



Eureka!

A K-12 Cognitive Skills Matrix
for Developing and Assessing Creativity

Raymond Veon
Director, Fine and Performing Arts,
Atlanta Public Schools
Instructor, Georgia State University


http://igniteart.weebly.com/

File Edit View Favorites Tools Help

Microsoft Outlook Web A... iGoogle Web Slice Gallery

IgniteArt

Search IgniteArt



ArtsAPS

US DOE Professional Development for Arts
Grant Resources and Findings

[Online ArtsAPS Core Concepts Training](#)

[2012 ArtsAPS Conference - Igniting the Creative Common Core](#)

[2011 ArtsAPS Conference - Rethinking The Shifting the Lens](#)

Common Core State Standards

ArtsAPS Core Concepts Training	ArtsAPS 1.0 Resources
Creativity	Arts Advocacy
Creativity Infusion Training	Arts Assessment
Professional Development And On Line Learning	APS Arts Assessment
	Links to Online Art

<http://www.igniteart.weebly.com>

rveon@atlantapublicschools.us

artrev@gsu.edu



The term “creativity” is like a Rorschach—we see what we want to see.

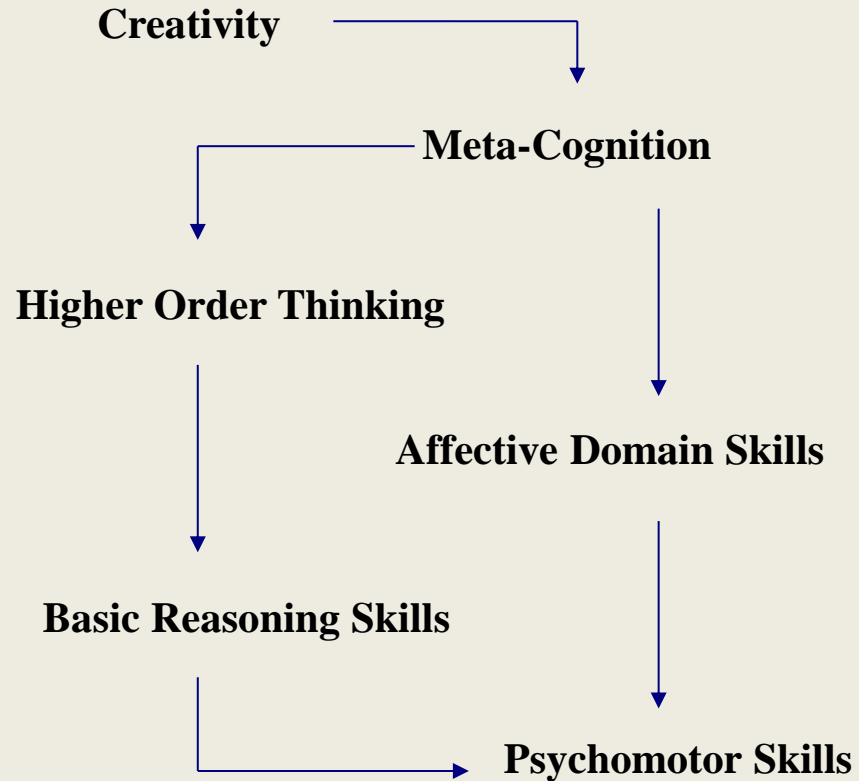


Unpacking the concept based on our model.

