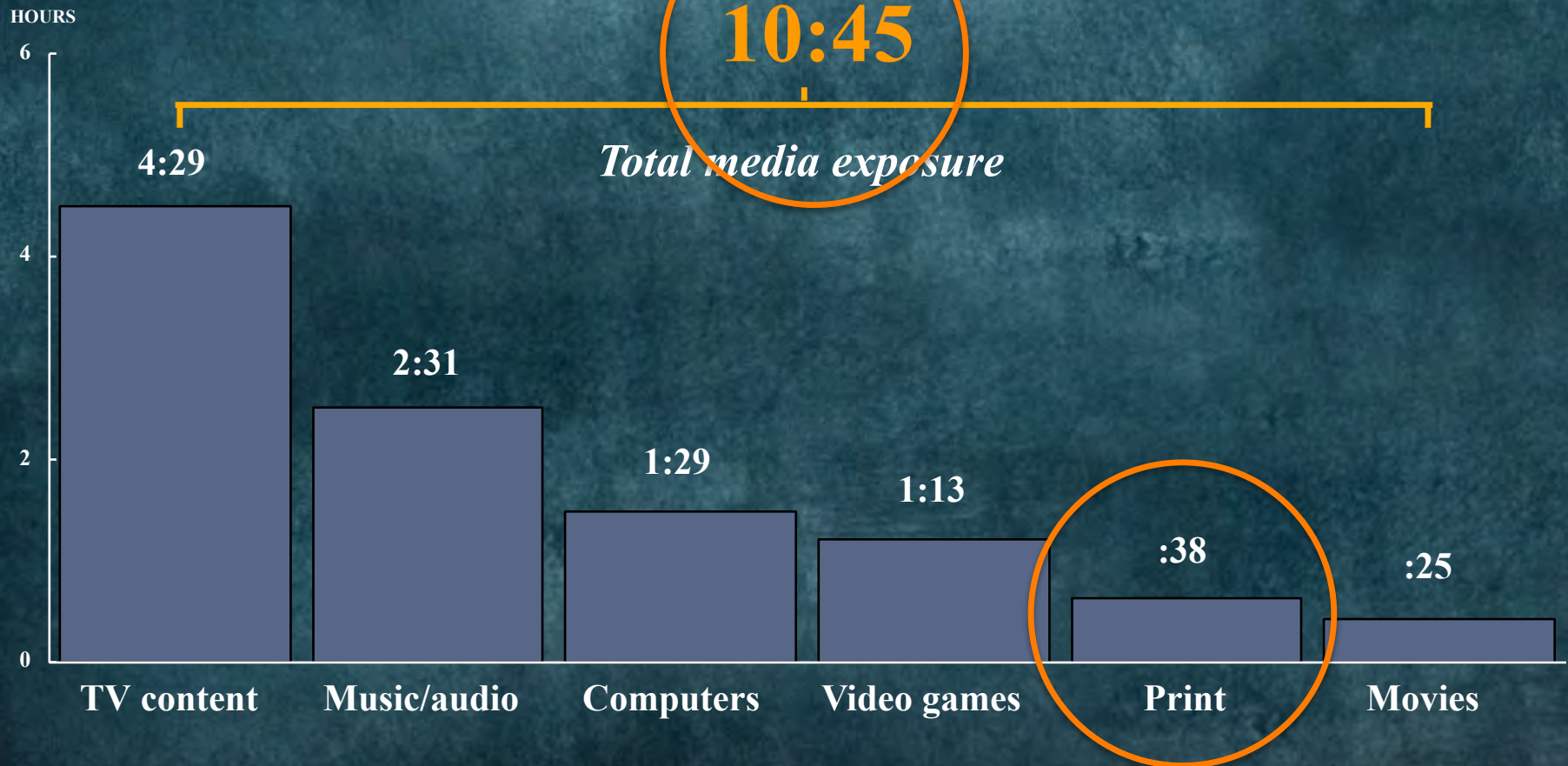
# *Context*

A Multimedia-based Perspective



# Media Use, By Platform

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



# 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 modeling skill but does require a basic knowledge of the Blender 3d user interface (Blender 2.48). I have also been very rough in my modeling 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 AK74, 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 (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)

# 21<sup>st</sup> 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)

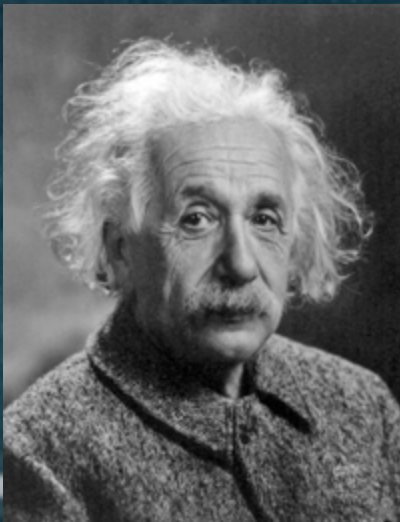
Applied Media

**Design**  
(modeling)

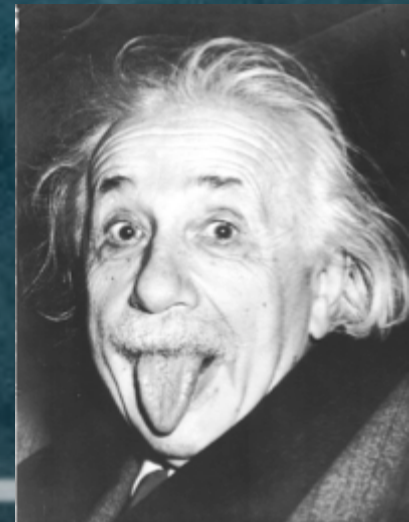
# Integrated Methods and Forms

## *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 Einstein*



In a world of abundance . . .



