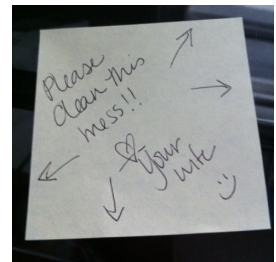
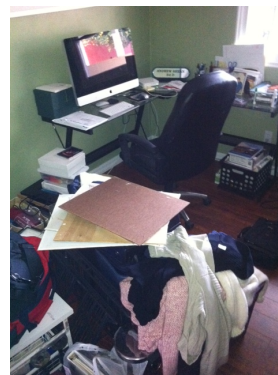


“What is worth learning is worth learning well.”
~Alfred North Whitehead

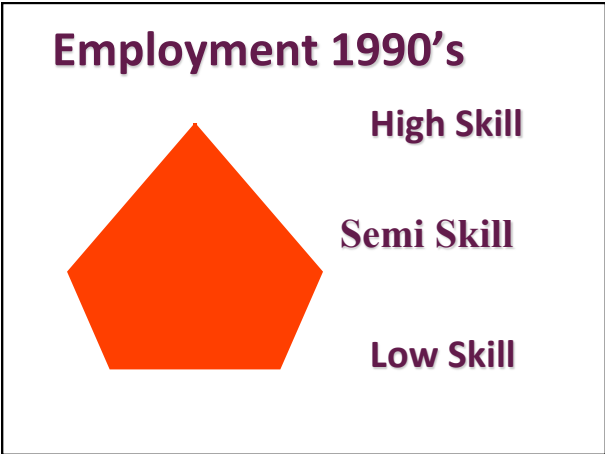
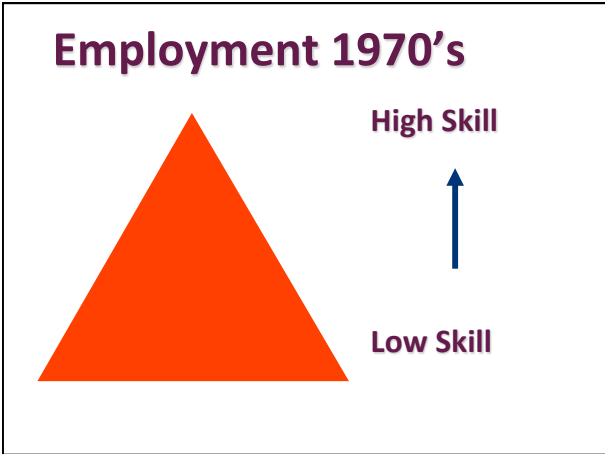

AGENDA

1. Why critical thinking?
2. What is critical thinking?
3. How do you ask great questions online, blended and face-face?
4. What are some face-face critical thinking strategies?
5. Reflection – what did we learn?





WHY CRITICAL THINKING?





Forbes | New Posts | Popular | Lists | Video

+35 posts this hour | Most Valuable Sports Te... | The Celebrity 100 | Country G...

Here, the 10 most critical job skills to parlay in your job search for 2015

4.7k

No. 1 Critical Thinking (found in 9 out of the 10 most in-demand jobs)

4.3k

and reasoning to identify the strengths and weaknesses of solutions, conclusions or approaches to problems.

3.0k

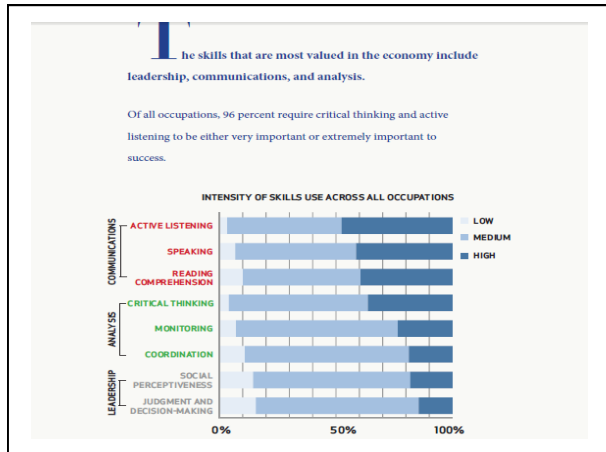
No. 2 Complex Problem Solving (found in 9 out of the 10 most in-demand jobs)

Identifying complex problems and reviewing related information to develop and evaluate options and implement solutions.