A complex, executive-level cognitive process

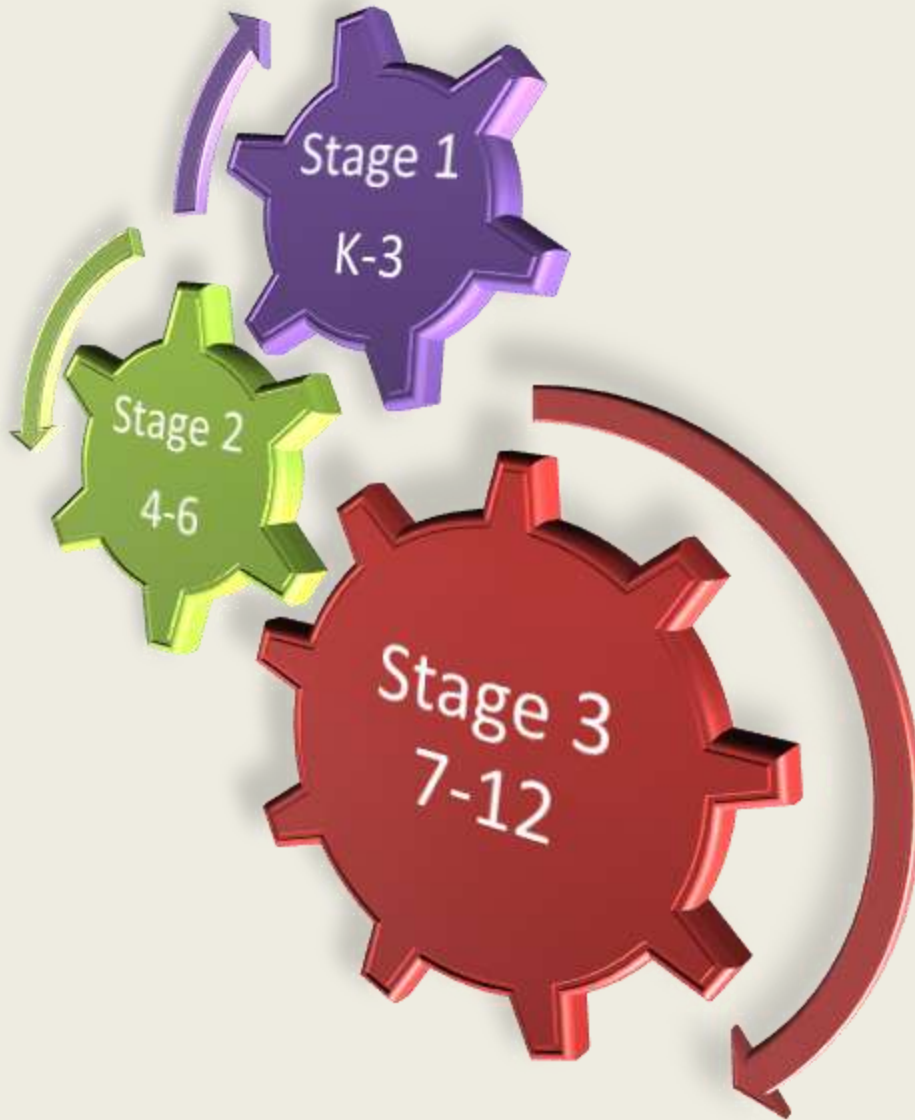


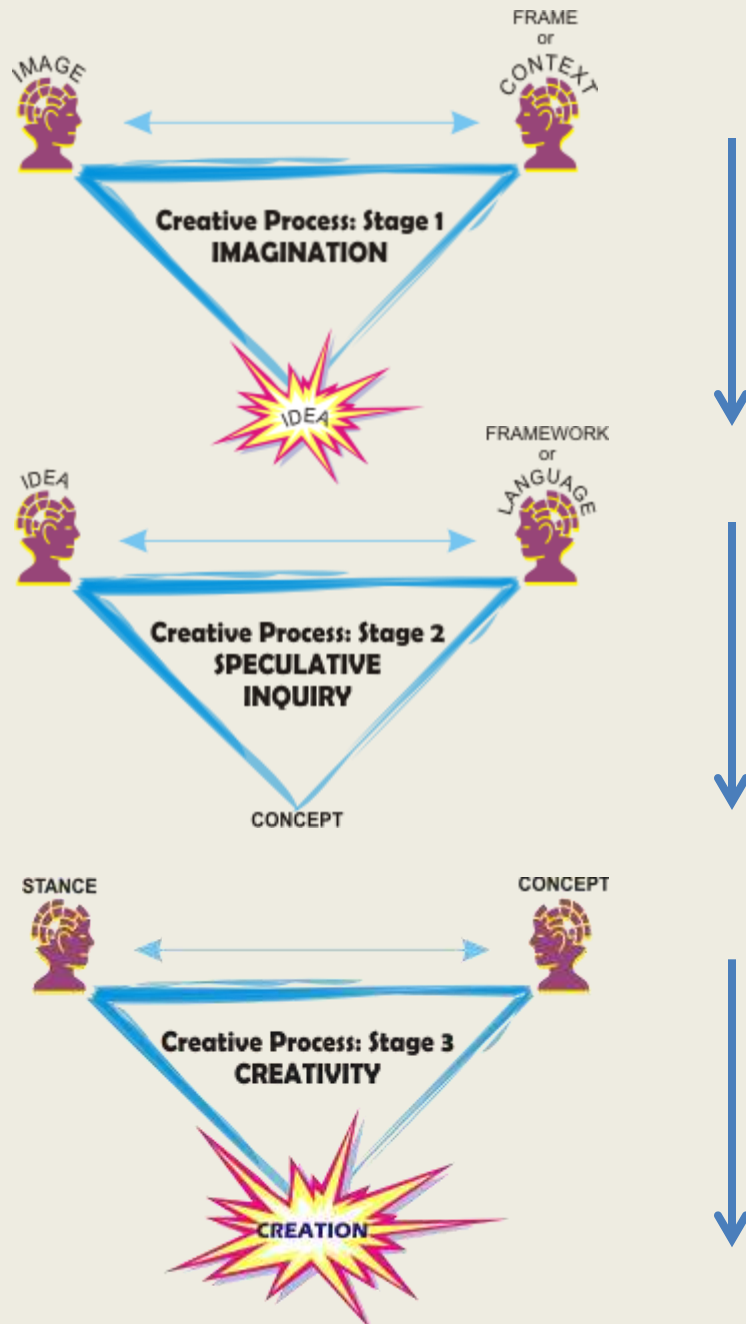
- Develops over time
- Not just a whacky way of producing zany ideas



3 Stage Model

Risk and Reframe
Question and Connect
Mindset and Stance





Identify and organize target cognitive skills

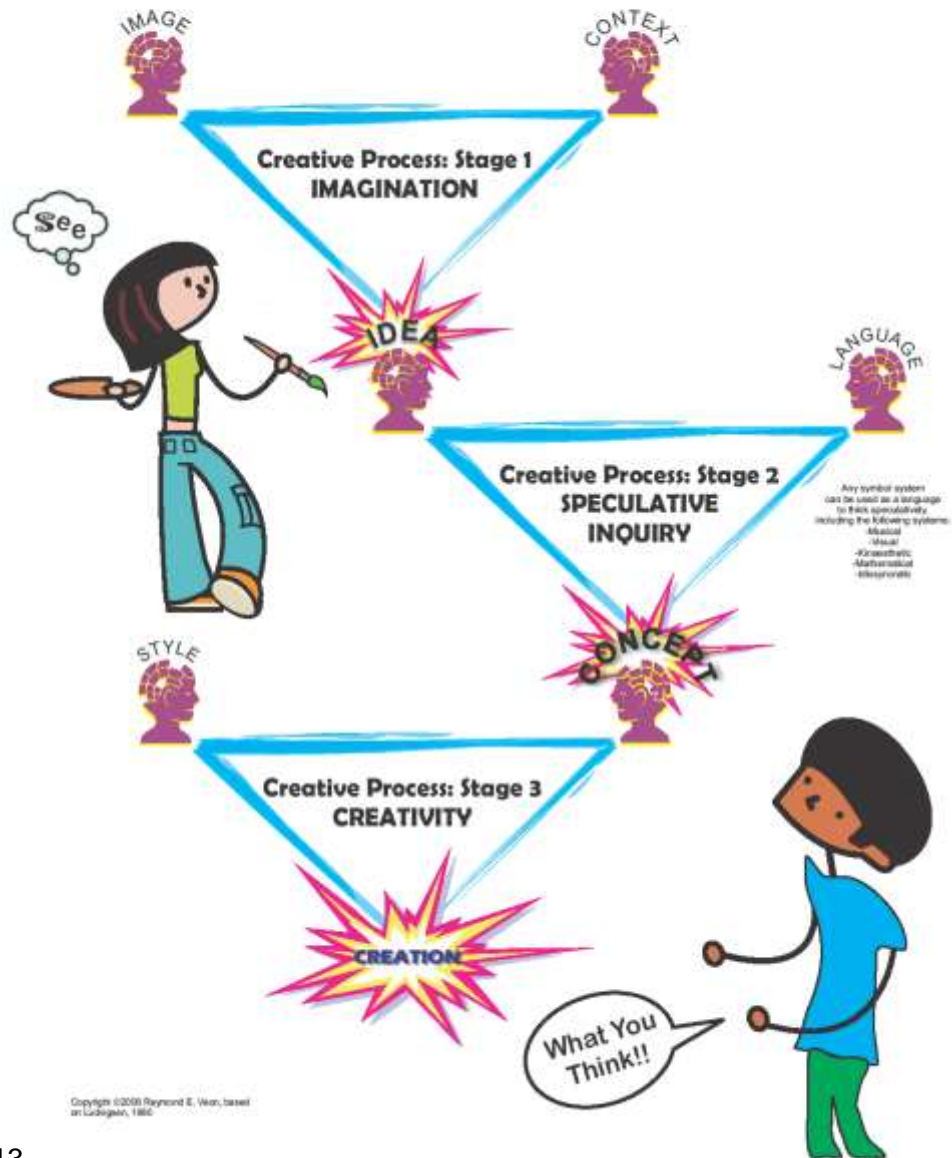
Backward Design – cognitive and developmental readiness

