GIS Gaming

Making spatial analysis “fun”

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Teacher in Toronto interested GIS and Minecraft

Gamification: Application of game-play to other areas of activity, to ***encourage engagement****.*

Google

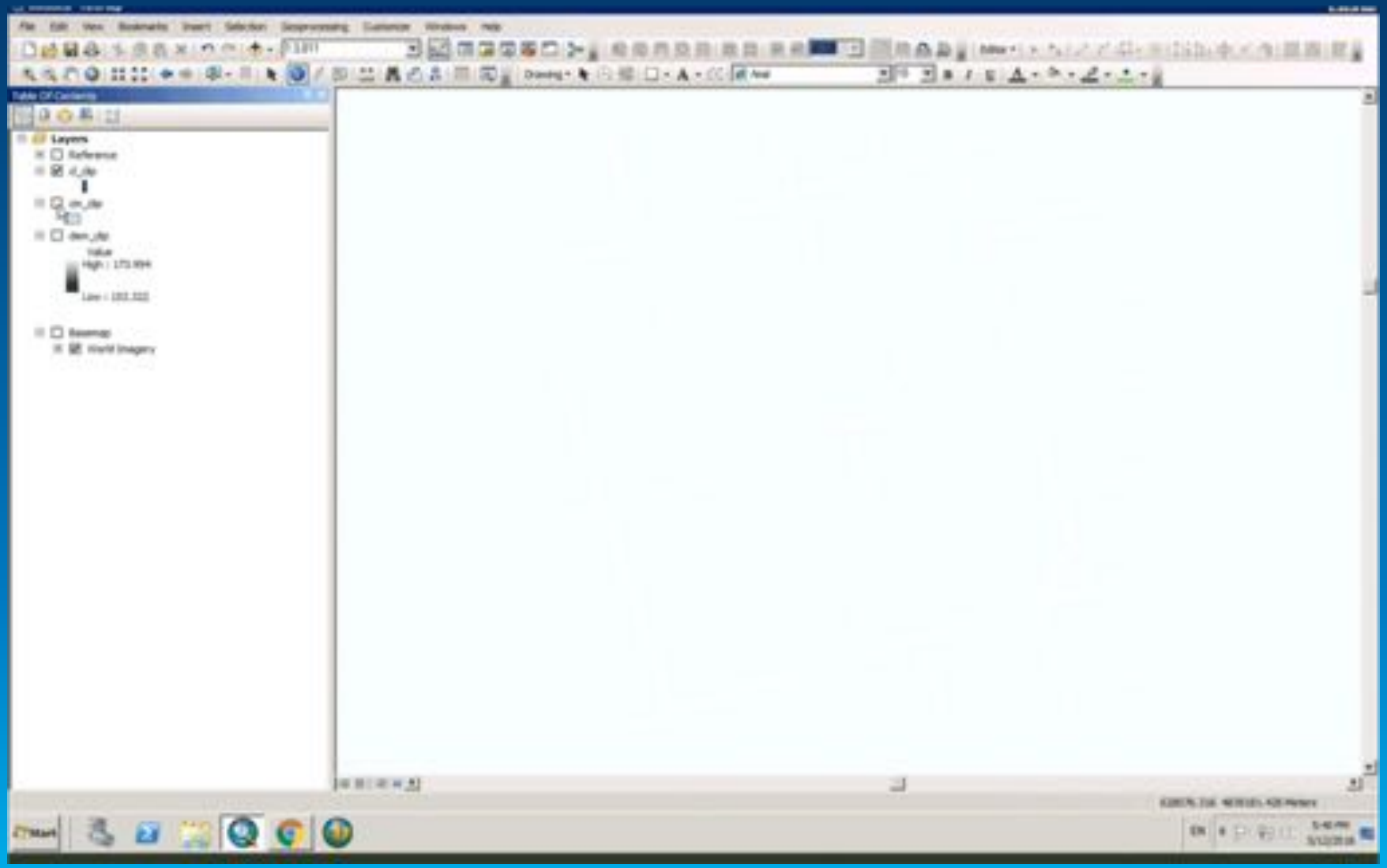
This encourages engagement in most grade 10 boys

