

My name is Raymond Veon – asst. dean, CCA USU director BTS Arts Access

We are here today to share insights into leadership, problem-solving strategies, and to learn what's happening outside of our home institutions. Today I'll be talking about why creativity is important, its connection to identity and social justice, and how using an explicit model of creativity can help you shape and assess your programs....But first - I'm back home! I worked for years near here in the MLK district, at GSU, and as director of F&PA for APS. I'm a visual artist and I remember once, after a show opened, a reporter interviewed me about my work. The next day the newspaper identified me as an African American artist – apparently because some of my work showed African-Americans. I'll be talking later about the cognitive mechanism that causes us to jump to conclusions like this is because it relates to creativity as well as bias and discrimination

I love this photo – its from my studio while I was at the Burren College of Art in Ireland developing a body of work based on site-specific interventions across the country. My studio looked out towards a farm, and eventually the cows became very curios about the strange doings inside. They eventually became my friends and even inspired some of my work – to the dismay of the McDonald's in downtown Galway. That's a story about creativity and social justice for another day. (Creative challenge – thought experiment - world of sound/conceptual mapping – if time)



Why is creativity important?

Beyond our conference theme, is there a deeper connection between creativity and social justice? From a cognitive perspective, I believe there is a deep connection. At first the two topics seem far apart.

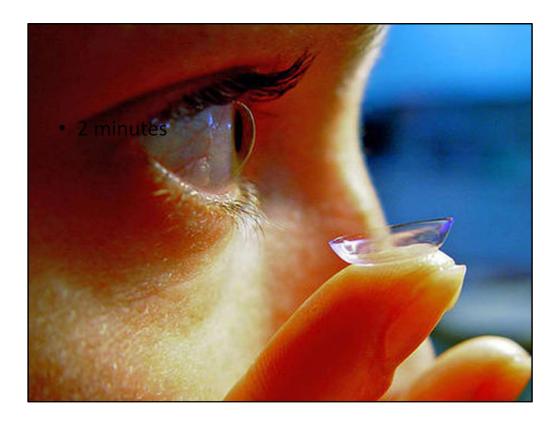
For instance, what do we think of when we think of social justice? Let's take wealth inequality – related to but different from Income Inequality.

Most of the wealth created is now the result of returns on previously existing wealth, not labor. In the big picture, this means that the harder people work, the less they will receive in terms of the overall economic pie. The recession eliminated 8.7 million jobs and "hollowed out" the workforce, with more higher- and lower-paying and fewer middle-income jobs.

As an example, recall a couple years ago Facebook bought WhatsApp, a messaging service, for \$19 billion dollars.

At the time, the company had a staff of 55 people - that's a cool \$345 million per employee. Thus there is a premium put on creative performance in our current economy.

So, creative skills are not just an economic priority for the country, but increasingly are a key for those who don't already have wealth.



Studies show a 20 year decline in creative skills even as the STEM professions need more creative people.

My task today is to discuss the role of administrators in promoting creativity. This is done through the curriculum and programming.

But to shift the curriculum, shift how people see. Not an easy thing to do with a faculty of experts. But the role of the administrator in promoting creativity is to do just that - to shift how people see. The steps to shifting the lens are:

- 1. Build a shared language.
- 2. Assess your faculty's views, assumptions and approaches.
- 3. Identify your opinion leaders.
- 4. Challenge their aspirations with new knowledge and strategies. While here in Atlanta,

I brought in experts and artists from across the country – from Harvard and Yale to San Francisco State – over the course of several years. I found that it takes about three years for faculty to catch hold of things.

5. Finally, help your department heads and opinion leaders monitor and adjust your programming and curricula.

But let's back up. We've heard today about how we might respond to the challenges faced by our society, challenges which take place against the background of our culture and history, and about strategies meeting some of these challenges. I'd like to continue in this vein by talking about creativity, what we need to know about it, and how it connects to our larger conference theme. But before I do any of that, I'd like to try something I've never done in this kind of setting before. What I'd like you to do in the next 7 minutes

STEP 1

- Big Groups sides of room, front/back of room
- Big Group 1: Think back to the most powerful personal creative experience that you've ever had.
- Big Group 2: Think back to the most powerful or intense experience of social justice you've ever had.
- Small groups of 3-4 one person takes notes on the index cards.
- Think back to a the most intense, powerful or meaningful moment that you personally experienced (not one you saw from a distance, on television or in a film – but one where you were personally present). Who was there, what was happening, how did you feel, what were you wearing, what did you see, hear, and smell?
- As arts professionals you'll have no problem sharing an intense creative experience, but let me help the group that will be discussing social justice. Notice I am asking for experiences of social justice, not injustice I'm interested in what social justice looks like in your experience. In my experience:
 - Sitting in room of African American 4th graders watching the inauguration of our nation's first black president.