Organize and select strategies

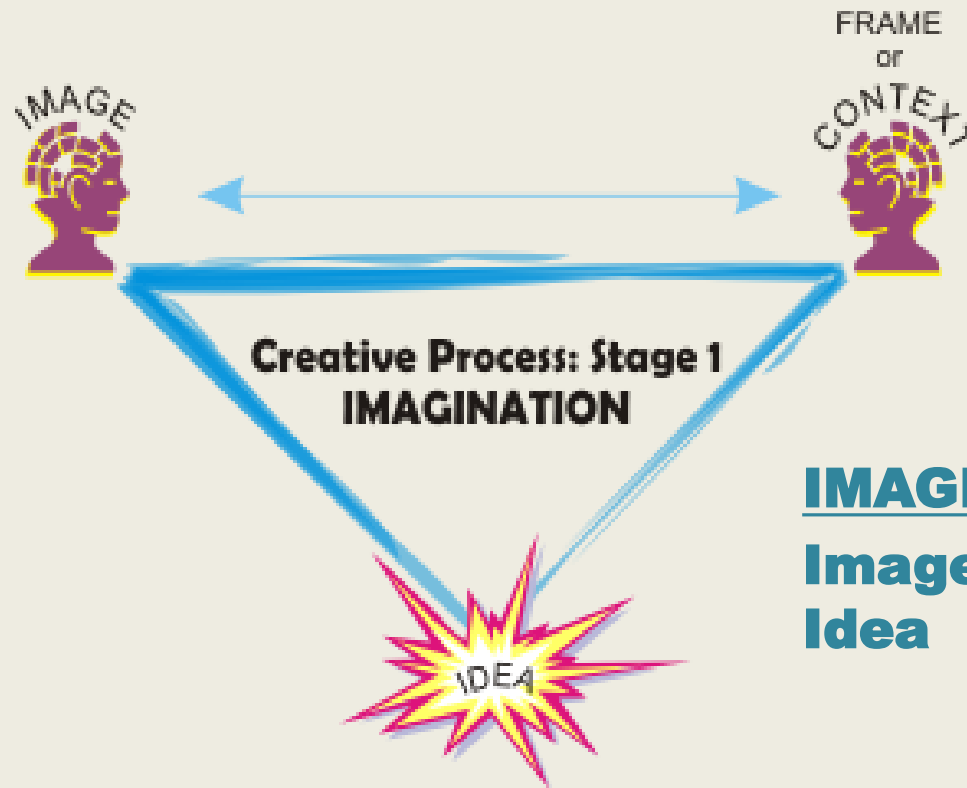
Focus for units and lessons

Differentiate - even with older students, start with stage 1 and allow them to progress at their own rate.

The Creative Process



Based on Arne Ludvigsen, 1980;
Developed as Creativity Infusion
Curriculum by R. Veon 2009-2013



IMAGINATION:
**Image + Frame =
Idea**

RISK AND REFRAME

Stage 1: How to generate and develop ideas through imagination.



Natural way our mind
works

Ex: Freedom

Change the image =
change the idea

Change the frame =
change the idea



Frame Shifting



A different point of view is simply the view
from a place where you're not.

yourpointofview.com

HSBC 
The world's local bank



pleasure



pain




pleasure



pain

Open minds are welcome here.

yourpointofview.com

HSBC 
The world's local bank.



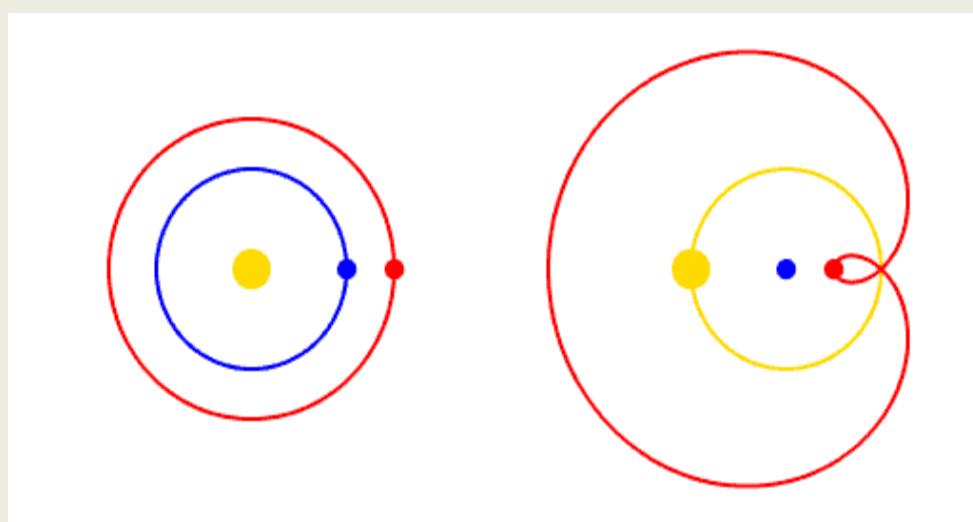
When we look at the world, we see that different values are what make it so remarkable. With over 140 years of experience, we use this understanding to serve you better.

us.hsbc.com/values

HSBC 
The world's local bank







Idea-formation is at the root of Visual Thinking Strategies.

Take a minute to
Look at this picture.

What's going on
in this picture?*

What do you see
that makes you
say that?

What more can
we find?

Paraphrase.
Point.
Link.



Teaching for Creativity: Tweaks and Small Shifts

$$5 + 5 = ?$$

$$? + ? = 10$$

ART

STAGE 1: IDEA-FORMATION SKILLS								
Stage 1 Assessment: Did you risk and reframe?	K	1	2	3	4	5	6-8	9-12
The student...								
S1.1 R Mentally recalls/produces visual images using art materials								
S1.2 O Follows prompts inherent in the character of art materials								
S1.3 R Generates multiple interpretations for an object or image								
S1.4 R Mentally manipulates images and meaning								
S1.5 R Improvises in response to unanticipated insights, deviations or teacher-imposed constraints that reframe experience								
S1.6 R Makes multiple representations of a single theme using varied media and approaches								
S1.7 R Mentally envisions what cannot be directly observed by depicting imaginary worlds, machines with mysterious functions, embodiments of mythical beings, intangible forces, values, etc								
S1.8 R Recognizes that interpretation relies on context (the implicit and explicit cues/clues that suggest how we should assign meaning to something); combines cues/clues from disparate contexts in an artwork to generate unusual meaning								
S1.9 R Uses strategies, such as those found in SCAMPER (Eberle, 1996), McKim (1980), Roukes (1984), to alter/generate visual images and how they are perceived. Example from Visual Art: Banksy								

Stage 1 Objectives

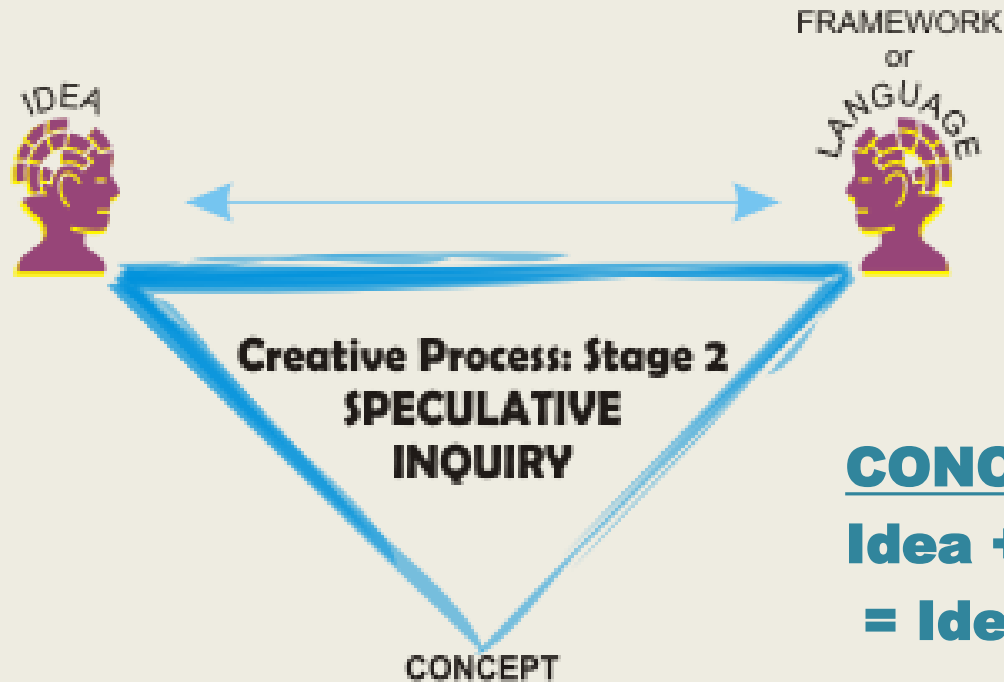
How can we tweak what we already do to cultivate these signposts on the path to a creative mindset?