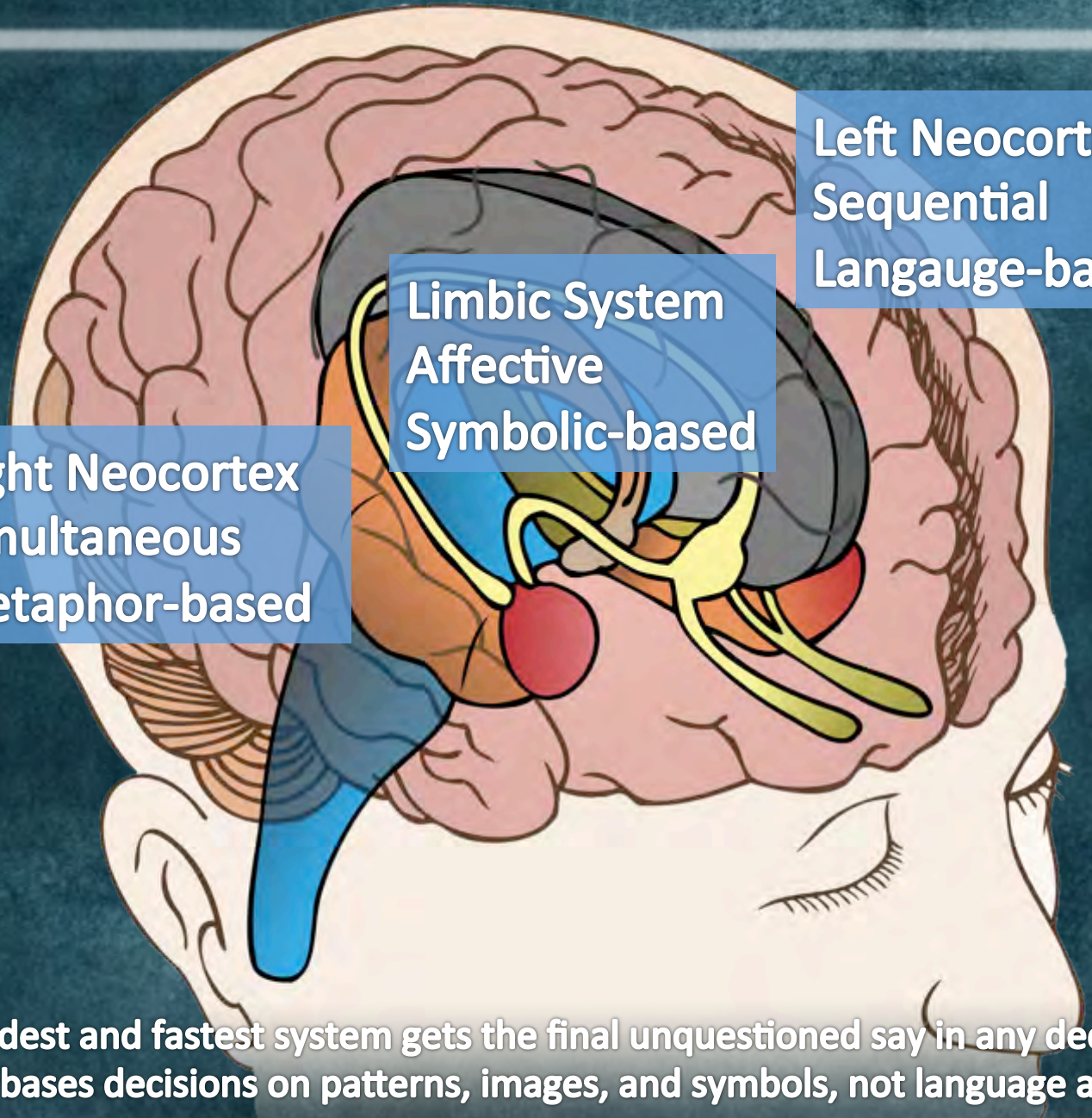
Aaron Koblin

. . . how do we construct meaning?



Chris Jordan





Right Neocortex  
Simultaneous  
Metaphor-based

Limbic System  
Affective  
Symbolic-based

Left Neocortex  
Sequential  
Language-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