The story

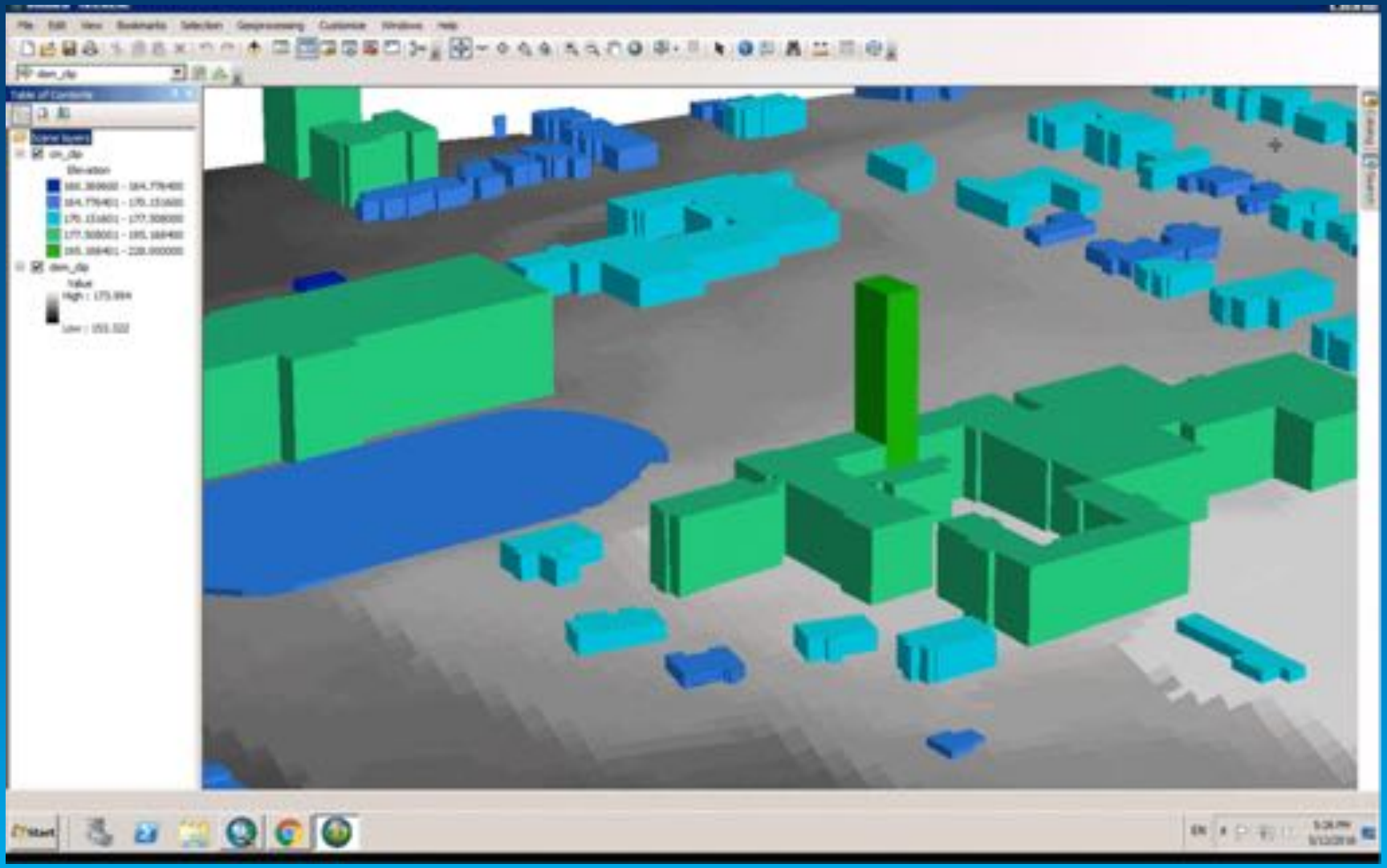
Developing GIS skills and problem solving with “Minecraft Spatial”