Infuse into the Scope/Sequence

36 Week Time line				
Week	SLO Alignment	GPS and CCGPS Alignment	Unit Theme	Concepts/Skills/Activities
Week 2	PT Sketching DOK Level 2 Formulate Planning, Reflection	<p>Art GPS: VA5MC.2.a Student uses a sketchbook for planning and self-reflection.</p> <p>VA5MC.3.b Student develops visual images by combining or modifying open-ended themes in unique and innovative ways</p> <p>VA5PR.1.b Student makes design decisions as the result of conscious, thoughtful planning and choices.</p> <p>CCGPS: CCRAS – R. 5 CCRAS – SL.1 AWL: Integrate, modify</p> <p>CIM: S2.2 R Adapts/uses a visual language to connect one idea to other ideas using a range of strategies, such as metaphor, narrative, irony, appropriation, etc.; seeks/employs visual and conceptual patterns to make connections</p>	Creative Thinking – Thumbnail Sketching, Planning, 3D Sculpture (clay, paper, etc)	<p>Concepts/Skills: Analogy/Metaphor</p> <p>Activities: VTS Images 1 & 2; Visual-Verbal Sketchbook</p> <p>Suggested Lesson:</p> <p>Artist(s)/Artwork(s): See artists in Nicholas Roukes' book, <u>Artful Jesters</u>; see also his website, http://www.nicholasroukes.com/</p> <p>Resources: 5th Grade VTS PPT: VTS Image 1.)Image 5.1.1 Probably by Mirza Ali. Hawking Party. About 1575. Gold, silver and opaque watercolor on paper, 14 11/16 x 9 3/4 in. VTS Image 2.) Museum of Fine Arts, Boston; Francis Bartlett Donation of 1912 and Picture Fund; 14.624. © 2002 Museum of Fine Art, Boston.</p> <p>Ongoing: Self-reflection, Mood/Feeling, Analogy</p> <p>Questioning Strategies:</p> <p>VTS Questions</p> <p>Five Core Questions for Creativity Development:</p> <ol style="list-style-type: none"> 1) What more can you do? 2) Did you take a chance? 3) What else can you connect it to? (What more can you add?) 4) What is another way of doing it? Can it be better? 5) Are you letting your personality come through? <p>Additional Questions: What ideas or parts can be combined? Can I combine or merge it with other objects/ideas? What else can it be used for? What else is like it? Is there something similar to it, but in a different context?</p>

Ideas do not know what discipline they are in.

They need a language or framework...



CONCEPT:

**Idea + Framework
= Idea**

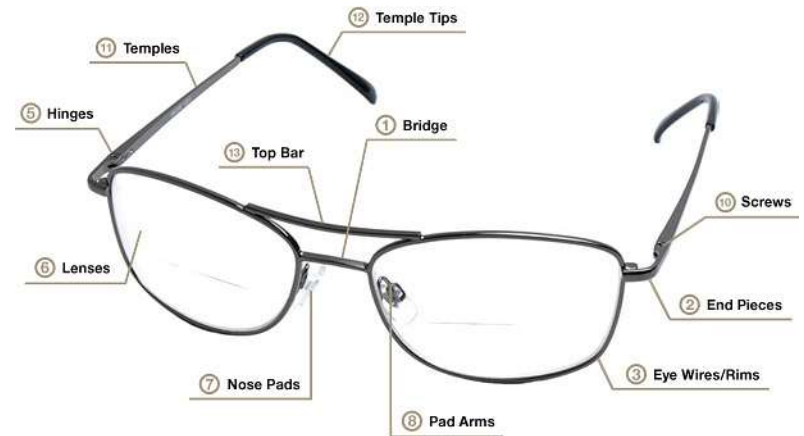
QUESTION AND CONNECT

Stage 2: How to question and connect alternate hierarchies of value and logic for new concepts to emerge