250

No. 3 Judgment and Decision-Making (found in 9 out of the 10 most in-demand jobs)

5



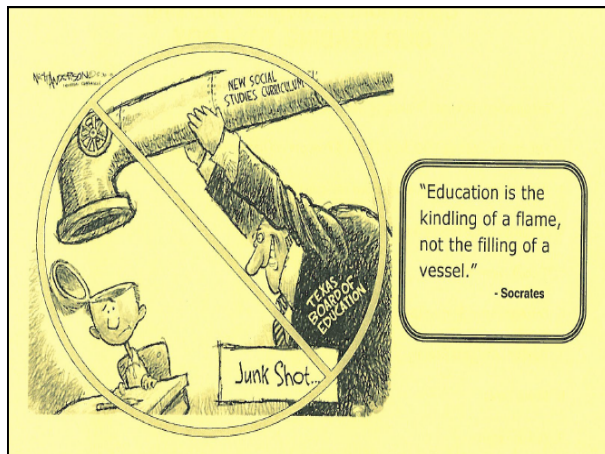
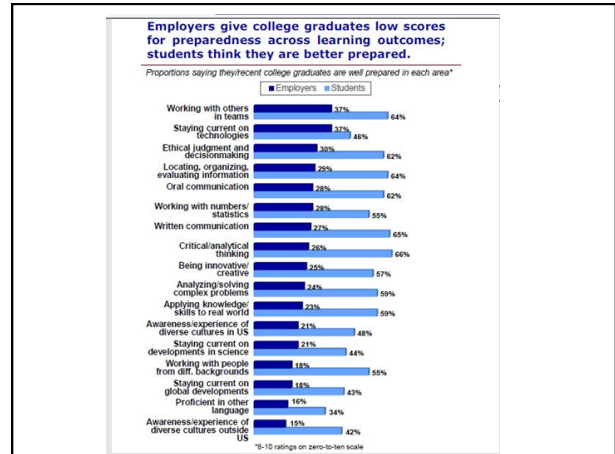
THIS IS WHY ...

- The top 10 jobs in 2015 will be jobs that did not even exist 5 years ago.
- Today's students will have an average of 10-14 jobs by age 38.
- There are 31 billion Google queries each month.
- In a week of reading *The New York Times*, you can learn more than a person in the eighteenth century might have learned in a lifetime.
- As Keeling (2004) articulated in *Learning Reconsidered: A Campus-Wide Focus on the Student Experience*, "...knowledge is no longer a scarce – or stable – commodity. (It) is changing so rapidly that specific information may become obsolete before a student graduates and has the opportunity to apply it" (p. 4).

93%

It Takes More than a Major to Succeed

93% of employers agree that candidates' demonstrated capacity to think critically, communicate clearly, and solve complex problems is *more important* than their undergraduate major.


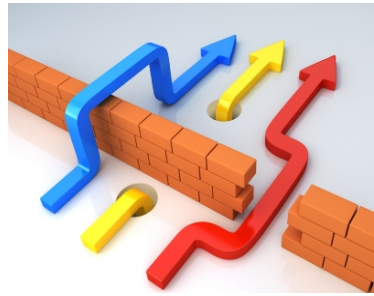


TALK BACK!

Comments

Feedback

WHAT IS CRITICAL THINKING?

THE CRITICAL THINKING TASK FORCE

Convened in Fall 2011 to assess the level and rigor of critical thinking across the curriculum.

Activities included consultation with outside experts in the field:

- Dr. Stephen Broadfield
Professor, University of St. Thomas
- Dr. Rod Sims
Professor, Capella University
- Dr. Jack Levine
Dean of Humanities and Literature, Southwest College
- Dr. Richard Emil & Dr. Linda Fisher
Fellows and Directors of the Foundation for Critical Thinking


WHAT IS CRITICAL THINKING?




CRITICAL THINKING

The essence of critical thinking is evaluation ... the process by which we test claims and arguments and determine which have merit and which do not ... critical thinking is a search for answers, a quest.

-Dr. Rod Sims



ANOTHER PERSPECTIVE

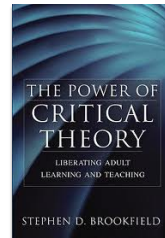
Critical thinking is the art of analyzing and evaluating thinking with a view to improving it.