- Onsight-Inisght 5th grade student saw a HS boy with Down's Syndrome and screamed but months later asked to work with a first grader with disabilities; or the 5th grade boy who said "I don't want to be paired with that high school arts mentor s/he's white, we don't go with white people" but 30 minutes later they were talking as if they were the best of friends
- Take a minute to gather your thoughts.
- Take 2 minutes to share with your small group.

I will monitor the time.

STEP 2

• Identify common themes across all of your stories? What are the values that make them important or special? Circle or note them in some way.

STEP 3

What are the three most essential, <u>core</u> values that come through all of the stories?

STEP 4

Share

Normally, I would break you into groups of 8 or so and have multiple facilitators familiar with the process helping; and we'd identify 5 rather than 3 core values; then share across groups.

We now have the foundation for shared understanding and developing a shared language around creativity over here, and social justice here (indicate groups).

This comes from my Creativity Infusion work. I'm part of a team that works with K-16 institutions to develop creativity through the curriculum.

The exercise we just did can help leaders shift the lens and reshuffle the deck.

If I were your Dean or department head and you were my faculty, this strategy becomes an exercise of me listening and learning about you, but also a means for you to clarify and express your own ideas, your core values, about either creativity or social justice. By going back to experiences that you cherish, that are sometimes private but passionate, you get to see your values – what drives you – in a new, public context. Telling stories about ourselves brings down walls and opens people to new perspectives, and starts to form the basis of a shared language – in this case, a shared language about creativity and social justice.

- By building a shared language and understanding based on personal stories, we honor e pluribus unum, both the many and the one. After all, faculty diversity within a coherent institutional vision benefits the diverse skills and backgrounds of our students.
- By developing a shared language we develop cohesion amidst differences, clearer communication, and an overall vision that empowers many voices.
- I've noticed sometimes there is a clearer shared understanding among faculty about lower level techniques and skills in our disciplines, but less shared understanding and agreement about higher level skills and broader values.
- Both creativity and social justice seem to belong to the latter category they are all like Rorschach tests – everyone sees something a little different when we use the words Creativity or Critical Thinking or Social Justice.
- When we look at the research about creativity (and critical thinking) there is debate about the Domain specificity vs. generalized skills, and whether critical thinking and creativity are general and transferable across disciplines or are deeply domain specific. Research and informed judgment seem to point more towards domain specificity, but some research suggests that transfer does seem to occur if the means of transfer is explicitly taught.
- So what I am saying is that what we are exploring today is a small slice of a very large, complicated issue.

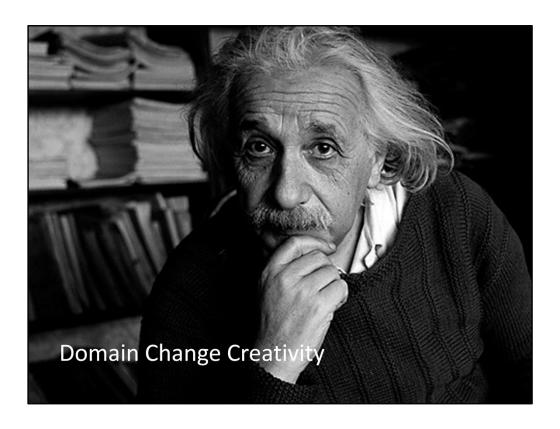


I would like to add to our ideas about creativity and social justice identified in our small groups; I will start with creativity and then go to social justice.

There are several major models of creativity. I'll touch on them briefly. The first is creativity as self expression.

Understanding the different creativity models helps you to reflect on where your faculty are - whether and how they may or may not explicitly be developing creative skills in students. The educational concern with creativity started 100 years ago and has since expanded to look at life long creativity.

For instance, if an instructor's model of creativity is self expression, they might believe that little or no explicit instruction in creative skills is needed as long as there is self-expression, or that nurturing a positive self concept in students will best cultivate creativity. There might be an assumption that creativity is "in" expression itself. The origins of this model can be traced to psycho-analytic ideas about expression and mental health.



