

Journal Assignment

Quotes by Amy Herman (First Year Read):

"That's what both art and communication are: an invitation. An invitation to let others into our brain, to let them know what we see and how we see it." (Page 210)

"What don't I know"? is not the same as throwing out an "I don't know." (Page 162)

"Scientists have discovered that just looking can have a profound impact on the brain's ability to perform. 'Experience gained through observation activates performance-enhancing neurons which accelerate learning and the capacity to learn'" (Page 129)

"It seems obvious that we all see things differently. Yet we constantly forget and act as if there is only one true way to see. However, knowing now that we are all susceptible to inattentional blindness and other perceptual errors, we cannot assume that anyone else sees what we see, that we see what they see, or that either of us accurately see what's really there." (Page 41)

"George de Mestral, Betsy Kaufman, Steve Jobs, and Leonardo da Vinci all believed that invention is less about creation than it is about discovery. And discovery is made possible by simply opening your eyes, turning on our brains, tuning in, and paying attention." (Page 22)

"And surprisingly, discomfort and uncertainty bring out the best in our brains." (Page 12)

"Slowing down doesn't mean being slow, it just means taking a few minutes to absorb what we are seeing. Details, patterns, and relationships take time to register. Nuances and new information can be missed if we rush past them." (Page 17)

"A lot of us have learned to skim or skip over the beginning of things, to get to 'the meat' but when we do that we're quite possibly skipping over vital valuable information." (Page 33)

"Always use an open mind, and look past the obvious, but focus only on what you can observe to be true, not what you assume to be (true)." (Page 65)

"We will never have all the answers – not many people do – but the more observant we can be, the more facts we can collect, catalogue, and process, the more we will know." (Page 74)

"Often when one works at a hard question, nothing good is accomplished at the first attack. Then one takes a rest, longer or shorter, and sits down anew to the work...It might be said that the conscious work has been more fruitful because it has been interrupted and the rest had given back to the mind its force and freshness." (Henri Poincare quoted by Amy Herman on Page 101)

Assignment:

Choose at least one quote by Amy Herman (see above) that speaks to your experience in this mathematics classroom. Write 2 pages using the following prompts:

How has your mathematical persona changed during the semester? For example:

- Has your perception of mathematical thinking and reasoning changed?
- Do you value working in teams more or less? Why?
- Have your approaches to doing mathematics/exploring new ideas/solving problems changed?
- How has your experience in this class influenced your confidence in doing mathematics?
- Have you become more or less persistent in your work as a mathematician? Why?

Has your perception of mathematical authority changed? For example:

- Who do you rely on to know that you are “right”? Why?
- How do mistakes play a role in doing mathematics?
- What does it mean to be “good at mathematics”?

Rubric:

You pass this journal if you:

- Write 2 pages (typed, double spaced)
- Connect your reflection to at least one of the quotes above.
- Reflect deeply on how your mathematical persona has changed making explicit connections to at least one quote.
- Reflect deeply on how your perception of mathematical authority has changed making explicit connections to at least one quote.