Left Neocortex

Logical/Cognitive

Download

Passive

Curriculum

Roadmap

Allegoric

Hierarchical



## Linked/PBL

Right Neocortex

Affective/Emotional

Upload

Experiential

Creative

Discovery/Spontaneous

Participatory

Social



## Informal

Limbic System

Impulsive/Reward

Connecting

Sensation

Risk

Unregulated

Symbolic

Autonomous

# Expanding the Idea of Outcomes

## Goal: Creative Critical Expression



**CREATE**

Evaluate

Analyze

Apply

Understand

Remember

Characterize

Organize

Value

Respond

Receive

“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

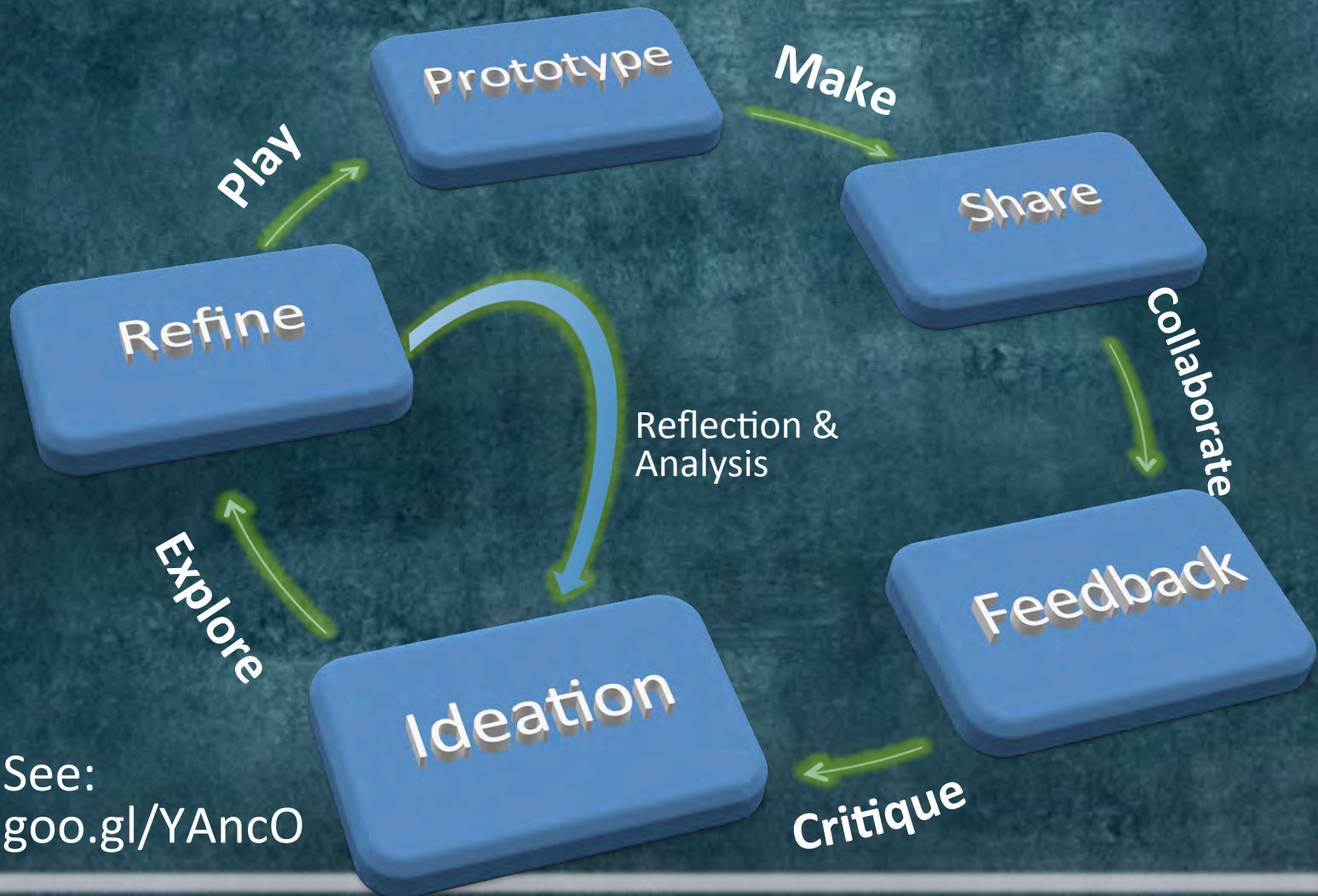
Is central to the **public and private life-worlds** of students

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



# DESIGN THINKING

## Iterative & Reflective Prototyping



See:  
[goo.gl/YAncO](http://goo.gl/YAncO)

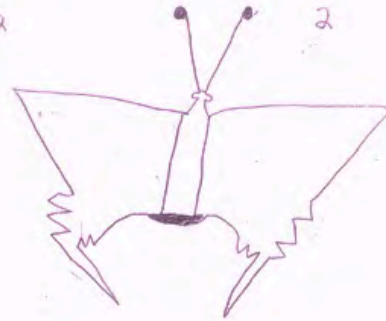
# Austin's Butterfly



Austin 9-3-02



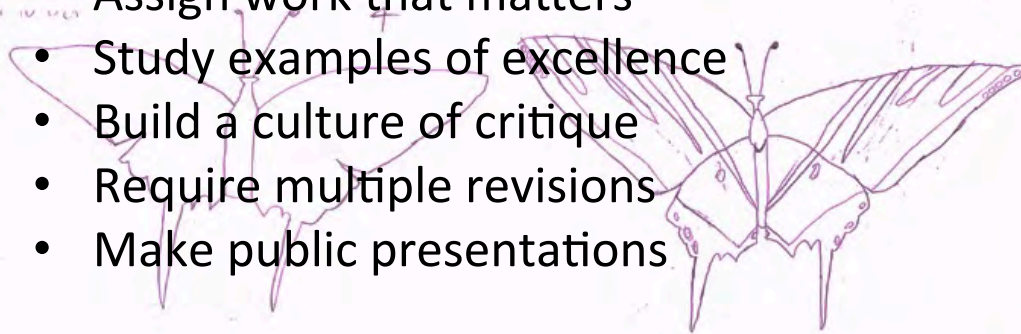
1-9-02



1-10-02



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



[vimeo.com/38247060](https://vimeo.com/38247060)

