

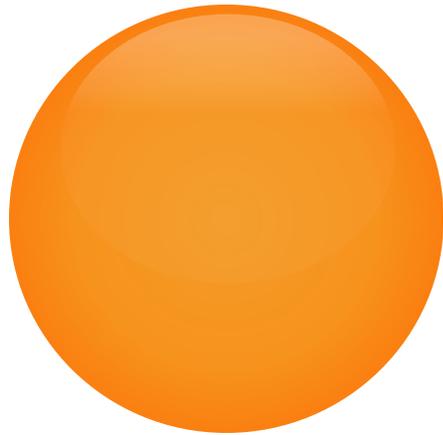
Dr. Ellen Vincent



Exploring

# CT2: Alternate Views





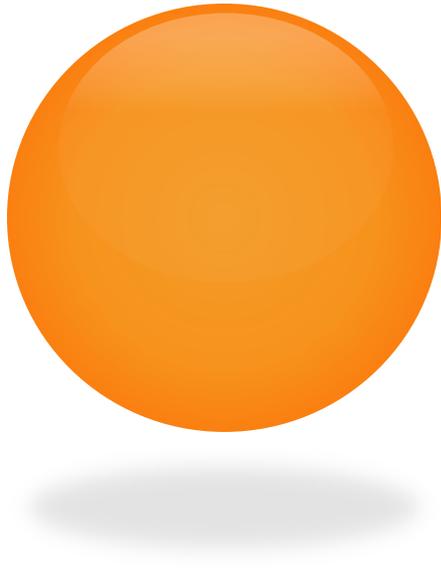
# **CRITICAL THINKING IS AN ANCIENT RICH CONCEPT**

The practice and concepts are 2500 years old. 

<http://criticalthinking.org/pages/defining-criticalthinking/766>



# HISTORY



IT CAN BE TRACED IN THE WEST TO ANCIENT GREECE WITH ITS SOCRATIC METHOD AND IN THE EAST TO ANCIENT INDIA WITH THE BUDDHIST KALAMA SUTTA AND ABHIDHARMA LITERATURE.

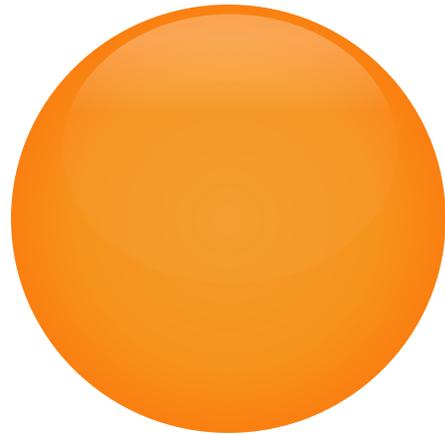
Brookfield, S.D. "Contesting criticality: Epistemological and practical contradictions in critical reflection" in *Proceedings of the 41st Annual Adult Education Research Conference* (2000) as found on Wikipedia page at [http://en.wikipedia.org/wiki/Critical\\_thinking](http://en.wikipedia.org/wiki/Critical_thinking)

# Socratic method

- Father of philosophy.
- **Questions** were asked to determine logic, ethics, fairness, and constancy.
- Inspired the scientific method (develop a hypothesis and then investigate validity.)



Carnelian gem imprint representing Socrates, Rome, 1st century BC-1st century AD



# **CRITICAL THINKING IS AN INTELLECTUALLY DISCIPLINED PROCESS**

<http://criticalthinking.org/pages/defining-criticalthinking/766>



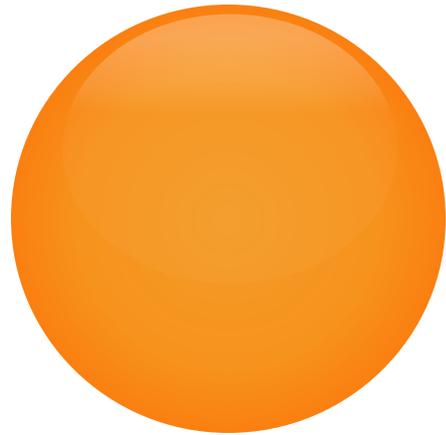
# Critical thinking

- Critical thinking happens when we think about how we think... we track our own thoughts and decision making processes (Vincent, 2013).
- Critical thinking...the awakening of the intellect to the study of itself (Scriven & Paul, 1987 from the Foundation for Critical Thinking Defining Critical Thinking at <http://www.criticalthinking.org> ).



