

This project turned out to be much more difficult than I expected, and caused me to learn many important lessons along the way:

- Knowing a significant amount of content in a subject area is not sufficient for being able to convey the content effectively to others. The way in which the knowledge is conveyed is also critical for effective teaching.
- Knowledge takes time to acquire. It is not enough for a teacher to merely state the content and move on. Sufficient time must be given for the students to internalize the material.
- The path of least resistance in teaching is a boring lecture. The teacher must be aware of this when making presentation materials, and actively try to create an engaging lesson plan for students.
- It is easy to forget how difficult certain knowledge is to acquire once you have already mastered it yourself.
- When trying to convey a body of knowledge that you have personal passion for, it is easy to be overly ambitious in lesson-planning. I wanted to cram several years of my collected knowledge and experiences into a short (~1 hour) workshop, which should have been an obvious red-flag in retrospect. I have since properly scoped my presentation materials, even though there is much more material that I would like to cover which will not be covered. I need to remember that the goal is not to lecture on all of the content, but to maximize the amount of material that is retained by the students.
- It is difficult to be satisfied with work on something you deeply care about. There is always something more you wish you could have done, something you know you could have done better. But, in the end, nothing is perfect, and it is better to finish something than to never finish. For most school projects, this is not an issue because the primary source of the project was external. In this case, the source of the project was primarily internal, adding an additional level of attachment to the final result.
- Empathy is required to be a good teacher. The students must be understood in order to be interacted with successfully.
- In this project, I attempted to argue for ideas I support in my worldview from the differing worldview of my intended audience. I have mixed feelings about this approach. Having not tested its effectiveness on an actual audience, I can only predict that it would be received well. However, this often required me to dilute powerful messages I wished I could convey (e.g., the true scale of some of the problems created by engineering work). I needed to exercise restraint in carefully shaping my message, and this need for restraint was frustrating at times.