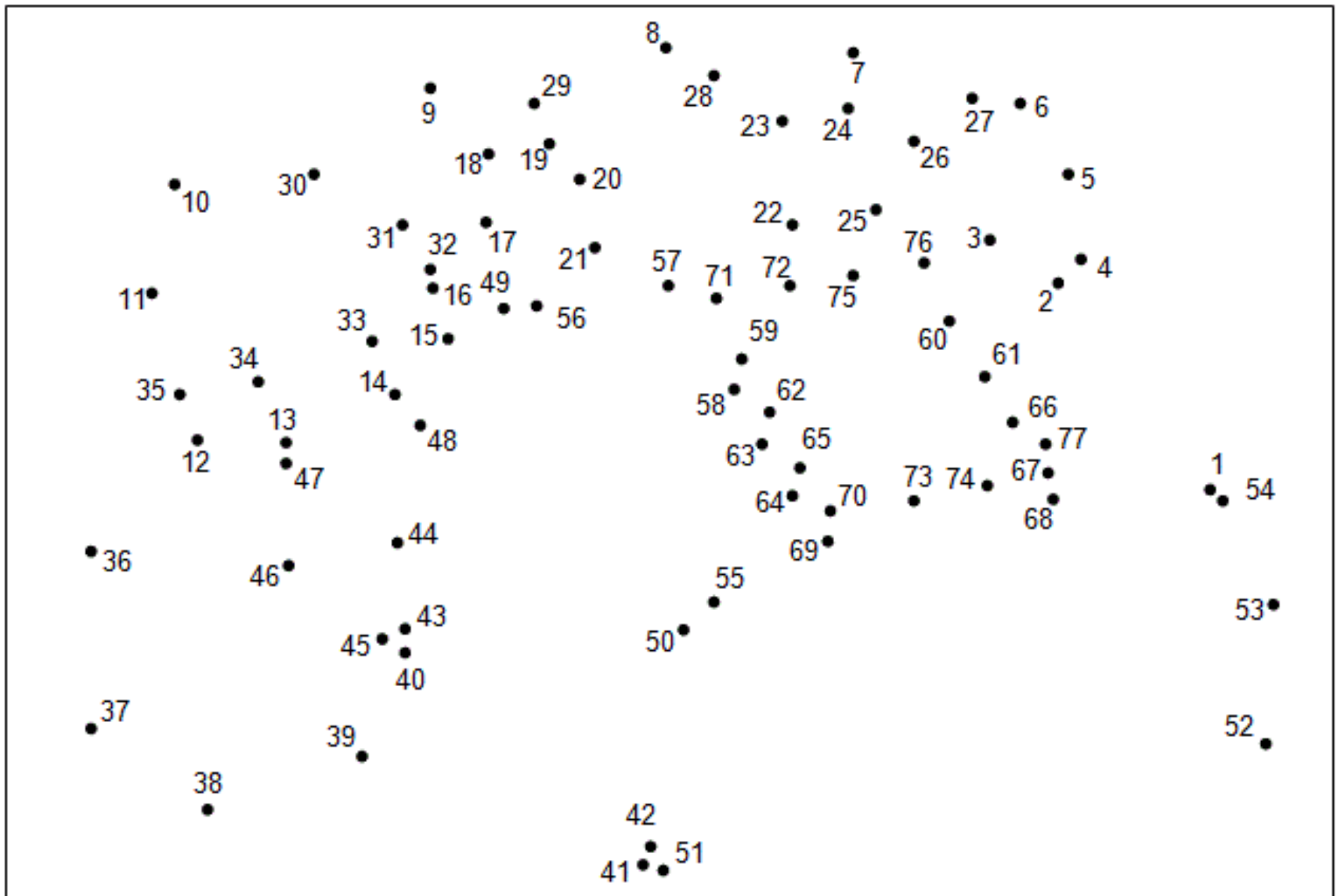
Frame vs. Framework



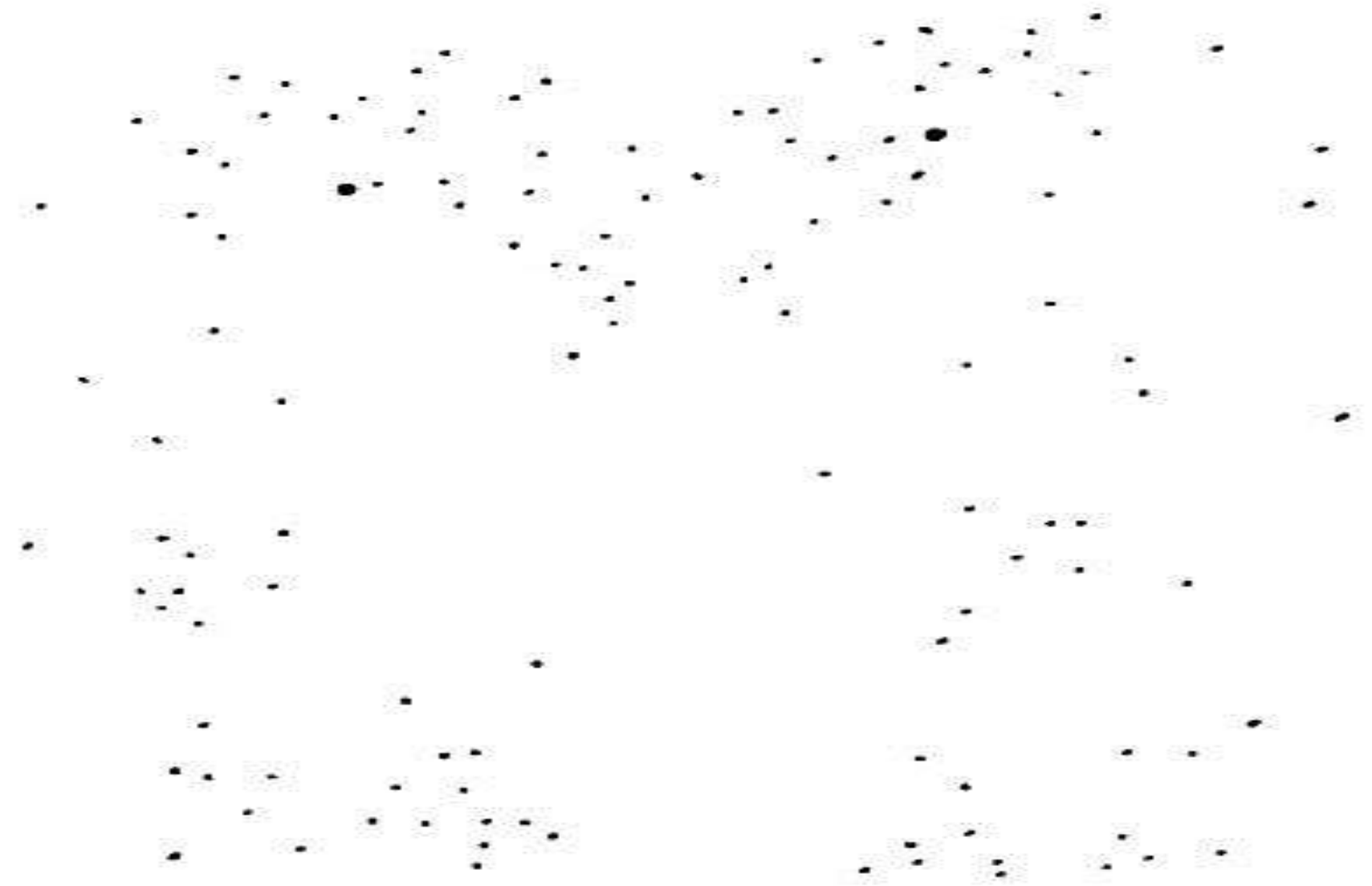
A frame or context focuses your thinking and seeing for you; like eyeglasses, you just use it



A framework allows you to see and think AND shows you how to reason about how and why you see and think.



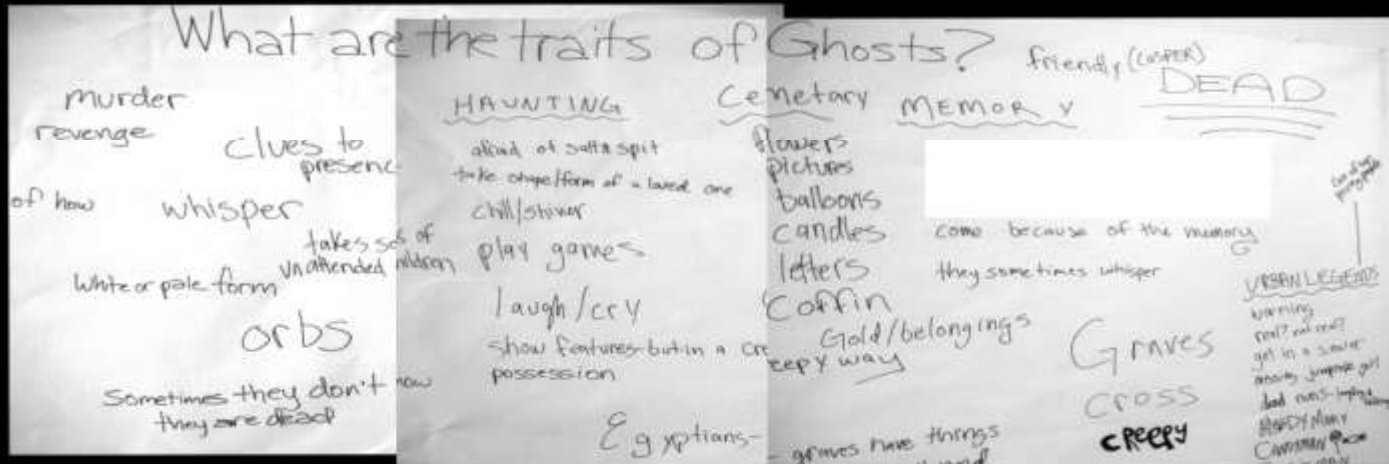
Question hierarchies of logic (explicit/implicit rules for what can and cannot be combined)



Challenge assumptions about how and what to connect
...and whether it is important and valuable...
The Unknown: Where to start...what is the problem?