# Case Study: New Tech News



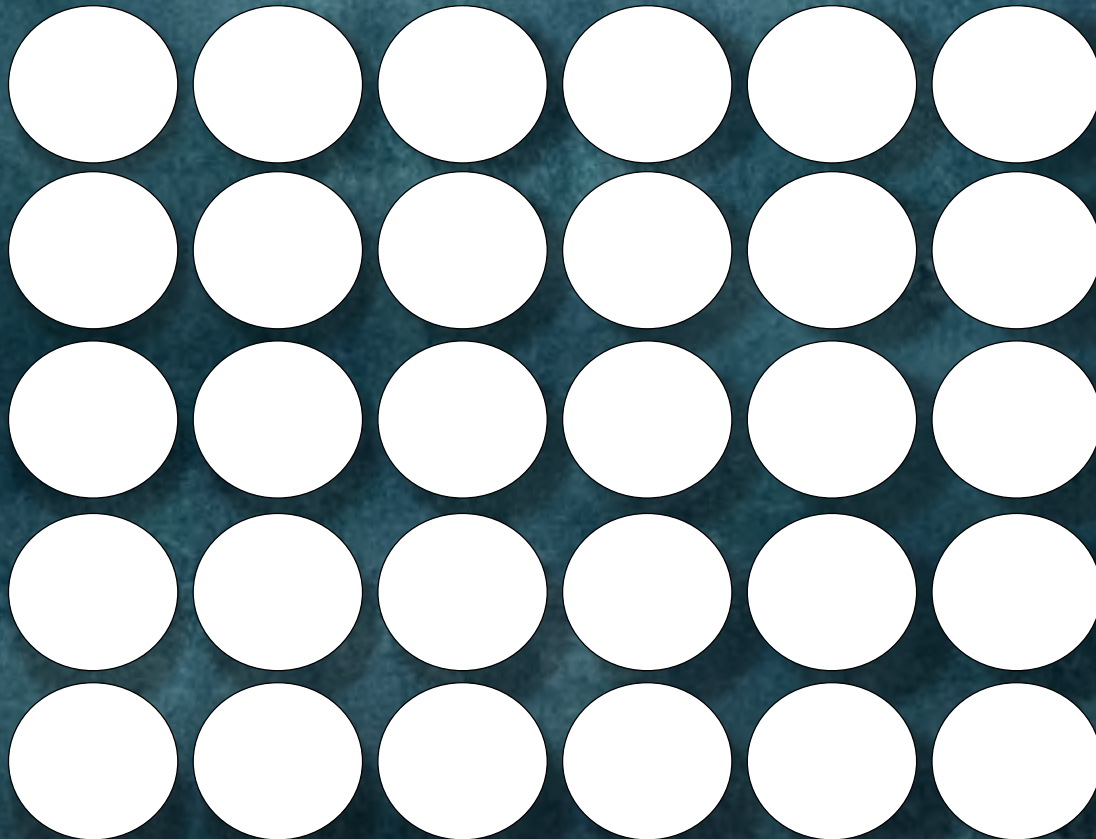
*Creativity*

Purposeful and Relevant Elaboration



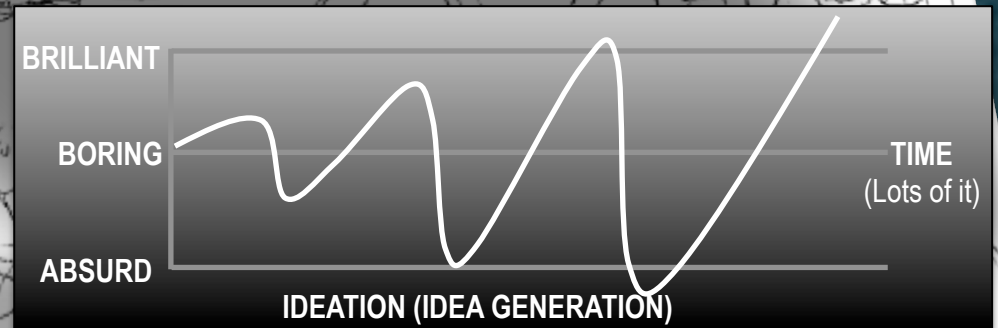
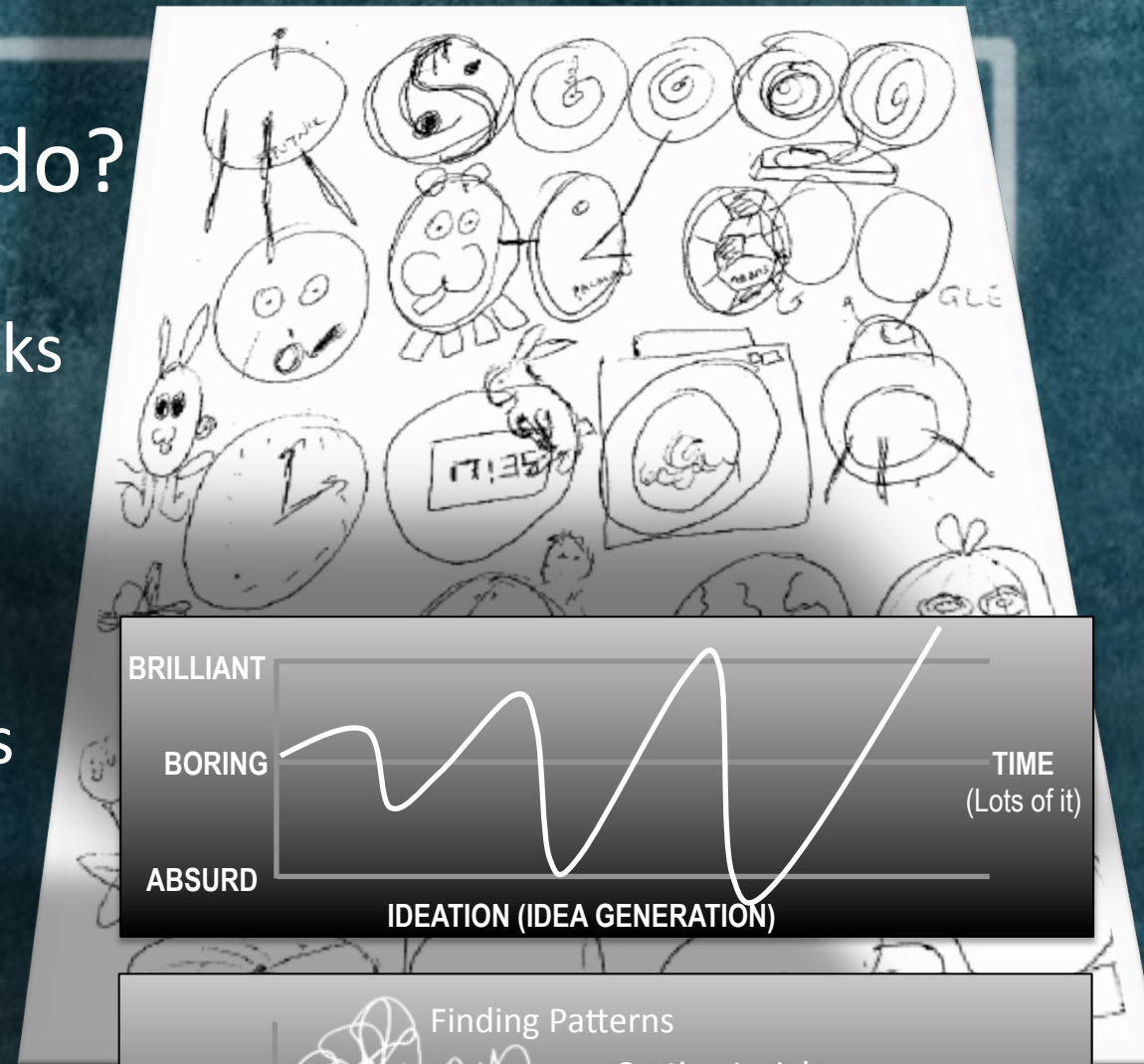
# 30 Circles Exercise

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

# FILL IN THE STORY



as  
s  
to

# LOST

## BUILDINGS OF CHRISTCHURCH

RICH IDEA +

Design Art  