Paul & Elder, 2009



BROOKFIELD'S THEORY

- Identifying and challenging assumptions.
- Challenging the importance of context.
- Trying to imagine and explore alternatives.
- Reflective Skepticism.





THINK DIFFERENT




TALK BACK!



Comments



Feedback



What is an input, what is an output?
Respond to two peers.

THE ART OF POWERFUL QUESTIONS


Catalyzing Insight, Innovation, and Action

by Eric E. Vogt, Juanita Brown, and David Isaacs

If I had an hour to solve a problem and my life depended on the solution, I would spend the first 55 minutes determining the proper question to ask, for once I know the proper question, I could solve the problem in less than five minutes."

—ALBERT EINSTEIN

over time, led to significant physics. Many years later showed that light from it passed through the Einstein's graduate student walking through it



Crafting Discussion Questions

Questions that could be asked:

- Knowledge
- Comprehension
- Application
- Analysis
- Synthesis
- Evaluation

(Bloom's Taxonomy) :

<http://faculty.washington.edu/krumme/guides/bloom.html>

http://www.ihr.org/jhr/v17/v17n6p19_reparations.html

Discussion Questions

Take a look

A short online article from the Institute for Historical Review
No End in Sight: Germany Has Paid Out More Than \$61.8 Billion in Third Reich Reparations

http://www.ihr.org/jhr/v17/v17n6p19_reparations.html

Crafting Discussion Questions

- Who or what is the JCC?
- In the 1990's, how much did the JCC pay out to individual claimants?

What do you think might happen in the discussion thread when you ask this type of question?

Crafting Discussion Questions

Analysis: Delve deeper into the subject

The article states that “most of those who were alive during the Second World War are now dead”—that is, the perpetrators of war crimes are themselves long gone from Germany—and that further, the process of reparation may be “bottomless.”

Should Germany be required to make good on damages for the past, and should there be a limit to the reparations? Use what you have learned from this unit to support your position. Respond to two of your peers postings and describe how their opinion aligns with yours. Is there any evidence from the article that they could consider to further support their position? What are possible some made to contradict their reasoning?”

Crafting Discussion Questions

Evaluation:

What implications does Germany's reparation requirement have for this issue of Reparation to African Americans?

Are the fundamental violations of human rights the same? What issues are different?

Again, support your opinion with what we have learned in this unit. Read and respond to the posts of two other students.

CRITICAL THINKING DESIGN

Does the learning activity allow the student to:	YES	NO
Hypothesise		
Experiment		
Modify		
Manipulate		
Compare		
Choose		
Contextualise		
Personalise		



What the Smart-erotti Are Saying About Citizens United

By Ashby Jones

The legal story of the week, if not the month or year so far, concerns Thursday's Supreme Court ruling in Citizens United. In fact, we'd say that there's a better than average chance that once you're finished talking Colts/Jets with folks this weekend, conversation will turn to the ruling that may have fundamentally changed American politics forever (or unless and until the court revisits the issue).



With that in mind, below are a handful of talking points you might refer to, if needed, from around the blogosphere. For background, click [here](#) for our recap of the decision.

The WSJ's editorial board:

Freedom has had its best week in many years. On Tuesday, Massachusetts put a Senate check on a reckless Congress, and yesterday the Supreme Court issued a landmark decision supporting free political speech by overturning some of Congress's more intrusive limits on election spending. In a season of marauding government, the Constitution rides to the rescue one more time.

The NYT's editorial board:

With a single, disastrous 5-to-4 ruling, the Supreme Court has thrust politics back to the robber-baron era of the 19th century. Disingenuously waving the flag of the First Amendment, the court's conservative majority has paved the way for corporations to use their vast treasuries to overwhelm elections and intimidate elected officials into doing their bidding.

Congress must act immediately to limit the damage of this radical decision, which strikes at the heart of democracy.

COMMUNITY of THINKERS

Ashford University
Critical Thinking Task Force

Discussion Board Job Aid
for Curriculum Developers



RECIPE FOR A GREAT DISCUSSION

- Emotional appeal
- Set the scene
- Ask a great question
- Write a question that goes somewhere
- Variety is key



DEWEY SAID, "...WHEN IT BECOMES CAST IN A MOLD AND RUNS IN A ROUTINE WAY DOES IT LOSE ITS EDUCATIVE POWER."