<http://sandykumskov.com/images/think.jpg>

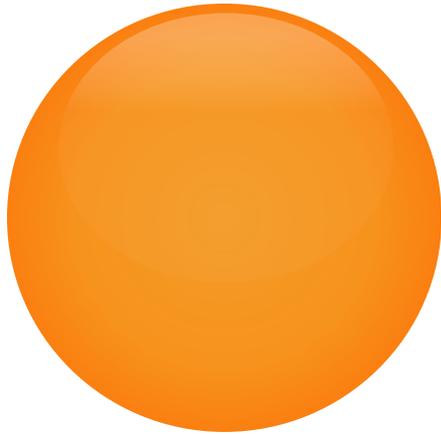




# WHY SEEK ALTERNATE VIEWS?

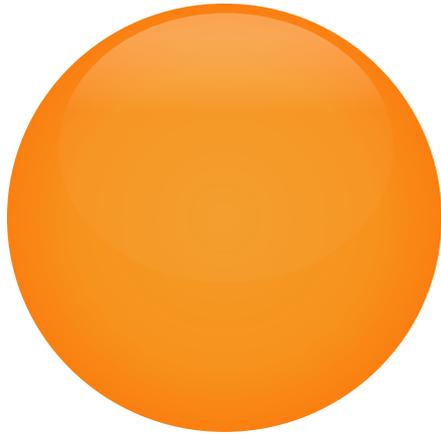
Critical thinking process





**WE QUESTION OUR OWN PURPOSES,  
EVIDENCE, CONCLUSIONS,  
IMPLICATIONS AND POINT OF VIEW  
WITH THE SAME VIGOR AS WE  
QUESTION THOSE OF OTHERS.**

(PAUL BIOGRAPHY BY ELDER)



**THEY EMBODY THE SOCRATIC PRINCIPLE: *THE UNEXAMINED LIFE IS NOT WORTH LIVING*, BECAUSE THEY REALIZE THAT MANY UNEXAMINED LIVES TOGETHER RESULT IN AN UNCRITICAL, UNJUST, DANGEROUS WORLD.** (ELDER BIOGRAPHY)

# Ellen Vincent

- Encourages curiosity; reduces echo chambers
- Awakens the questioning mind; minimizes silos
- May foster interdisciplinary teamwork needed to craft solutions to environmental problems.



Photos courtesy John Evan Brown and Robert Dinkins

A word cloud on a black background featuring various terms related to alternative viewpoints. The most prominent words are 'viewpoints' and 'ALTERNATE VIEWS'. Other words include 'open', 'imagining', 'expansive', 'opposing', 'mindedness', 'engagement', 'empathy', 'explore', 'mutuality', 'multiple', and 'thinking'. The words are arranged in a non-linear fashion, with some oriented vertically and others horizontally.

open  
imagining  
ALTERNATE  
VIEWS  
viewpoints  
multiple  
expansive  
opposing  
mindedness  
engagement  
empathy  
explore  
mutuality  
thinking

# Chimamanda Ngozi Adichie

## Chimamanda Ngozi Adichie

- Nigerian award winning author, educated at Yale
- [TED Talk: The danger of a single story](#) (18.49)
- Awarded MacArthur Genius Grant 2008



[Ehttps://www.ted.com/talks/chimamanda\\_adichie\\_the\\_danger\\_of\\_a\\_single\\_story?language=en](https://www.ted.com/talks/chimamanda_adichie_the_danger_of_a_single_story?language=en)

[https://pi.tedcdn.com/r/pe.tedcdn.com/images/ted/3527cd41287ab9d66473e112dbd339c6e515ef38\\_1600x1200.jpg?quality=89&w=800](https://pi.tedcdn.com/r/pe.tedcdn.com/images/ted/3527cd41287ab9d66473e112dbd339c6e515ef38_1600x1200.jpg?quality=89&w=800)

<http://2.bp.blogspot.com/-YznGKlErV4/U4HQsluLVml/AAAAAAAAAEIY/X1olwTpVfzk/s1600/adichie2.jpg>

# The danger of a single story...Mine

---

Hired help was poor “Finish your food-don’t you know people like his family have nothing?”