Thinking about Ghosts

based on a group discussion about belief in ghosts
Apparitions: Painting group, Spiral Workshop 2008



What are the elements and principles best suited to YOUR problem?

The invasive people say that decision makers should consider the effect of their decisions on seven generations into the future.
Do you think that this is good or necessary advice?

Can you think of any decisions being made today that will affect people in seven generations? (Figure 25 years for a generation.)

Does being afraid help people to avoid disaster?

(dis)order

Apocalypse Spiral Workshop

List movies that you have seen that are based on apocalyptic scenarios.

Do your friends ever bring up what to do in case of a disaster?
What's the disaster? What's the plan?

Does your family ever talk about disaster plans?
What disaster? What are the plans?

Do any of the things people have or do in apocalyptic movies seem cool? Describe.

Artist As Medium

Self portrait as medium, using pressed photographs and projection



Equipping students with a framework for thinking and an expressive language
Traditional Elements/Principles are NOT enough!!
From The Spiral Workshop



The Millennials

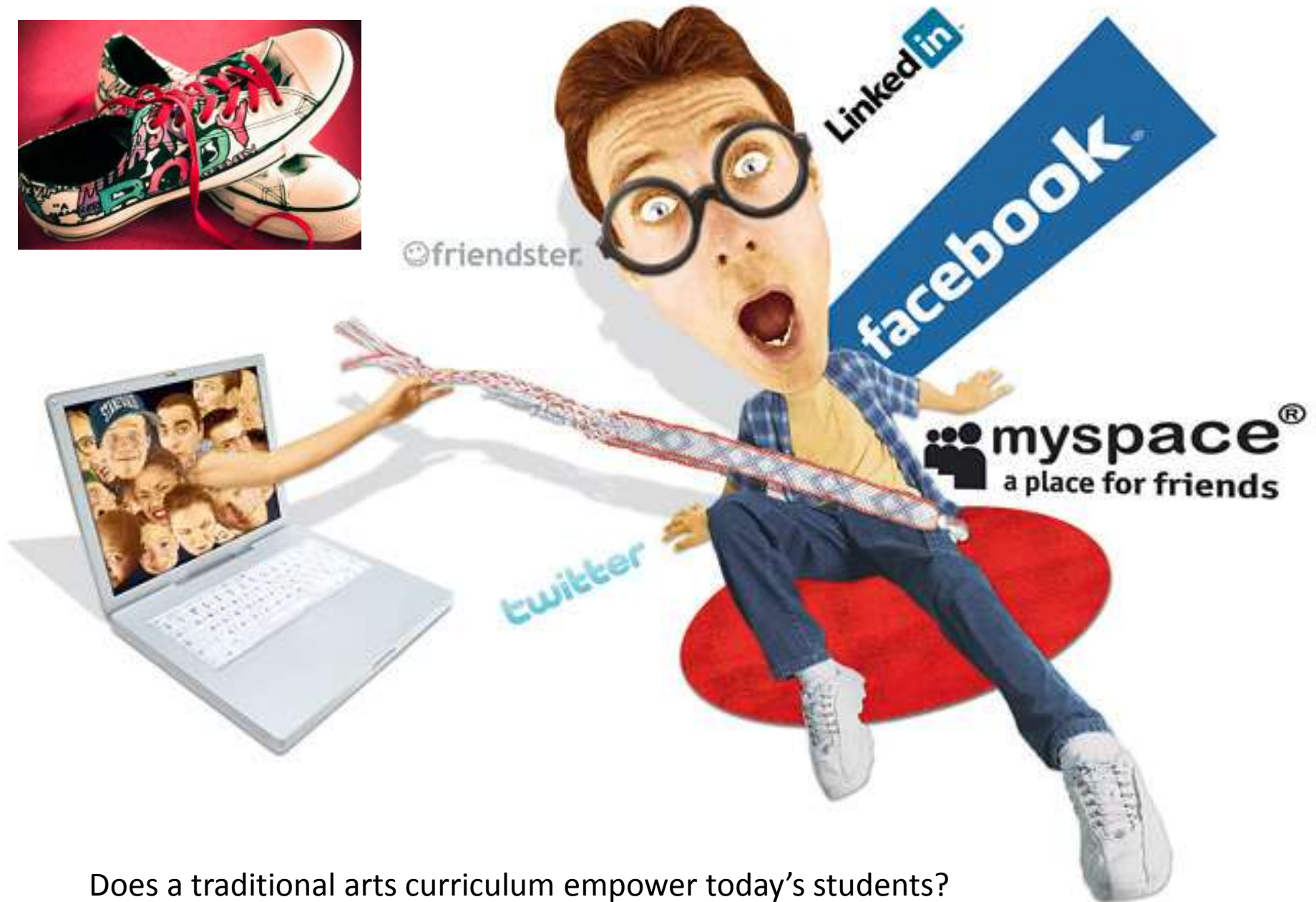




"Brands can reflect my status and my taste/aspiration in life."

-ELAINE, 30, BEIJING

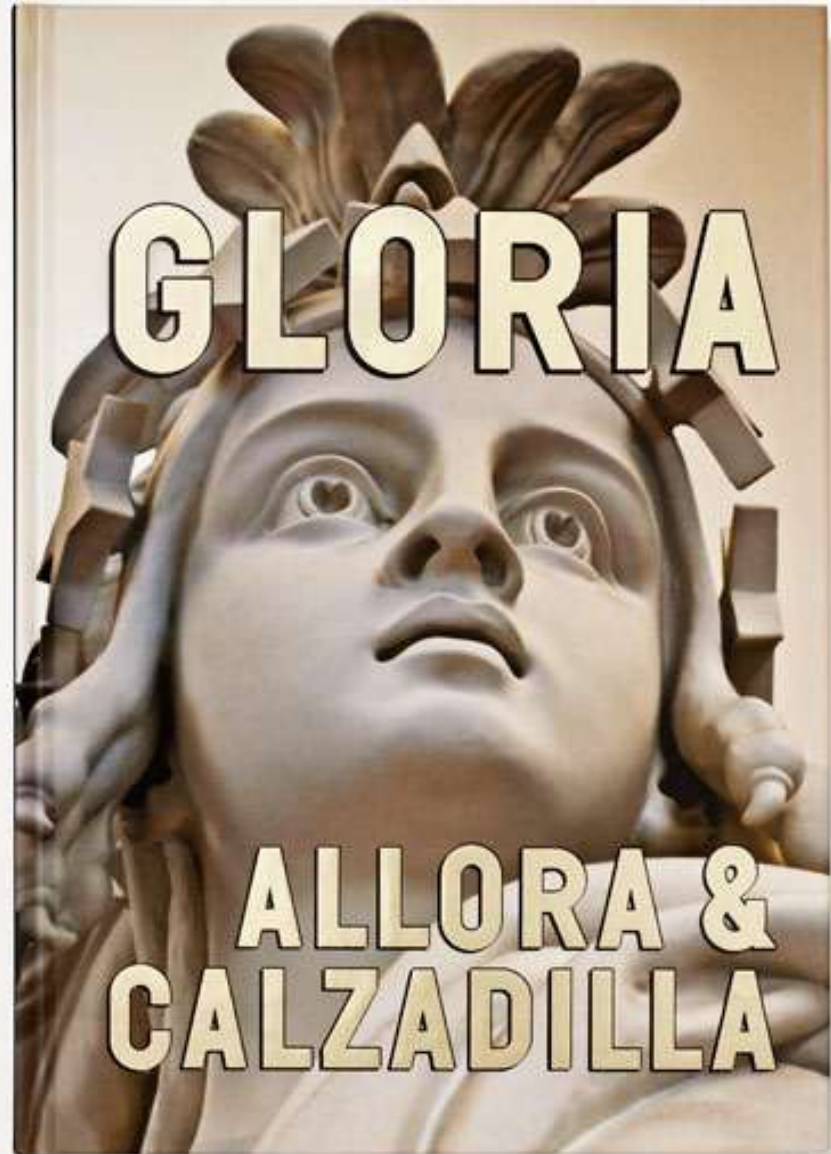
8095™



Does a traditional arts curriculum empower today's students?
How relevant are the arts to self-expression in the 21st century?