Domain Change Creativity

If an instructor's model or understanding of creativity is defined by whether or not a product, a performance or an insight fundamentally changes a discipline – music, theatre, dance, art, or physics – then there is little reason to teach for creativity in introductory courses – or perhaps not at the undergraduate level at all. Another assumption might be that it can not be taught – that it is the product of genius, accident, or unique circumstances. Thus little needs to be done since it is out of our control.



Creativity as Problem Solving

If an instructor's sees creativity as innovative problem solving, emphasis will be placed on solutions being both novel (or unusual) and useful. The focus isn't on changing the field or discipline, but in moving it forward one problem solution at a time. The instructor might explicitly teach or model a handy set of heuristics or techniques for coming up with novel ideas. Here, process is as important as product.

Student initiative - and trust in the student's abilities - is an important part of the process, and students who find problems to solve are more highly rewarded than those who simply follow the instructor's formula. Creativity is not seen as innate or linked to self expression, nor as something rare and world-changing – but a skill with a strong cognitive component that can be developed in any discipline and regardless of where a student is on the arc of mastery. Indeed, mastery isn't defined solely by a set of technical skills but rather student's independence as an outcome.

(the 'enemy" of this approach is the passive student following teacher direction)

Role of leader – to focus faculty vision and shape it, at times to challenge faculty to grow



Environmental Perspectives

If an instructor's model or understanding of creativity is defined by environmental perspectives, creativity is a function of the social, moral, physical, and economic environment in which a person is embedded as much as it is a function of individual insight, expression, technique or problem solving. Black Mountain College is an example that someone might cite who takes an environmental perspective on creativity.

An administrator or instructor who emphasizes an environmental approach to creativity might be more concerned with laying the foundation for interpersonal interactions, opportunities for cross-disciplinary collaboration, and eliminating boundaries that prevent students and faculty from having the time and space for long term development of innovative ideas and work. They might seek to hire individuals who can support and sustain these kinds of interactions.

Traditionally, Environmental factors impacting creativity traditionally ignored.

An administrator who emphasizes the environmental approach will ask: What are the conditions for creative behavior to happen?







Cultural Critique Models of Creativity

- Creativity involves critical reflection
- Depends on the personal interfacing with the social
- Relies on bringing tacit or hidden social and cultural structures to light
- Creativity must be useful
 - Call to social action
 - Also personal empowerment

Cultural Critique Model

If an instructor's model or understanding of creativity is defined by cultural critique, issues of social justice and community engagement will be at the forefront of student work. Instructors develop skills and technique within a broader context of how the discipline links to the larger world and the issues that people face, especially those that are marginalized. Skill and technique are often placed in the service not of perpetuating existing social norms, but in questioning the hierarchies of thought and value that these practices and norms reinforce. The origins of this approach can be traced back civil rights movements and early postmodernism.

In this model, instructors encourage the use of cognitive, emotional, and moral skills in tandem, and encourage students to look for opportunities for creativity at the interface between an individual and the current socio-economic environment.



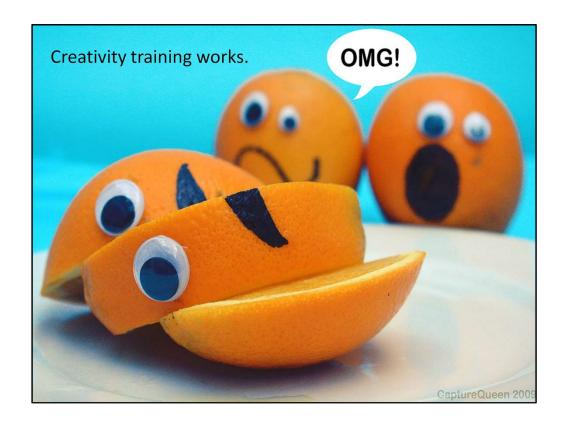
Socio-Economic Model

If an administrator or instructor's understanding of creativity is defined by socioeconomic priorities they might look first and foremost at how the arts contribute to the economy – say, a state's economic development plan – and how a college, department or program can contribute to the success of economic development zones that include the arts. They might actively seek collaborative ventures with the STEM fields.

20-year *decline* in student creativity (Kim, 2011)

Creativity will be the primary driver of the future economy (National Academy of Sciences, et. al., 2011).