Went to see them in the village—was startled—by beautiful hand made basket.

“All I had heard about them was how poor they were, so that it had become impossible for me to see them as anything else but poor. Their poverty was my single story of them.”

**--Chimamanda Ngozi Adichi**

# The danger of a single story... Hers

- “My American roommate.... asked if she could listen to what she called my ‘tribal music’,
- She assumed that I did not know how to use a stove.
- Her default position toward me...was a kind of patronizing, well-meaning pity. My roommate had a single story of Africa: a single story of catastrophe.

**--Chimamanda Ngozi Adichi**

# David Brooks

## David Brooks

- Op-Ed columnist NY Times
- Commentator on PBS NewsHour, NPR's "All Things Considered" and NBC's "Meet the Press."
- Award winning author
- Instructor at Yale



# The danger of a single story....

- “...What happens when complex human beings and situations are reduced to a single narrative”..
- “Every problem can be solved by finding some corrupt or oppressive group to blame. “
- “...Each individual life contains a heterogeneous compilation of stories. If you reduce people to one, you’re taking away their humanity.” --**David Brooks**

# Brookfield-Critical Thinking Processes



Critical thinking results in *taking informed action* 

Brookfield, S. D. (2012). *Teaching for critical thinking*. San Francisco, CA: Jossey-Bass

# Taking Informed Action

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Informed action is based on **thought and analysis** (hunting claims/beliefs),

that contains some **evidence** (checking assumptions and using multiple viewpoints),

that results in **action** that improves the quality of our lives and leads to satisfaction.



# **STEPHEN BROOKFIELD, PH.D. AWARD WINNING AUTHOR AND TEACHER OF CRITICAL THINKING**

Born-Liverpool, UK

Position-John Ireland Endowed Chair,  
University of St Thomas, Minneapolis,  
Minnesota

Works in England, Canada, Australia, US  
Clemson Thinks2 presenter in summer 2013

Photo: <http://www.columbia.edu/itc/tc/parker/adlearnville/transformativlearning/graphics/Brookfield.jpg>

Text: [http://www.stephenbrookfield.com/D\\_Stephen\\_D\\_Brookfield/Home.html](http://www.stephenbrookfield.com/D_Stephen_D_Brookfield/Home.html)text:

