## Future Schemes and TPACK Dreams

I am a person who is always scheming. Not in a [Professor Harold Hill](#) way, but in the sense that I always have projects that I am working on, and I fall headlong into these projects. Now that I am at the end of a major phase of my educational technology journey, I felt it appropriate to sit down and think about some of my schemes. I am empowered now more than ever to not only use technology within my context, but to use it appropriately. My goals for the future largely involve utilizing my [Technological Pedagogical and Content Knowledge (TPACK)](#) to best enact change within my context. I would like to accomplish this in the extracurricular space using design thinking, in my classroom using CAD and 3D printing, and in my school as a whole through the use of ISTE standards.

### *Design Thinking*

I have spent my summer doing a deep dive into different [design thinking](#) methodologies, and very much want to push myself to utilize it in my classroom. Design thinking is not often part of mainstream education, and I would like to change that at my school. In addition to the obvious move of incorporating design thinking into my classroom, I would like to create opportunities for design thinking in the extracurricular space. The most obvious area for this is teaching the [VEX Robotics team](#) that I co-coach how to better design and iterate. In addition to helping my robotics students, I would like to create an extracurricular space that is explicitly for design thinking- a student design team. This would be a space for students who desire more creative outlets and students who would thrive in leadership roles to flex and develop their skills. The school would present problems to this team, and the students would then work together to collect data, ideate, and prototype until they came up with a solution for the school. I would ideally want to model this after the idea of a [student tech team](#), wherein students take initiative to teach classmates how to use different technologies, but I would want my students to actively be helping to innovate solutions to problem we face. While design thinking itself is not exactly a technology, [the tools that it presents](#) can absolutely be leveraged in the right context to better student learning.

### *CAD in the Classroom*

I have recently spent a lot of time learning about [Computer Aided Design (CAD)](#) software. I have tried to use it before in the classroom, but the way I integrated it wasn't very effective. There were flaws in my TPACK integration- I used it just to use it and in a context where it didn't do much to help the learning process. I had stopped using that project and hadn't tried to use any in class since, but now that I am taking the time to better my own understanding of CAD, I have a world of new ideas about how to utilize it meaningfully to further learning goals (while also teaching students a useful skill). I also intend to explore resources on [TinkerCAD](#) that could be used as classroom challenges within my context. I also want to push myself to create and print my own 3D models to be used in my classroom for object based interpretation. Through my research I have discovered the education section of [Thingiverse](#) and intend to spend a good

chunk of time exploring the potential classroom resources within it. CAD is a tool that could greatly enhance how I am able to convey my content.

### *ISTE Certification*

While I love being in my classroom, my ultimate goal for myself is to serve as a technology coach at a school. As such, it is important that I continue to acquire skills that will help me to be the most effective coach that I can be. My first step in this direction is to get [International Society for Technology in Education (ISTE)](#) certified. ISTE certification seems like a natural continuation of my work with the [Master's of Arts in Education Technology (MAET) program](#) that I have been a part of- the certification combines both the learning of practical skill and self reflection on what you have accomplished (and might accomplish in the future). Becoming more intimately familiar with the [ISTE standards](#) will also allow me to be a better support to teachers as I work towards becoming a technology coach.

These schemes are only the beginning. Armed with my knowledge of educational technology and my love of learning, I plan to quest towards larger and larger goals as I grow as an educator.