Students who can collaborate, find and solve problems, apply creative skills, use empathy, and navigate complex relationships (all developed in the arts) (National Governors Association, 2002 & 2007; Adams, 2005).



The next thing to know is that creativity training works. Decades of studies even show what training components seem to work best.

The creativity model you gravitate to is shaped by your own core values. It is likely each of us has elements of all of these models inside but that we tend to emphasize one or two. Understanding this orientation can help shape decision making by clarifying your own personal goals while also helping to clarify how the faculty sees their role as it pertains to creativity.

But we can challenge our faculty's aspirations by finding ways to share current research into developing creativity.

For instance, research has identified key component cognitive skills that support creative work. These include kills related to:

- Speculative thought
- · Problem construction or problem finding,
- Information gathering,
- concept search and selection,
- · Conceptual combination,
- idea generation,
- idea evaluation,
- · implementation planning,

· Action monitoring.

It has also identified key features of what successful creativity training looks like.

So today I've chosen to highlight one meta-study – an analysis of multiple other research studies – because it highlights features of the emerging consensus around creativity training. While this example focuses on cognitive skills, a part of the overall consensus is that environmental factors are just as important in developing creativity. This means we need to look at both pedagogy and context to successfully develop creativity.

- •based on 70 prior studies meeting high internal and external validity standards
- •well-designed creativity training programs induce gains in performance that generalize across criteria, settings, and target populations.
- •more successful programs were likely to focus on development of component cognitive skills (r = .15, β = .05) and the heuristics involved in skill application, using realistic exercises appropriate to the domain at hand
- •such <u>cognitively based</u> programs produced the only sizable positive correlation (r = .31) and regression weight (β = .24)
- •Those programs that were based on an explicit model of creativity produced greater benefits (r = .39; $\beta = .46$) overall and in the criterion specific analysis than those which relied on a collection of theory-independent techniques.
- training should be lengthy and relatively challenging
- •suggests that creativity training leads to the generation of original, or surprising, new ideas (Besemer & O'Quin, 1999).



Now I'd like to pick up the thread that connects creativity to social justice. We often think the arts promote social justice through artistic products and performances that highlight issues and challenges. They do – but as I will show creative skills have a role to play at the cognitive level.

We all have examples of the arts promoting social justice at our home institutions. For example, at Utah State we have the Crossroads Project.

The physicist Robert Davies who originally worked at the University of Oxford in England and then came to USU, became concerned between the gap between what science understands about climate change, and what the public understands.

He reached out to our artists in residence at the Caine College of the Arts, the Fry Street Quartet, in finding ways to change people's behavior through music.

They created the Crossroads Project a multimedia performance featuring music, imagery, and narration that premiered in 2012 and has been performed many times since. (including internationally). You can hear some of it and get more information on YouTube.



Creativity and social justice are not just linked through performance – they are also linked through learning. As I mentioned, I am privileged to have an endowment, the Beverley Taylor Sorenson Arts Access Program, for reaching students with special needs. Really, the arts are freedom machines, and a clear example of this—combining practical innovation and with a small but no less significant story of social justice — comes from Northern Utah. There a high school art teacher wanted to ensure that students with disabilities had access to the experience of making art. But if a student has limited control of their arms and hands, how can this be accomplished? This is his solution.



Another example is the work of my colleague in Art Education, Ms. Dennise Gackstetter.

Dennise has her art ed students work with refugee and immagrant children to cultivates creativity through the use of hand made personal journals. By starting where the students are and asking them to risk and reframe, they question systems of logic, thinking and value in their lives so that they can make new connections, and to slowly develop individual voice and vision. Dennise works out of her core values about the importance of connecting to other people and also across cultures, and about the intimate, transformative role that the arts can play in people's lives.



Oh its joke time! I have to apologize to my USU colleagues, who have probably heard these.

Who is this?

I get to practice my really bad fake French accent now. (This is the reason I'm in art and not theatre).

Tell joke

Frame Shifting

Notice the punch line shifts the frame at the end

Humor plays an important role in both creativity and social justice – and gets us back to the underlying cognitive mechanisms behind bias, what makes us laugh, and innovation. Humor has played an important role in our culture carving out a space that values creativity, improvisation, the questioning of hierarchies, the value of making unexpected connections. Its also been an important tool for unveiling inconsistencies in our culture

Let's try one more – this time a visual joke.