Contemporary artists craft their own languages

The “Elements and Principles” in
contemporary art are **dynamic**







**Idea + Framework
= Concept**

Question hierarchies
and establish new
connections.

Connect, intersect, and
explore points of
tension between ideas.

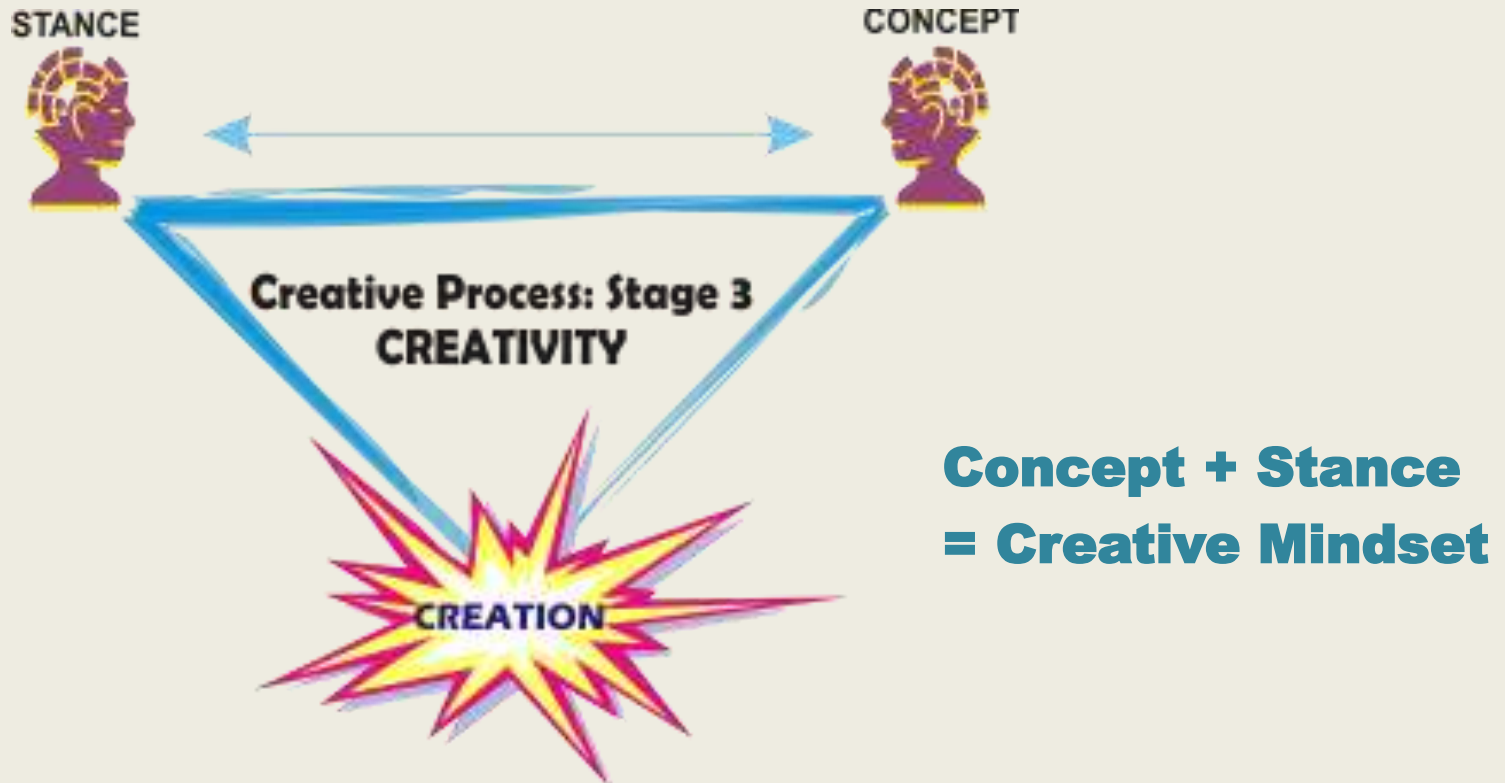
Students should supply the framework to the greatest extent possible...

ART

STAGE 2: CONCEPT FORMATION SKILLS Stage 2 Assessment: Did you question, intersect, and connect? Did you explore and exploit points of tension? The student...	K	1	2	3	4	5	6-8	9-12
S2.1 R Explains how changing an artwork's visual language changes its meaning; see Madden (2005)								
S2.2 R Adapts/uses a visual language to connect one idea to other ideas using a range of strategies, such as metaphor, narrative, irony, appropriation, etc.; seeks/employs visual and conceptual patterns to make connections								
S2.3 R Conducts ends/means analysis by: 1.) S2.3.1 R : Identifying ambiguous, indeterminate, conceptually or emotionally dissonant topics as themes for artworks; 2.) S2.3.2 R : Determining strategies and criteria for investigating them artistically.								
S2.4 R Develops iterative mindset by consciously forming provisional answers, testing, revising, testing, etc.								
S2.5 R Questions hierarchies of value and logic by critiquing and producing artworks.								

Stage 2 Objectives

Again, infused onto the curriculum



MINDSET AND STANCE

Stage 3: How the 5 elements of a creative stance work together to generate new knowledge.



“When stereotypes attempt to take control of their own bodies, they can only do what they are made of and they are made of the pathological attitudes of the Old South.



Therefore, racist stereotypes occurring in my art can only partake of psychotic activities.”

-Kara Walker



1. Personal Objectives



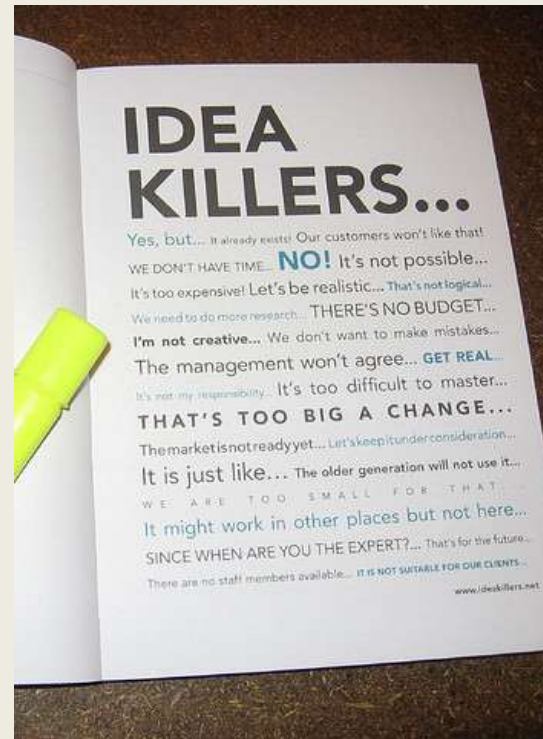
2. Personal Rationale,
Passion, Core Interest:
Motivation for
persevering through
failure and not
knowing the next step