Engineering  
Social Studies

<http://spin360.co.nz/christchurch-lost-buildings>

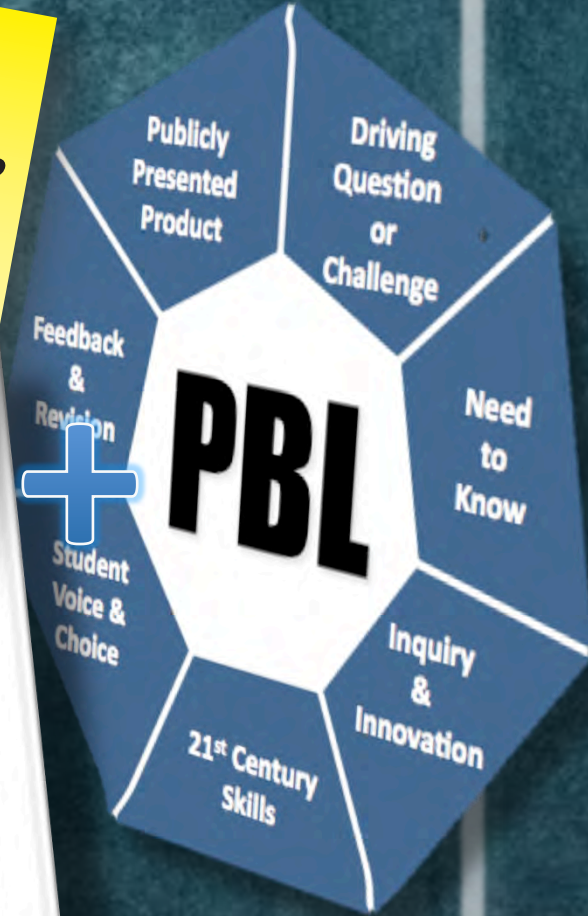
*Design Thinking for Educators*

Version One | April 2011

DESIGN PROCESS

bootcamp bootleg

d. [5 icons]



# Just Remember: Zombies Work



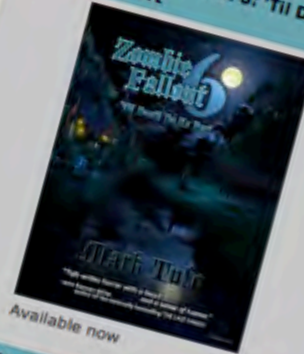
Giveaway!!

Giveaway  
Reckoning

October 20, 2012.  
etails at Goodreads.