There are many ways to construct an engaging and varied line of questioning. Here are a few you might consider:

- A. Quotes/Image Analysis
- B. Multimedia
- C. Debate
- D. Case Studies / Scenarios
- E. Quotes
- F. Concept Maps



TAHRIR SQUARE, EGYPT

Describe how this image conveys a sense of nationalism?



OBAMA CAMPAIGN POSTER

What is the intent of this image and how does it convey its message?



RECRUITMENT POSTER



What is the intent of this image and how is it compelling?



DEBATE

A few years at a top-tier management consulting firm is often more valuable than an MBA from an elite institution.

Point of view A: Agree/why?
Point of view B: Disagree/why?

"The main part of intellectual education is not the acquisition of facts but learning how to makes facts live."
 ~Oliver Wendell Holmes

Ashford UNIVERSITY Elements of Critical Thinking Help Mute audio Resources

Ashford UNIVERSITY Elements of Critical Thinking Help Mute audio Resources

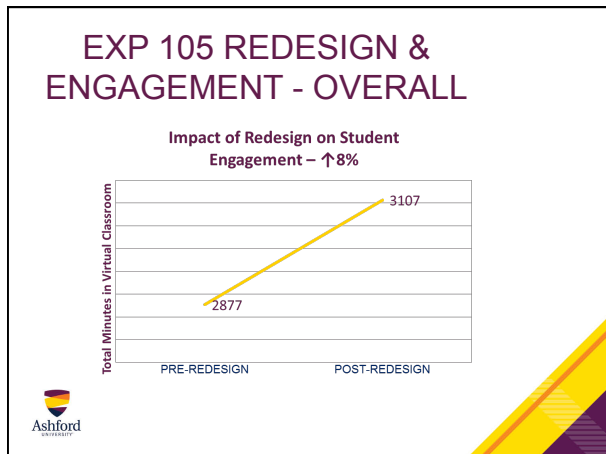
POINT OF VIEW
PURPOSE
QUESTION OR ISSUE
INFORMATION
INTERPRETATION AND INFERENCE
CONCEPTS AND IDEAS
ASSUMPTIONS
IMPLICATIONS/CONSEQUENCES

Elements of Critical Thinking

Show captions

Ashford UNIVERSITY

- Questioning Assumptions**: Awarded for recognizing the presence of potentially inaccurate assumptions about a given topic.
- Recognizing Cognitive Bias**: Awarded for identifying subjective biases in one's own thinking.
- Secrates**: Awarded for asking and answering questions to stimulate critical thinking and to illuminate ideas.
- Platner**: Awarded for illustrating how knowledge is constructed when information comes into contact with existing knowledge.
- Global Awareness (Top Right)**: Awarded for recognition and consideration of the scope and impact of cultural differences.
- Global Awareness (Middle Right)**: Awarded for recognition and consideration of the scope and impact of cultural differences.




EXP 105 REDESIGN & ENGAGEMENT – CRITICAL THINKING QUESTION (WEEK 4, DISCUSSION 2)

	Pre (25 sections)	Post (25 sections)	
Total number of students	609	581	
Total number of minutes of engagement	68,156	85,754	
Average number of minutes of engagement per student	111.91	147.59	31.88% increase in engagement

Ashford UNIVERSITY

Watch Your Use of Language: Catch Phrases

Watch For	Replace With
In fact...	In my opinion...
The truth is...	In my experience...
Scientists say...	According to some research I have read...
In reality...	From my perspective...
I know...	I have noticed...
The right thing to do is...	My instincts tell me...




CRITICAL THINKING: ADDITIONAL RESOURCES


Youtube Video (made specifically for this assignment)
<http://www.youtube.com/watch?v=NDfa96H5Rjw&feature=youtu.be>

CT Library Guide
<http://ashfordonline.libguides.com/aecontent.php?pid=492499>

Harvard Project Zero
<http://pzweb.harvard.edu/>

Dr. Steven Brookfield
http://stephenbrookfield.com/Dr_Stephen_D_Brookfield/Home.html

The Critical Thinking Community
<http://www.criticalthinking.org/>



TED EX

Register or Log In **TED**


Tour Blog Get Involved FAQ About

Lessons Worth Sharing

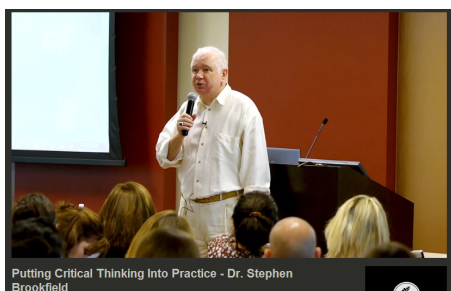
Lessons Series Community Clubs

Create a Lesson +

[HOW & TECHNOLOGY](#)
[HOW TO DETECT](#)
[HOW PEOPLE](#)



SPECIFIC STRATEGIES



Putting Critical Thinking Into Practice - Dr. Stephen Brookfield



Problem – How Do You Get Students To Be Open To Multiple Viewpoints?