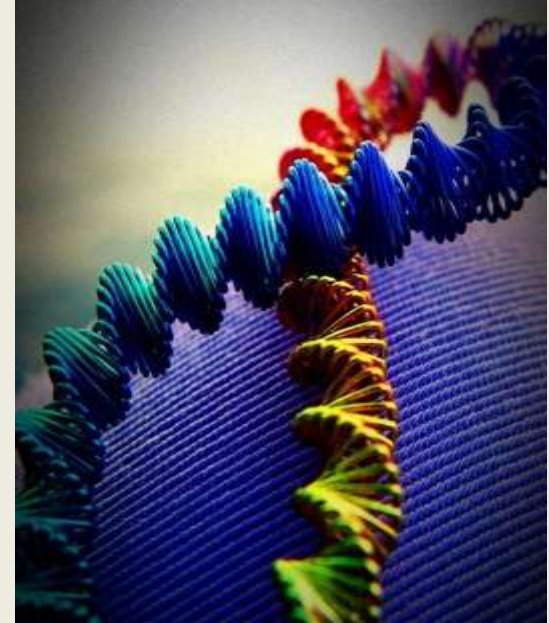
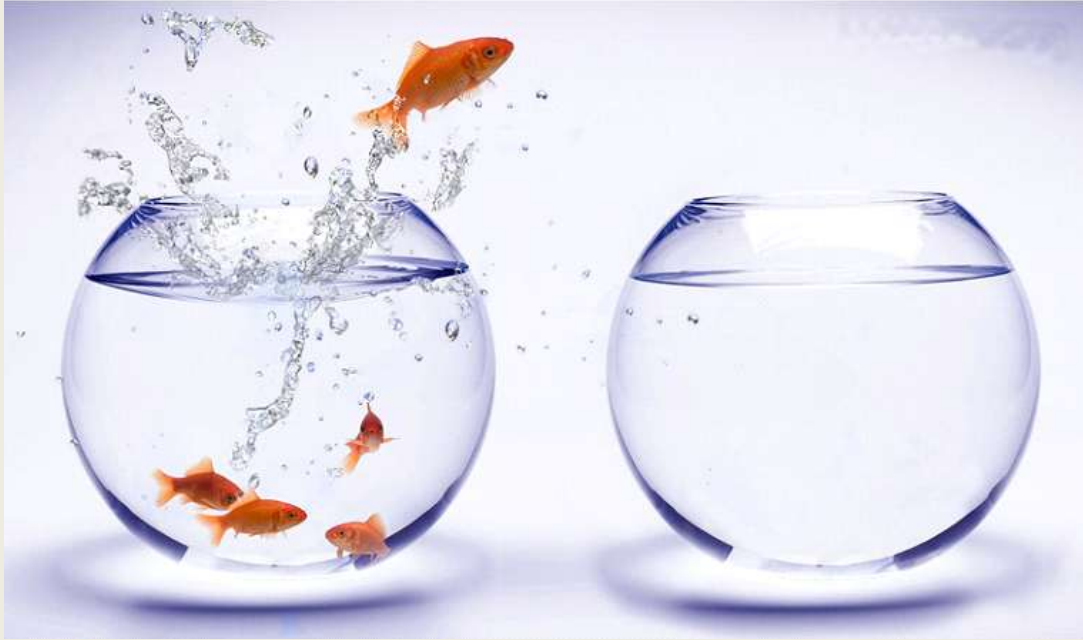
3. Personal Viewpoint



4. Preferred Working Method



5. Personal Standards



Creative Stance: shows how the feeling of rigor, coherence, and consistency we get from sustained artistic effort guides us as we chart unknown territory and start to form our own creative DNA.

ART

STAGE 3: CREATING SKILLS								
Stage 3 Assessment: How does this come out of your own creative stance—your personal, creative DNA?	K	1	2	3	4	5	6-8	9-12
The Student...								
S3.1 R Reflects on portfolio and identifies patterns to revise or generate new work								
S3.2 R Generates problems by:								
1. S3.2.1 R : Setting personal objectives (themes/topics for investigation)								
2. S3.2.2 R : Identifying personal standards (adapting/going beyond exemplars)								
3. S3.2.3 R : Identifying personal rationale (interests/passions);								
4. S3.2.4 R : Identifying preferred materials and working methods;								
5. S3.2.5 R : Developing personal viewpoint/context for working (parameters based on beliefs, experiences, emotions, social awareness, personality traits, media, etc.)								

Stage 3 Objectives



Xenophilia

Love of the Unknown

(George Herms)

Synthesizer vs. Creator

“The synthesizer’s goal is to place what has already been established in as useful and illuminating a form as possible. The creator’s goal, on the other hand, is to extend knowledge, to ruffle the contours of a genre, to guide a set of practices along new and hitherto unanticipated directions.”

Howard Gardner, *Five Minds for the Future*, page 98



The model points to the unknown, intangible, and unpredictable—and provides a rational, educationally viable means of discussing them.

Understanding the Creativity Instructional Matrix

Please work in small groups and rotate to each poster, adding your thoughts; at the end, all posters are shared.

Creativity Objective	S1.8 R Recognizes that interpretation relies on context (the implicit and explicit cues/clues that suggest how we should assign meaning to something); combines cues/clues from disparate contexts in an artwork to generate unusual meaning
Key Terms and/or thoughts on Creativity Objective	Interpretation; Context; Clues that tell us how to interpret; Fits in to definition of Imagination (Image + Context = Idea); Objective is focused on CONTEXT rather than Image
Fact Sheet Details and Important Research	Conceptual combination bears a special relationship to creativity, having been mentioned frequently in historical accounts of creative accomplishments (e.g., Rothenberg, 1979; Thagard, 1984; Ward, 2001; Ward et al., 1995). In addition, combining concepts is a crucial component in several process models of creative functioning (e.g., Davidson, 1995; Mumford et al., 1991; Sternberg, 1988),
Suggested Activity – What lesson, activity, or experience can you provide students to achieve this creativity objective?	VTS; An automobile made of postage stamps (Check for Stage 1: Does it ask students to risk and reframe?) Are we assessing image transformation, context transformation, or idea generation (image + context)? Is the focus on the transforming and combining the visual structure of cars and stamps, or on the meaning cars/stamps have for us (context), or both (idea)? Cohort-Based Assessment: class sets standards of exploration, resolution, novelty
“Look Fors” - Evidence that the objective is being met (Indicators, Sample Behaviors)	Students are asking questions and talking about the meaning we attach to cars and stamps, not just the visual structure of these objects (“Well, both cars and stamps travel, and some go fast in first-class style, while some go slow”)
“Red Flags” for creativity objective	Students only focused on visual structure, not on meaning
Questions we should expect teachers to ask when helping students meet the objective	Can you combine or recombine the purposes or uses of the parts? Can you take a risk and make it even more different?
Questions we should expect students to ask when meeting objective	What if it was only going to be used by kids instead of grown ups? Will it be sticky on the outside if it gets wet? Could we buy it from a postman instead of at a car dealership? What else could it mean? What more can we find?