Notice the punch line isn't given to you — the image provides just enough contextual information - because the images are so engrained in our culture - for the punch line to spring up in your mind. Still, this is an example showing that given a visual, aural, or kinaesthetic image (or mental stimulus) the mind naturally searches for a context, a frame of reference, to make sense of it. Most of you jumped to the right context to interpret the images — the Lord of the Rings movies and social media. The definition of an idea can be stated as an equation: image + context (or frame of reference) = idea. Here image refers to a sound, kinaesethetic, or visual image held in the mind.

(If time, mention NPR series "Brilliant and Bored" – too much digital distraction and instant gratification- Need boredom, mental space for creativity)

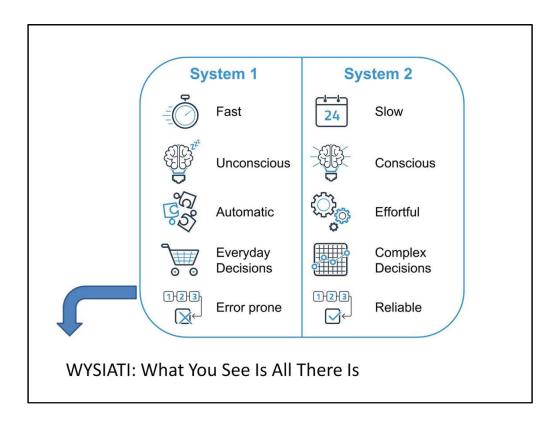
Let's try one final joke:

Two men are playing golf on a lovely day. As the first man is about to tee off, a funeral procession goes by in the cemetery next door. He stops, takes off his hat, and bows his head.

The second man says, "Wow, you are incredibly thoughtful."

The first man says, "It's the least I could do. She and I were married for 25 years."

Once again, the punch line reframes everything that is said before it. But notice it is chauvinistic and juvenile. Its funny to some – or not funny to others – because it relies on what I call our embedded identity – the largely unconscious network of associations we absorb from family, friends and our culture – even if we reject them, they are still a part of us. And thus Gollum points us in the direction of cognitive science and well-established findings about how the brain works. It also points us to the where creativity and social justice intersect.



We've all heard about studies demonstrating everyday, unconscious forms of racism that stem from a complex of values, culture, and cognitive mechanisms. For instance, there is the replicated study showing that if you have resumes that are identical in every way except for the names, human resource officers are more likely to choose resumes with Caucasian-sounding names than those with African American sounding names. There are many related studies showing this kind of bias and discrimination, as well as how Caucasians are blind to the privileges they have just because they are Caucasian, regardless of socio-econimic status. I'd like to turn now to the collection of related cognitive mechanisms that are the vehicle for this kind of bias – which are also, ironically, the same mechanisms that help us make unexpected associations and connections across mental domains in the creative process.

We've all probably experience times when our minds are overworked and we are cognitively busy – and find it hard to control our eating or make good choices. The reason seems to be the way two cognitive systems in our minds work together.

The mind has two important systems: an *intuitive* system which works quickly and instinctively; and a slower, more ponderous *rational* system. The Nobel Winning behavioral economist Daniel Kahneman calls them systems 1 and 2.

The fast System 1 mind, when confronted with new data, quickly searches through emotional and experiential associations order to arrive at an almost instantaneous

and largely unconscious evaluation. The slow System 2 mind, on the other hand, takes a more cognitive approach, scrolling through memory banks and engaging the rational mind before coming to conclusions. The existence of these simultaneous systems helps explain many interesting phenomena, such as how the brain "fills in the blanks" when faced with ambiguous or incomplete information and how our associations and biases affect our evaluations of people or events.

Thus, findings about how are brain works – here identified as Systems 1 & 2 - already suggest connections to both creativity and social justice. We're all familiar with brainstorming, getting ideas from random association or inspirational Eureka moments when ideas pop into mind from nowhere. These are functions of System 1. But so is racial profiling, stereotyping, and knee-jerk responses to those who don't look, sound, or act like we do. We also know about the hard work and mental effort required to bring creative ideas to fruition. This is a function of System 2. Efforts to promote both creativity and social justice need to account for both Systems.

Here are some findings about implicit bias and automatic associations made by System 1.

Loss Aversion: People's dislike of losing is about twice as strong as our enjoyment of winning. In practical terms, this means we're twice as likely to switch insurance carriers if our policy's rates go up than if a competitor's rates go down.