BLOG

Zombie Fallout 6: 'Til Death Do  
Us Part



Available now

Visit My Website  
[www.MarkTufo.com](http://www.MarkTufo.com)

About Me

MARK TUFO

Week 3 Indian Hill 1 audio Giveaway!!  
Goodreads Book Giveaway  
Indian Hill  
by Mark Tufo

# Theme Oriented



# Cross-curricular





# *Communication*

Development of Multiple Literacies

# Literacy Competency Framework

## Code Breaker

*Skills & Knowledge of Semiotic System*



## Media User

*Creative Design, Authoring & Production*



## *New Literacy Forms*

*(Text, Visual, Aural, and Spatial Modes)*

## Meaning Maker

*Learning and Semantic Context*



## Media Critic

*Critical Thinking and Analysis*



The Four Resources of New Literacy Competency

# Common Core Literacy Connections

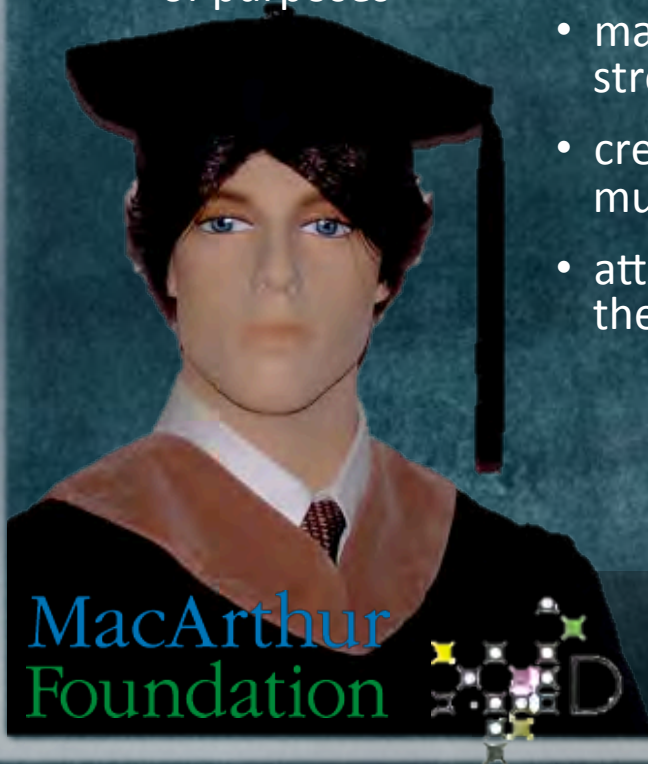
- Use technology to produce, publish, and update
- Make strategic use of digital media and visual displays
- Integrate and evaluate multiple sources of information presented in diverse formats and media
- Synthesize information from a range of sources
- Web 2.0 tools are required components for students 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

Central d.



© 2010 CDD

**WIN \$1000!**

# Directing Change

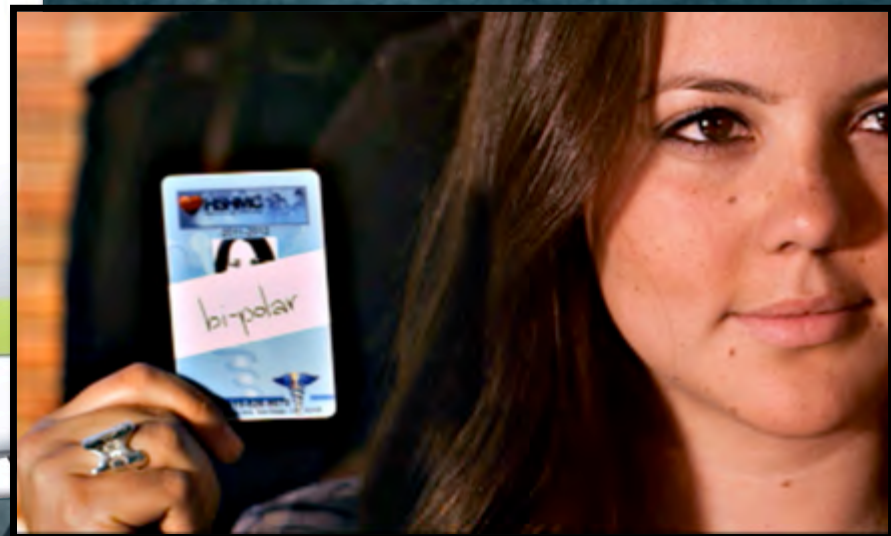
## Student Video Contest

**TAKE ACTION BY CREATING A 60 SECOND PUBLIC SERVICE ANNOUNCEMENT TO PREVENT SUICIDE AND CHANGE MINDS ABOUT MENTAL ILLNESS. THE WINNING VIDEO TEAM WILL WIN \$1000, A CASH PRIZE FOR THEIR SCHOOL, AND WILL BE RECOGNIZED FOR THEIR CINEMATIC ACHIEVEMENT AT THE AWARD CEREMONY.**

The contest is open to high school students in California. No prior video production experience necessary.  
Submissions are due **March 1, 2013**.

VISIT [WWW.DIRECTINGCHANGE.ORG](http://WWW.DIRECTINGCHANGE.ORG) FOR CONTEST RULES AND INFORMATION.

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



# Narrative and Documentary Film

## CCS Strands

- Reading
- Writing
- Speaking
- Listening



**VERITAS**  
 WRITTEN BY STEPHANIE SJOBLOM AND

Smash Bros music can be heard in on the TV screen where the game is a couple of controllers that are lying on the floor. The camera zooms in on a bowl of food, obviously abruptly at to a scene of a hand lying limp on right of the shot, and suddenly it title "VERITAS" appears on the screen above the sofa cushion.