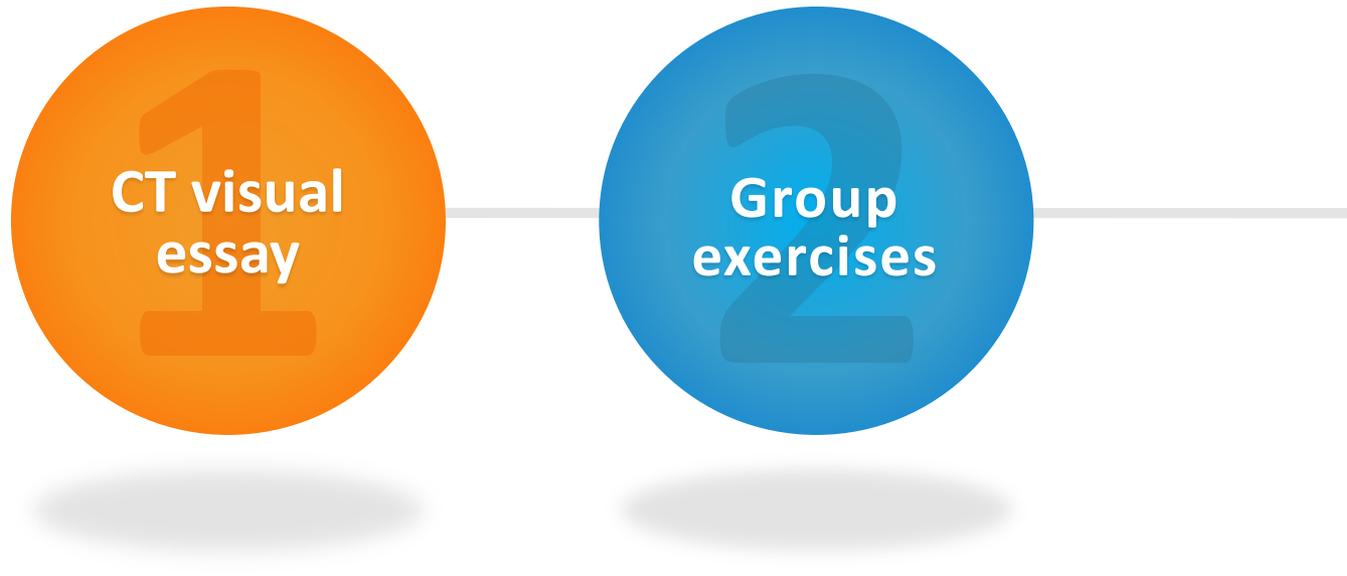
# Critical Thinking Processes



**Critical thinking results in *taking informed action***

Brookfield, S. D. (2012). *Teaching for critical thinking*. San Francisco, CA: Jossey-Bass

# Critical Thinking Processes



Critical thinking strategies for *uncovering multiple views*

Brookfield, S. D. (2012). *Teaching for critical thinking*. San Francisco, CA: Jossey-Bass

# Tools: CT visual essay

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- Points earned for identifying alternate views to the claim.



# Critical Thinking Visual Essay Items

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1. Identify a claim/belief/assumption from the readings or class that personally connect with.
2. Investigate the validity of the claim/belief/assumption.
3. Explore or look at the issue using multiple viewpoints.
4. Reflect from your past and tell the story.
5. Conclude with personal *informed* actions.
6. Add an image that supports your search.
7. Cite the image



# Sustainable Landscape Garden Design, Installation, & Maintenance HORT 3080

**HORT  
CT<sup>2</sup>**

## Critical Thinking Protocol in Visual Essay

Grading rubric: 100 points total

Each essay should contain a header that includes: Name; Class title; Date; CT2 Visual Essay

Save the essay with your last name and the essay # in the saved file name: e.g. Vincent\_CT2 essay1

Critical Thinking Essay Item	Points
<b>Identify a claim/belief/assumption from class or readings that you personally connect with:</b>  Identify and clearly state a specific claim/belief/assumption that you perceive. Include the source(s) you are using in the text. Do not use quotes-use your own words.	10
<b>Investigate the validity of the claim/belief/ assumption:</b>  How can you check the author's claim/belief/assumption for accuracy and validity? Be specific and use a <b>minimum of two methods</b> to determine the legitimacy of the author's claims.  <b>Experiential</b> (personal experience); <b>authoritative</b> voices (professors, .gov, .edu sites); <b>disciplined</b> (peer reviewed literature; surveys; fact checks; repetition of experiments, etc.)	20
<b>Explore alternate possibilities/conclusions using multiple viewpoints:</b>  What other possible perspectives, explanations, or interpretations can you suggest for a deeper understanding of the claim/belief/assumption? State the source of the view.	10
<b>Reflection from your past:</b>  Using your own personal experiences share a story from your past that was triggered by the claim/belief/assumption. Make it vivid so the reader feels as though they were there with you.	10

**Critical Thinking Visual Essay** By Vernon Dennis

# THE HIGH LINE

SC Nurseryman  
May/June 2017

Over the course of the previous semester in Sustainable Landscape Garden Design, Installation, and Maintenance class we dove into talking and learning about how to create a sustainable landscape and the benefits in which the design of these landscapes bring to the community. One landscape that we have continually discussed in class was the High Line, located in New York City. This structure is a public park that was built on one of Manhattan's historic railways, located above its streets on the west side. The park is known for its beautiful use of green space as well as the small shops that are placed along the entire strip. This is a great landscape to use when referencing sustainable landscapes.

#### Claim

We need to build more sustainable landscapes like this one in other areas across the globe. This structure was redesigned from the foundation of an old railway which was out of order and left to rot for 20+ years. A significant group of people of different backgrounds and professions came together for the common goal of bringing life to the railway without losing its historical significance. After long collaboration, designers were able to come up with a plan that successfully utilizes the already present hardscape of the abandoned rails by adding a variety of low maintenance native plants. With the simple yet ingenious installment of these plants, the area has been revitalized and labeled as one of the most, if not the most well-known sustainable attractions in New York.