Optimism Bias: We tend to overestimate the likelihood of positive outcomes. Thus, most new restaurant owners think they will succeed, even in cities with a 65% failure rate. This tendency is in a kind of perpetual tug-of-war with loss aversion.

Attribute Substitution: When faced with a complex problem, we tend to unconsciously simplify it. Our response, therefore, is often the solution to a related, but completely different problem. This is part of a general psychological tendency to avoid expending too much energy on decision making, and explains many forms of bias. What is racism, after all, besides a shortcut to judging another person's intelligence or value?

Kahenman says that

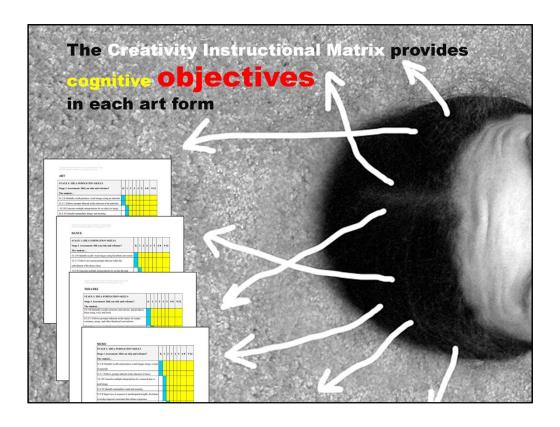
"People who are cognitively busy are also more likely to make selfish choices, use sexist language, and make superficial judgments in social situations." (p.41).

But we need System 1. It is this reflex-like quality, the instant associations and the snap judgments that System 1 brings to the table that allow us to go about the vast

majority of our day and interact with the world around us efficiently, and in a way that is usually correct and useful. We would be paralyzed if we had to rationally think through all of the things we are exposed to. It is cases where we don't correct System 1 or don't correct it properly, where we get into trouble and experience biases and misjudgments.

One last quote from Kahneman:

The attentive System 2 is who we think we are. System 2 articulates judgments and makes choices, but often endorses or rationalizes ideas and feelings that were generated by System 1" (p.415).



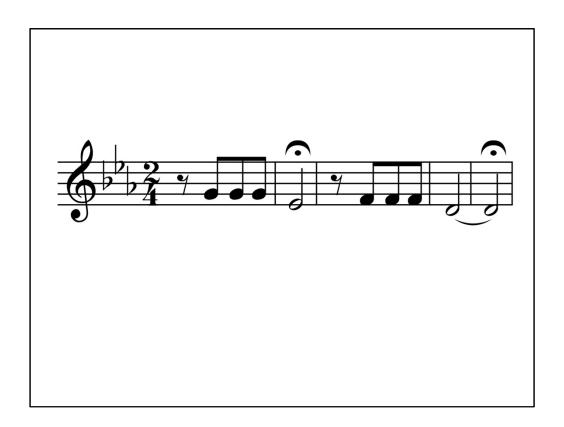
Training works best with an explicit creativity model that targets component cognitive skills. By building a shared language around open-ended concepts such as creativity, a faculty can ensure greater horizontal and vertical curricular alignment across programs in ways that help define, sustain, and even market a college's identity.

The cognitive skills in each matrix are grouped into 3 stages – Risk and Reframe, Question and Connect, and Voice and Vision.



Risk and Reframe can rely heavily on System 1- your understanding of this advertisement is largely a function of System 1. Notice also the values and attitudes embedded in our cultural identities that this advertisement is playing on and make this understanding possible.

Although we all know this, it helps to restate it: how a problem is framed is critically important – so the question may not be how do you build a better smartphone, but what is communication? The ideas and possible innovations expand exponentially by just reframing the question.



For instance, think of how many ways Beethoven reframed the phrase short-short long



Question and Connect is largely the domain of System 2 – it is effortful, critical, questions assumptions, looks for different connections. Cognitive skills in this stage are designed to question systems of logic and value to make new connections. Here John Cage comes to mind and also....

Weingarten has a fascinating observation on writing, drawn in part from a long-ago story he did about a terribly inefficient sewage treatment plant in Detroit that basically wasn't treating sewage.

Weingarten used that example to say that the most important words aren't the ones you write, they're the ones that you don't write -- the ones you make pop up in a reader's head. By doing that, he said, you change the reader from a passive receiver of what you've written to an ally.