THREE TECHNIQUES

- **Circle of Voices** – small groups (optimally 4-6 in size)
- **Chalk Talk** – adaptable to any size depending on space : from 5 to 50 to 100
- **Circular Response** – larger groups (optimally 10-12 in size)

An Example: Circular Response

- **Groups of 8-12**
- **Go round the circle: each person has a turn to talk up to 1 min. - NO INTERRUPTIONS**
- **What you say must respond to the previous speaker's comments (can be a disagreement or express confusion)**
- **Once all have spoken move into open conversation with no ground rules**

- Read the following quote and **paraphrase** it. In other words, say the EXACT same thing in your own words.

"Reading furnishes the mind only with materials of knowledge; it is thinking that makes what we read ours."

~John Locke

Read the following quote and **PARAPHRASE** it. In other words, say the **EXACT** same thing in your own words:

“The best learners often make the worst teachers. They are, in a very real sense, perceptually challenged. They cannot imagine what it must be like to struggle to learn something that comes so naturally to them.”

-Stephen Brookfield

An Example - CIRCLE OF VOICES

- Individuals think silently about a question (1 min)
- Participants go round the circle in order - each person has up to 1 minute of uninterrupted air time to give their viewpoint on the topic. No interruptions are allowed.
- Move into free discussion with the ground rule that every comment offered must somehow refer back to a comment made by **someone else** in the opening circle of voices. This need **NOT** be agreement - it can be a disagreement, a question, an elaboration or extension, an illustration, etc.

“Education must begin with the solution of the teacher-student contradiction, by reconciling the poles of the contradiction so that both are simultaneously students and teachers.”

Paolo Freire

An Example: Chalk Talk

- Instructor writes a question in the middle of the board
- 5-10 minutes of silence is declared
- Students write responses to the question on the board whenever they feel ready
- Students & instructor draw lines linking comments & add questions & reactions

Prompt

- When Critical Thinking Happens With My Students it

LOOKS
SOUNDS
FEELS
like this

Follow Up ...

- [Home Page: www.stephenbrookfield.com](http://www.stephenbrookfield.com)
- TEACHING FOR CRITICAL THINKING (2012)
- DISCUSSION AS A WAY OF TEACHING (2005, 2nd Ed.),
Both Published by Jossey-Bass/Wiley
- E-mail: sdbrookfield@stthomas.edu

“POSITIVE” FACULTY BEHAVIORS

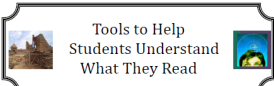
- Challenges students to think more deeply through appropriate questioning
- Communicates to student’s subject matter clearly and effectively
- Provides direction to additional information
- Genuinely compliments or affirms student post
- Follows up to student response
- Summarizes student’s comment
- Directs student to another student’s post
- Addresses more than individual student
- Shares personal/professional experience in response to student
- Responds to students more than once per week
- Uses 2 or more strategies listed under “Responding to a Peer’s Post”
- Cites course material or other scholarly source




“NEGATIVE” FACULTY BEHAVIORS

- Does not respond to all
- Responses are basically the same
- Asks close-ended questions
- Responses are very limited
- Lack of follow-up to 2nd level
- Response not related to student post
- Uses 1 or 0 strategies from list





BRING LEARNING ALIVE IN THE CLASSROOM
 Workshop
 Presented to the
 Critical Thinking Task Force
 at

 October 14, 2011

Facilitators:
 Sylvia Garcia-Saravate, M.A. Joel Levine, Ed.D.
 Reading/ESL Faculty Dean, School of Language and Literature
 Southwestern College Southwestern College
 agarciasar@swcol.edu jlevine@swcol.edu
 (619) 421-6700x5923 (619) 422-6049

"What is worth learning is worth learning well."
—Aristotle (c. 350 BCE)

Directions:

- Read the speech by Cesar Chavez that appears on the following page
- Respond to the **PROMPTS** below using the **TOOLS** provided
- Respond in clear and complete sentences (Thoughts)
- Answer the two Multiple-Choice questions below

1. Create a **HEADLINE (TITLE)** for this speech by Cesar Chavez. **ALL**

Headline Created
 Create a headline (title) that you think expresses the main idea of the reading.