#### Disciplined and Authoritative Sources

I have talked to several people who have had the luxury of experiencing the wonderful aesthetics of the High Line. Dr. Vincent, Professor at Clemson University often refers to it as an area brimming with energy and bustling with people, while also giving off a calming aura. While searching online at The Friends of the High Line web page (<http://www.thehighline.org/blog/2013/10/24/the-dirt-on-nematodes-a-gardeners-unlikely-ally>) I have found that Horticulturists are trying to find ways to help the area become even more self-sustaining. One way they are doing so is by adding nematodes in the environment. The nematode *Heterorhabditis bacteriophora*, only attacks grubs, and was applied to help control the plant pest *Anomala orientalis*, an Oriental beetle,

#### Alternate View Points

There are some people who dislike the High Line and think that the space should be reconstructed for public transportation. Others think that it should have just remained as an open canvas for people to create graffiti. There are also others who just wished that the railway be revamped and used strictly as a memorial for the changing of an era. All of these ideas are wonderful and interesting but I personally appreciate the current usage of the once railway turned global attraction.

#### Concluding Personal Informed Action

The High Line has been one of the best sus-

tainable installments and uses of extremely outdated railroad equipment. Its innovative design creates green space in the most unlikely of places; and all hands who helped in the development of The High Line have shown exceptionally outstanding sustainable development skills in reducing the amount of pollution in the area by adding plant material. This plant material is used to filter air while also helping to cool the city. Reusing elements and including existing hardscapes helps to maintain historical representation in the community. This has given me motivation to use those same techniques when I am designing a landscape in the future.

Photo by Elen Vincent



# Clemson Horticulture Student Essay

## Breaking the Norm

By John Robert Dinkins



Do you like to blend in or stand out? When designing your own yard would you rather conform or give your yard a pop with exciting originality and represent a background of your own culture? Well according to authors in *Landscape and Urban Planning*, "Results suggest that for American front yard land-

scapes, the cultural norm to conform to what the neighbors appear to prefer is stronger than cultural norms that favor particular conventional landscape characteristics." (Dayrell, Nassauer, Wang. 2009, p. 290).

While I don't currently own a front yard, nor do I have a particular design I plan on implementing, I think I can say that I want to display a sense of my culture in the design of my yard – even if it is not what my neighbors may prefer. With that said, the survey

developing neighborhood plans should be heard. And from my own experience; I've seen many neighborhoods with mundane neutral landscapes installed with only maintenance and proficiency in mind and not the whole picture of providing a landscape where the owner can feel at home.

In my past, I would visit my grandmother's rural country home where she had a beautiful camellia garden planted in her side yard. During these visits, my mother made it a point every time to walk through the camellia garden. Today I have a great appreciation of the camellia garden at the South Carolina Botanical Gardens as it gives me a sense of connection with my past of fond memories visiting the rural country home where my family was. One thing I plan on implementing into my own landscape one day is a camellia garden.

With "going against the grain" as my view I think it is important to take into account the counter argument to what I have proposed. A Home Owners Association may require yards to conform to a certain standard and look. By allowing the landscape to solely suit the owner, the value of the homes in the neighborhood could be negatively affected if it's considered bad taste. With these factors in mind I think an idea should be presented to a designer or possibly the HOA for an approval. This could satisfy both the owner of the landscape and the neighborhood.

While being respectful of the rest of the neighbor-

# Tool: Group exercises

- *Form interdisciplinary teams by mixing majors*



# Tool: Group exercises

- *Provide clipboards and worksheets to professionalize the experience*



## Group exercise: Sustainable Communications | HORT

Name	Major
1 Brittany Lapple	Architecture
2 Rachel Edwards	Hort
3 Jay Gervais	Civil Engineering
4 Austin Allen	LAHC

State a claim (clear and obvious) made by authors (like a hypothesis) about engagement and/or dialogue:

In order for a group to be successful<sup>in a dialogue setting</sup> every member must be included and energetically engaged, through maintenance and facilitation

Validity checks (search for truth) using three methods/sources:

1-Experiential (personal or others)

Multi- or interdisciplinary work with conflicting or multiple opinions. (e.g. lab work, architecture projects)

2-Authoritative (professors, .gov; .edu; non-profit organizations)

A contractor who has to deal with and help

**2-Authoritative** (professors, .gov; .edu; non-profit organizations)

A contractor who has to deal with and help converge ideas from a number of different professions on a daily basis.