Everything goes black and all of the literally sucked away, leaving the darkness. The screen is suddenly filled with a man. The eyes snap open and the camera zooms out from the eyes. It shows a field with white clothing on. It is a slight chirping of birds in the background.

**ALEX**  
 Wake up. You need to wake up.

Image flashes to a muddled scene of the house, a silhouette someone visible in the middle of the shot. The eerie smash bro music echoes in the background.

The man sits up and blinks a few times. Wide shot to show he's sitting alone in a field.

**SEAN**  
 What happened?

**Alex**  
 "Smash Bros? Earlier" show up on a black screen.

Alex is sitting on a chair in the room which was introduced the beginning. You can hear Smash Bros music and talking looks very sad and bored. She looks at Sean and Stephanie are laughing about something. Close shot of the two of them. Shot of Alex sighing.

Andrea walks in from garage. She has a bag of something, drops it down on the sofa, Alex is visible in the background.

**ALEX**  
 What are those?

The camera switches focus to her while she speaks. Stephanie Sean put their controllers down as Andrea reaches into the bag and pulls out disk-shaped things.

**ANDREA**  
 Memory-banks. The newest ones from what

**Plot Structure Diagram**

Name: Yoda, An, Megan, Bob  
 Date: 9/16/12  
 Period: 5

**TURNING POINT**  
 (The scene occurs between the protagonist and the antagonist or the moment for which the reader has been waiting.)  
Attack leads her and classes  
ret

**RISE IN ACTION** ①  
 (The major events that lead to the turning point.)  
From this and Alex is going  
about her

**CHARACTERS\***  
 (Protagonist and Main Characters)  
 Protagonist - Yoda, An, Megan, Bob  
 Antagonist - Megan, Bob  
 Main Character - Megan, Bob  
 Other Characters - Yoda, An, Megan, Bob

**SETTING\***  
 Time: 2011  
 Place: 2011

**CONFLICT** ②  
 (What's the problem between the protagonist and the antagonist?)  
From this to this  
from this to this  
from this to this

**THEME** ③  
 (The lesson or message the author is trying to help an understand.)  
to go to school

**Plot Structure and Development**  
**Character and Scene Analysis**

	<u>Person sits at a table and look outside</u>
	<u>5</u> <u>Person at street</u> <u>with animal crackers</u> <u>popping up + out</u> <u>of scenery</u>
	<u>6</u> <u>Crackers popping out</u> <u>of windows +</u> <u>shruggs</u>

Composition, Lighting, Staging  
 Sound, Production Design

# Creative Approach to Curriculum Invites Creativity

**YOUR BRILLIANT IDEA**  
LEARN HOW TO GRAB THE ATTENTION OF THE JURY  
LEARN HOW TO GRAB THE ATTENTION OF THE JURY

**PLOT STRUCTURE**  
DUE: TODAY (10/2/14)  
LEARN HOW TO STRUCTURE A NARRATIVE STORY  
SO YOU CAN COMPLETE YOUR...

**SCRIPT**  
DUE: TUES. OCT. 2<sup>ND</sup>  
LEARN TO WRITE A MEANINGFUL REPRESENTATION  
10 MINUTES OR LESS IN FILM LENGTH  
AHHHH!!

**AND MAKE**  
LEARN TO VISUALLY REPRESENT YOUR STORY AND CREATE A PASTEL-LIKE REPRESENTATION

**STORYBOARD**  
DUE: THRS. OCT 4<sup>TH</sup>  
FROM WHICH YOU WILL CREATE...  
NEED YOUR ELEVATOR PITCH TO PRESENT TO CLASS

