#### Why Scientific Literacy is Important?



#### **Questions to Consider**

Do you know how to draw, like an artist?



Do you know how to think, like a scientist?

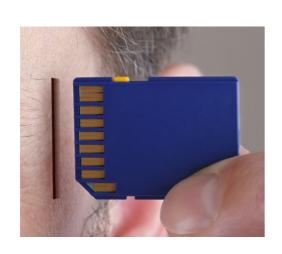


# Scientific Literacy Class Develops Critical Thinking Skills

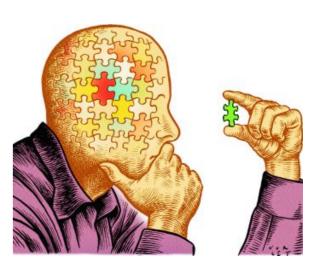


Muscular Strength ≠ Athletic Skill





Memory  $\neq$  Critical Thinking



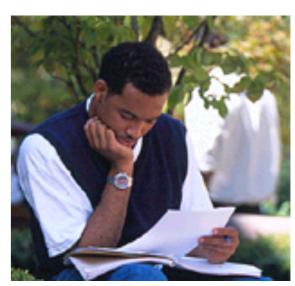
### **Scientific Literacy Activities**

- Improves student knowledge in STEM
- Enhances student understanding of the nature of scientific discoveries and interdisciplinary of science
- Promotes student interest, STEM identity, commitment and successful pursuit of STEM major
- Increases student awareness of career opportunities in STEM
- Enhancing student cognitive skills (i.e. memory and critical thinking)
  needed for success in the STEM major
- Enhances student non-cognitive skills (i.e. maturity and verbal communication) needed for success in the STEM major

## What Did Students Say After Taking the Scientific Literacy Class?

- I have actually learned what a research scientist does.
- I have found a new understanding of how important research is.
- The program has opened my eyes to the world of science greatly.
- I was quite unsure how scientific research really works. Now I have a clear understanding. Overall I am stimulated by the challenge...





### Why Scientific Literacy is Important for Freshman STEM Majors

- Scientifically literate freshmen STEM majors are more likely to be successful in their freshmen STEM classes.
- Scientifically literate freshmen STEM majors are more likely to graduate with the STEM major.