**3-Disciplined** (peer reviewed lit, published surveys and experiments)

Published peer reviewed article on the subject of communication and engagement.

### Alternate views/perspectives

Identify people or organizations who may disagree with the claim.

State the source of the view.

- A CEO who wants to have the final say on decisions, despite other opinions
- Control oriented people in positions of power
- A tenured professor who doesn't have Intellectual humility

# HORT 3080 Group exercise: Sustainable Garden | CT2

Name	Major	Name	Major
1 Laurence Gressette	LA	3 Raye A.	EA: Hort
2 Austin Allen	LA	4 Anna Fisher	Hort

## Viewpoint from your discipline

Beliefs/claims (clear and obvious) of authors (like a hypothesis):



Be mindful of design process in working with other disciplines.

Methods/sources for checking validity

Experiential (personal or others):

How we feel and know about the claim through our own LA and design experience.

Authoritative (professors, .gov; .edu; non-profit organizations):

Ask professors about personal experience working w. collaboration / local consultants / viewpoints from <sup>college</sup> books

Disciplined (peer reviewed lit, published surveys and experiments):

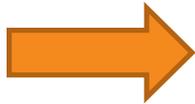
Clemson extension for published surveys.

ASK professors about personal experience working w  
collaboration / local consultants / viewpoints from books <sup>college</sup>

Disciplined (peer reviewed lit, published surveys and experiments):

Clemson extension for published surveys.

**Multiple views:** Perspectives (your own or imagined others) that do not support your claim. State the source of the view.



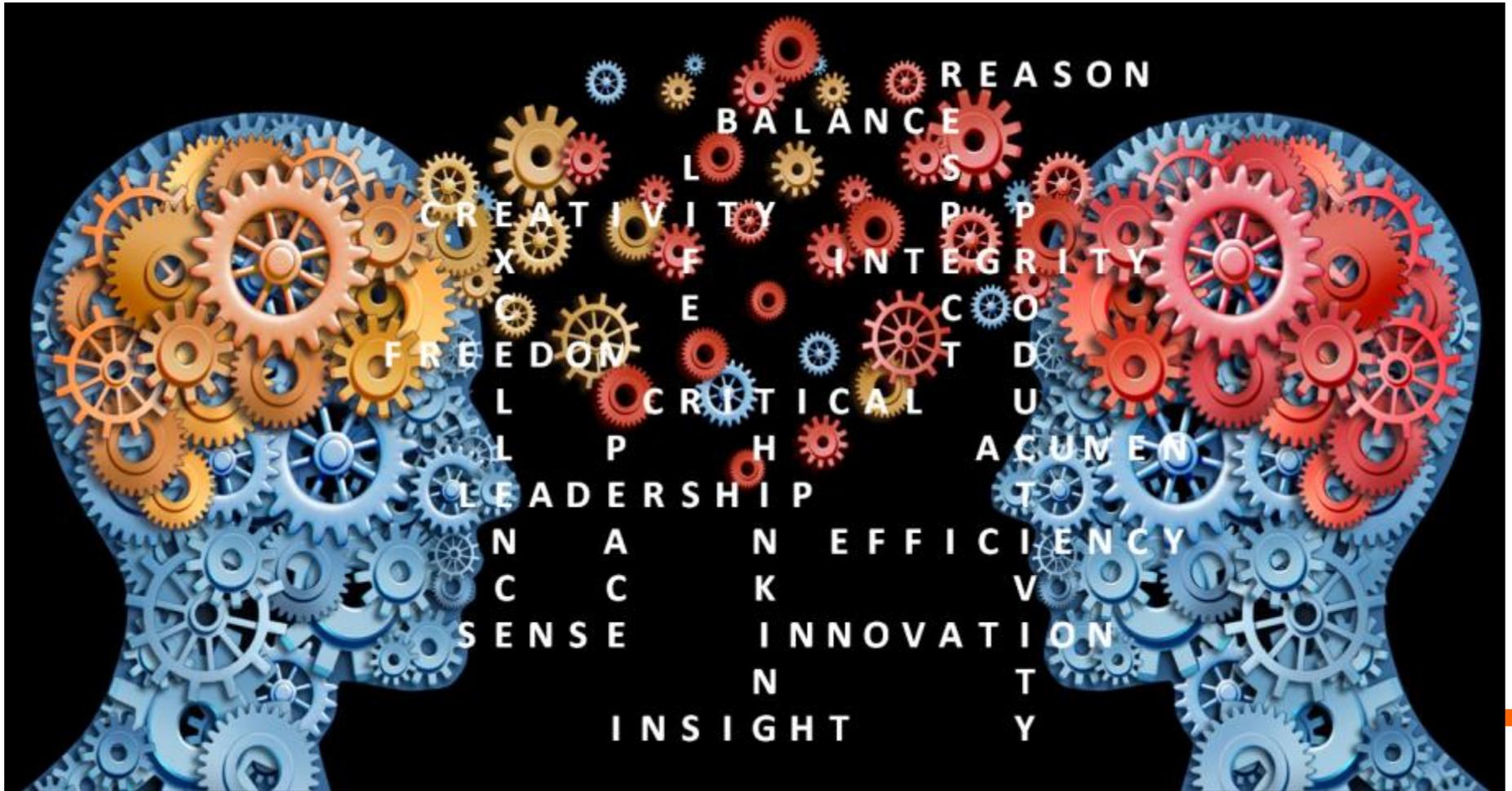
Prestigious design artists in different states or countries.

