

Logic and Literacy (Math and Writing)

Connecting Quantitative Literacy with Traditional Literacy,
and Changing The Conversation about Mathematics

By Professor Prime

Introduction

- Mathematics is often treated as a siloed subject, despite its connection to everything.
- We discuss the universe using mathematics. Quantitative Literacy is crucial in that. It permeates everything as a result.
- Traditional Literacy is also important. Knowing how to read, how to write, and how to communicate impacts our everyday lives.

If You Can Write A Paper, You Can Do Math

- How so? Why say that?
- There is logic in your paper.
- You are communicating when you are doing math.
- There is more to it though. Let's discuss that further.

The Connection between Quantitative Literacy and Traditional Literacy

- The connection between quantitative literacy and traditional literacy goes past the analogy.
- When we do math, we are conveying information, we are making a statement.
- We are forming arguments, and communicating our process. We have to translate that information.
- Going back and forth between math and your native language is crucial, key.

Logic

- At the root of quantitative literacy and traditional literacy lies logic. In both we apply reasoning.
- We use established rules and structures to form arguments.
- We aim for something cohesive, something cogent.
- The further we move up in math, this made more clear in some ways but not everyone has that luxury.

Math As A Foreign Language

- Math is a language, and it very much is.
- If I am writing a paper in a foreign language, I need to know the mechanics of that language, how it is structured, the vocabulary, the syntax, and more.
- I need to have a firm understanding of that language. I need to build up statements to properly write my essays.
- I need to be able to translate back and forth between my language and math.

Quantitative Literacy and Traditional Literacy Questions

- How does this connection impact organization?
- How does this connection impact S.T.E.M. Classes?
- How does this connection impact Non-S.T.E.M Classes?
- How does this connection impact teaching as a whole?
- How does this connection impact math as a whole?

Conclusion

- No one grows up wanting to hate math. I want to see a world where people don't hate it or fear it.
- Those with strong traditional literacy skills have an incredible amount of potential when it comes to math.
- Those with strong quantitative literacy skills can be effective writers and those skills are crucial.

Contact and Resources

- Official Math Time With Professor Prime Site:
<https://www.mathtimewithprofessorprime.com/>
- Online Math Resources:
<https://www.mathtimewithprofessorprime.com/online-math-resources>
- Math Time With Professor Prime YouTube:
<https://www.youtube.com/channel/UCRyNBE4-joAVYIYbNUaZ2Kw>
- Math and Writing Playlist Videos for Math Time with Professor Prime:
https://www.youtube.com/watch?v=rRht4OjWCaY&list=PLEdBh6aRWf2SHlzzZ4rbk72a_Vh9XAarc