**NAPA VALLEY FILM FESTIVAL STUDENT WORKS PROGRAM**

FINALIST SCREENING  
NAPA VALLEY OPERA HOUSE  
NOVEMBER 11<sup>TH</sup>

LEARN TO CONSTRUCT MEDIA SEQUENTIAL

# 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



**The Cat and Venus**

# 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.

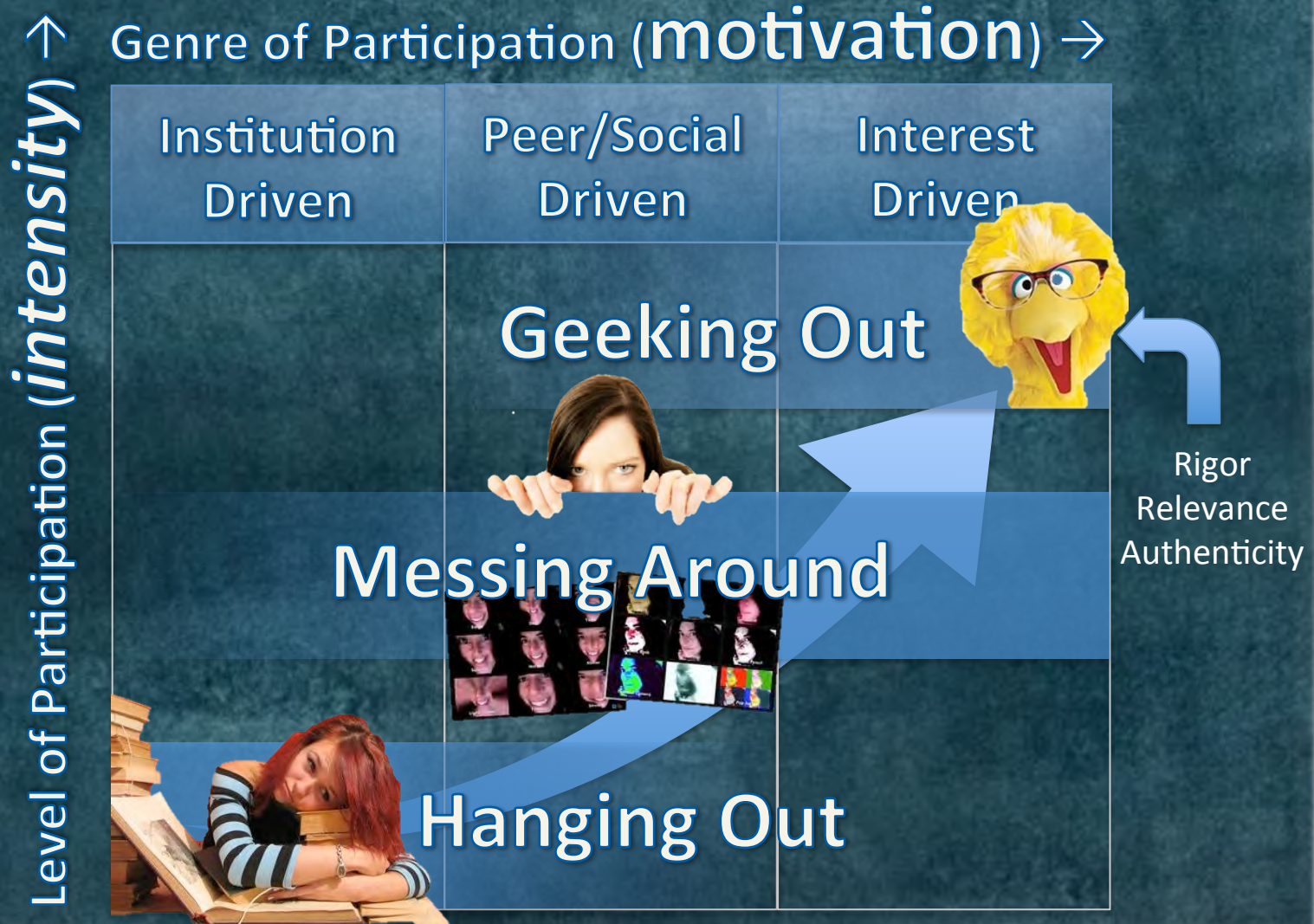
Copyright, Fair Use, Privacy, Safety, Ethics

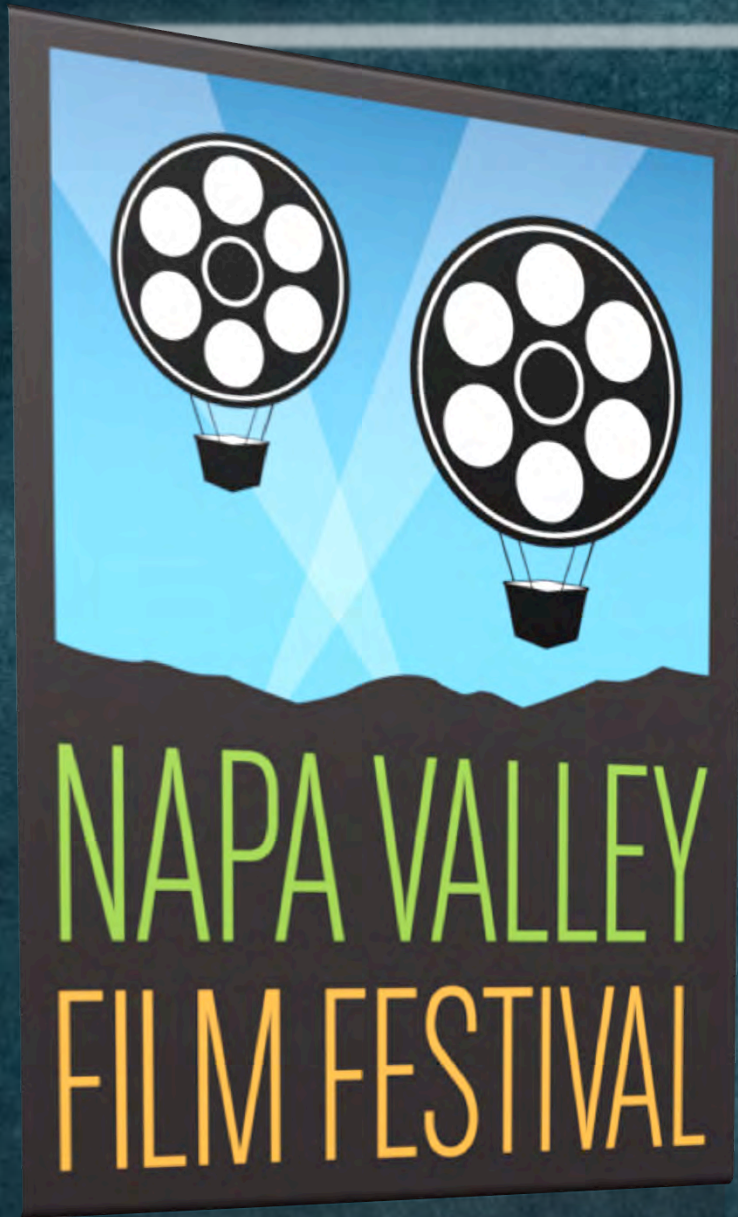


# *Collaboration*

Connecting the individual, the  
content, and the community

# Emerging Practice





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

**CALOVET**  
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.