-they have been so highly regarded, they have "faith" in their design and don't plan to look and listen to outside sources.

*Use reverse side if needed*



# TEST QUESTION SURVEY



# Test 1 question #88

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88. What aspect or step in the critical thinking process (at this point in time) are you intrigued by and have begun to use in your life? *(3 points)*

***2016--21/43 49% mention alternate view***



# Test 1 question #88

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*“I have begun using the opposing viewpoint step because I tend to be opinionated often. I try to stop and think about who would disagree with my claims before I say them out loud.” (Ag Ed)*

*“Opposing viewpoint: Think about how others might feel and react before I say something based on how I feel.” (Ag Mech)*



# Test 1 question #88

---

*“Understanding views from people of different disciplines....I find it incredibly interesting as we have come to learn and think a certain way based on our backgrounds and disciplines.”*  
**(Turfgrass)**

*“I’m intrigued more with discussing points of view during critical thinking-hearing other people’s reflections instead of only focusing on mine.”* **(Landscape Architecture)**



# Test 1 question #88

*“I am intrigued by listening to others, esp. those with experiential or authoritative influence such as Ricardo Urbina. Its interesting to see how they think/develop ideas.”*  
**(Architecture)**



Retired  
Federal  
Court Judge  
Ricardo  
Urbina

<https://static01.nyt.com/images/2008/10/08/us/judge190.jpg>

[https://www.propublica.org/projects/detention/judges/ap\\_urbina\\_200x300\\_100122.jpg](https://www.propublica.org/projects/detention/judges/ap_urbina_200x300_100122.jpg)

# Test 2 question #67

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67. What aspect or step in the critical thinking process (at this point in time) still eludes you or causes you to groan and struggle? Identify and describe *(3 points)*

***2016: 18/36 50% mention alternate view***



# Test 2 question #67

---

*“The hardest part for me is not jumping to conclusions. I have to take a step back and think why people act the way they do.”* (**Landscape Architecture**)

*“Opposing viewpoints sometimes are what I struggle with. It is hard for me to see it the other way a lot of the time, but I have concentrated on that and will get better.”* (**Turfgrass**)



# Test 2 question #67

---

*“The biggest struggle...is identifying an alternate viewpoint...I have to step back and think in a completely different way.”* **(Architecture)**

*“Opposing viewpoints give me a hard time. I have to work on staying open minded to others viewpoints even when they disagree with mine. Especially when I think my way is the best .”*

**(Ag Mech)**



# Test 2 question #67

---

*“I struggle trying to see the issue from an opposing viewpoint. It’s easy to just get stuck on what I believe/think and not consider others’ opinions, so I’m still working on trying to open myself up to other ideas early on in the critical thinking process.”* (**Landscape Architecture**)



## **Ellen Vincent, Ph.D.**

Environmental Landscape Specialist

CT2 Faculty Scholar 2014-2017

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<http://www.clemson.edu/cafls/demo/>



Photo by Craig Mehaffey