Gene Weingarten: It reminds me of the best first paragraph I ever wrote. I was a reporter at the Detroit Free Press in 1978, covering the Detroit sewage treatment plant on West Jefferson Ave, which was doing precisely the thing this guy is protesting, shooting nearly raw sewage out into lake Erie. My lead was:

Every day, liquid sewage -- 400 million gallons of it from starting points around Metro Detroit -- roars through subterranean sluices and pipes to arrive at a single collecting point at West Jefferson Ave. Then, it hits the fan.



Shirin Neshat, the most famous contemporary artist to come from Iran

Her work refers to the social, cultural and religious codes embedded in Muslim societies and the complexity of certain oppositions, such as man and woman.

Using Persian poetry and calligraphy she examined concepts such as martyrdom, the space of exile, the issues of identity and femininity

portray abstract oppositions based around gender and society, the individual and the group.

While these works hint at the restrictive nature of Islamic laws regarding women, they deliberately open onto multiple readings, reaching instead toward universal conditions. "Shirin really believes in the power of the artists' voice to enact change, to unsettle the powerful" — and to protest.



Having an explicit model of creativity along with an aligned set of instructional objectives allows you to:

- Assess your programs through a new lens
- More consistently develop mindsets that undermine bias and discrimination highlighting ways question systems of logic and value
- Provide elements in the curriculum to strengthen individual artistic identity

What should you look for in program outcomes? You can ask:

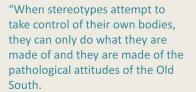
Do students leave your program able to generate, identify and define a constellation of related problems that reflect personal objectives and aspirations in their field? Is this constellation of generative problems rooted in their aspirations, drive, or emotional life in a way that will sustain them through periods of doubt, when the next step isn't know?

Have they chosen materials, methods, or strategies well suited to solving these problems and which, in turn, will generate more ideas?

Do students leave your program with a clear set of individually defined standards of excellence (that meet the criteria of consistency, completeness, and internal coherence in relation to the body of work or repertoire the student has developed?

Finally, have they positioned themselves in relation to both their discipline, other relevant fields, and their own interests and aspirations such that they have evolved an individual voice and vision? Let's look at an example of this.









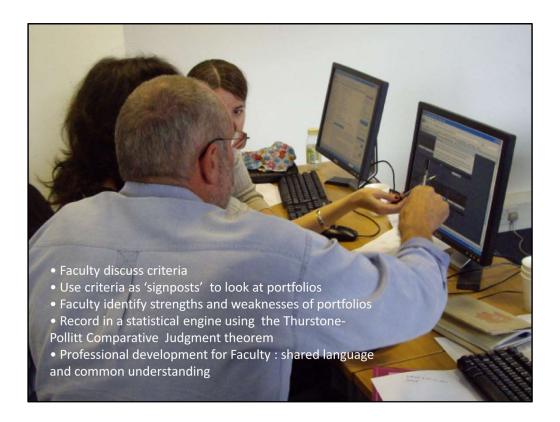
Therefore, racist stereotypes occurring in my art can only partake of psychotic activities."

-Kara Walker



Blood diamonds - Blood sugar Role of slaves and the poor in sugar production Role of sugar industry in past oppression Old domino sugar factory in new york city

"[But] human behavior is so mucky and violent and messed-up and inappropriate. And I think my work draws on that. It comes from there. It comes from responding to situations like that, and it pulls it out of an audience. I've got a lot of video footage of that [behavior]. I was spying."



I also want to touch base on assessing creativity. There are various ways to do it – one of the keys is finding a valid and reliable method. You faculty probably use panel review of student work in various ways. A researcher at Goldsmith in London took this idea and developed a system that has a 0.95 reliability coefficient – about the same as a standardized math test. So you can assess the specific creative skills your faculty decides are essential using a method familiar to them, but which has been tweaked to be statistically robust. Its been used 10,000's of times in different countries, but only two places in the US – Atlanta and Utah.

This process also becomes a means of Professional Development across academic years, and a way of tracking student performance from one year to the next using a method with strong psychometrics.

Shown: Live Assess with ACJ Engine

Which takes us back to where we started – Core Values and developing a shared language and shared vision about creativity – which can include social justice through the choice of assessment challenge



The arts are freedom machines. To empower students for a future where many will work in jobs not yet invented and where the worth of their labor will rely heavily on their creative skills, we should examine our programs through the lens of creativity and what research tells us about it. I encourage you to work with your faculty to develop an approach that works for you.

Thank You! For PPT references, image credits, or questions: Raymond.Veon@usu.edu Caine College of the Arts Utah State University