2. Complete this sentence: Cesar Chavez's **PURPOSE** in saying these words was... **A**

Purpose
 Explain why you think this reading was written.

3. If Cesar Chavez were here now, what **QUESTION** would you really like to ask him about what he said in this speech? **B**

Vital Question Posed
 Ask the author or someone in the reading a question that you would really like to have answered.

4. What is your **RECOMMENDATION** for what you think should be done to effectively begin to deal with the issue Cesar Chavez presented in the reading? **C**

Solution/Recommendation
 State what you think should be done to deal effectively with the issue or problem presented in the reading.

5. Under which California Governor was more money out of every dollar spent for education?
 (A) DeSautels (C) Wilson
 (B) Reagan (D) Schwarzenegger **ALL**

6. Cesar Chavez's speech suggests that minorities, in general...
 (A) are treated equally in educational funding.
 (B) are not interested in educational funding.
 (C) only want more for themselves in terms of educational funding.
 (D) are disadvantaged by the way educational funding is distributed. **Multiple Choice**

OUR READING TOOLBOX

OUR READING TOOLBOX

Paraphrasing
 Put a sentence from the reading, into your own words.

Headline Created
 Create a headline (title) that you think expresses the main idea of the reading.

Significant Sentence Selected
 Select the one sentence you think is most important in the reading, and tell why you selected it.

Vital Question Posed
 Ask the author, or someone in the reading, a question you would really like to have answered.

Issue/Problem Identified
 Identify the main issue or problem raised in the reading.

Purpose
 Explain why you think this reading was written.

D.O.U.B.T.
 Define, put into your Own words, give an Example, and Illustrate concepts (words, ideas) in the reading, which you feel you need to understand better.

Conclusion
 Identify what you think is the most important conclusion that the author comes to in the reading, and how that conclusion was reached.

Assumptions
 State what you think the author is taking for granted in the reading.

Implications & Consequences
 State what you think would happen, if we follow or do not follow, what the author or someone in the reading suggests or implies that we do.

Solution/Recommendation
 State what you think should be done to deal effectively with the main issue or problem presented in the reading.

Speaking in the Author's Voice
 Express ideas, or answer questions, about the reading, as if you were the author or an individual in the reading.

Example:

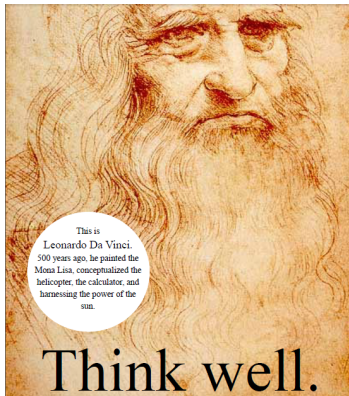
If Cesar Chavez were here now, what **QUESTION** would you really like to ask him about what he said in this speech?

Vital Question Posed
 Ask the author, or someone in the reading, a question you would really like to have answered.

Strategies for Teaching and Learning

1. Communicative Seating Strategy
2. Name Tents and Randomly Assigned Seating Strategy
3. Use of a Speaker's Voice Strategy
4. Popcorn Read Strategy
5. Clear and Complete Sentences (Written and Spoken Thoughts) Strategy
6. Circulate-to-Guide Strategy
7. Timed-Activities Strategy
8. Zenergy Chime Signal Strategy
9. "Call On Students" Strategy
10. "I Don't Know Yet" Strategy
11. Collaborative Activities Strategy
12. Stand-Up & Move Strategy

“Science is built of facts the way a house is built of bricks; but an accumulation of facts is no more science than a pile of bricks is a house.”
-Henri Poincare



This is Leonardo Da Vinci. 500 years ago, he painted the Mona Lisa, conceptualized the helicopter, the calculator, and harnessing the power of the sun.

Think well.



<https://www.youtube.com/watch?v=DKYJV7HuZw#t=93>