Site and Situation: Upper Canada College in real life

Stage 1 of fun: UCC in ArcMap



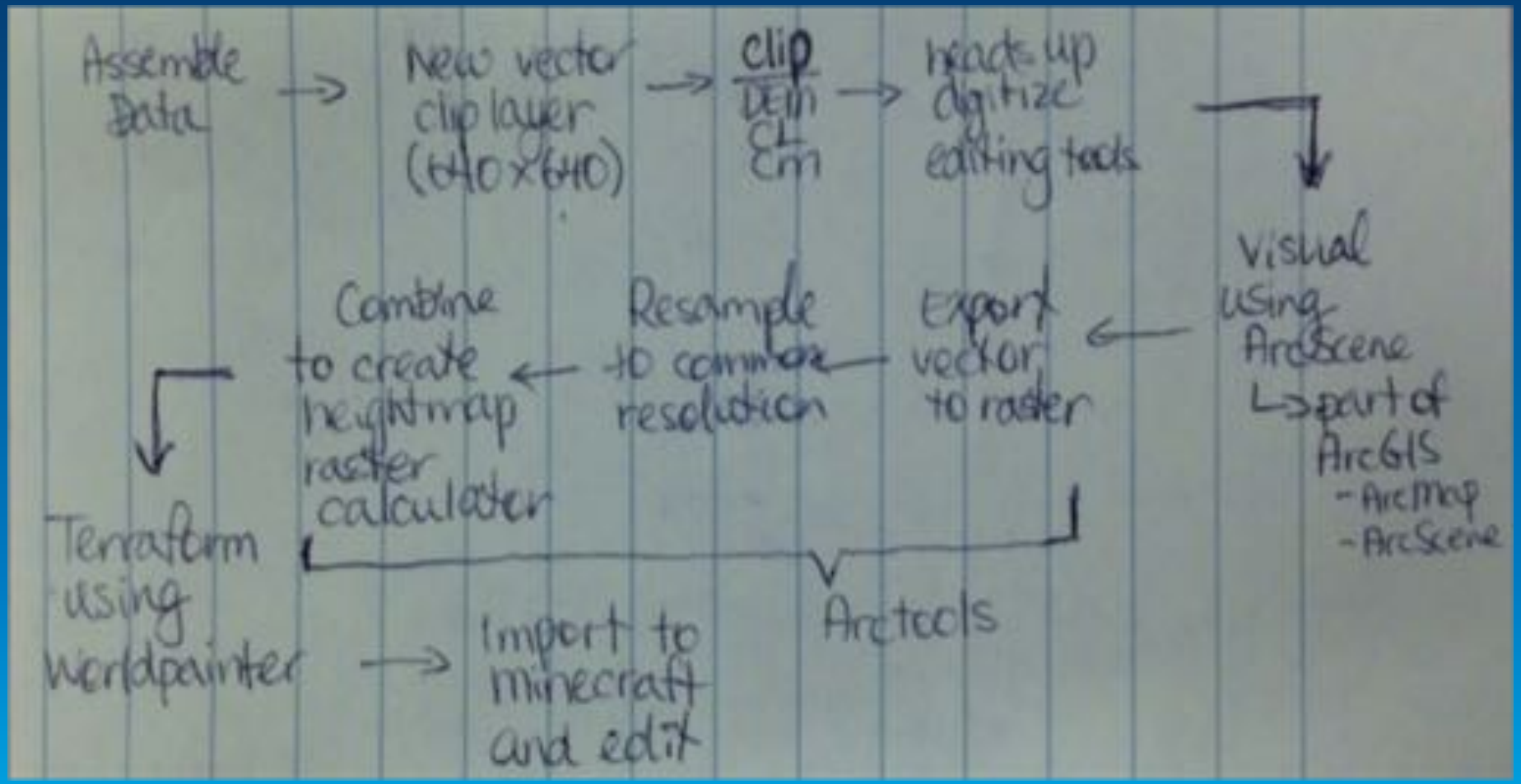
Stage 2 of cool: UCC in ArcScene – 3D!



Stage 3: GIS data in Minecraft – THE COOLEST!

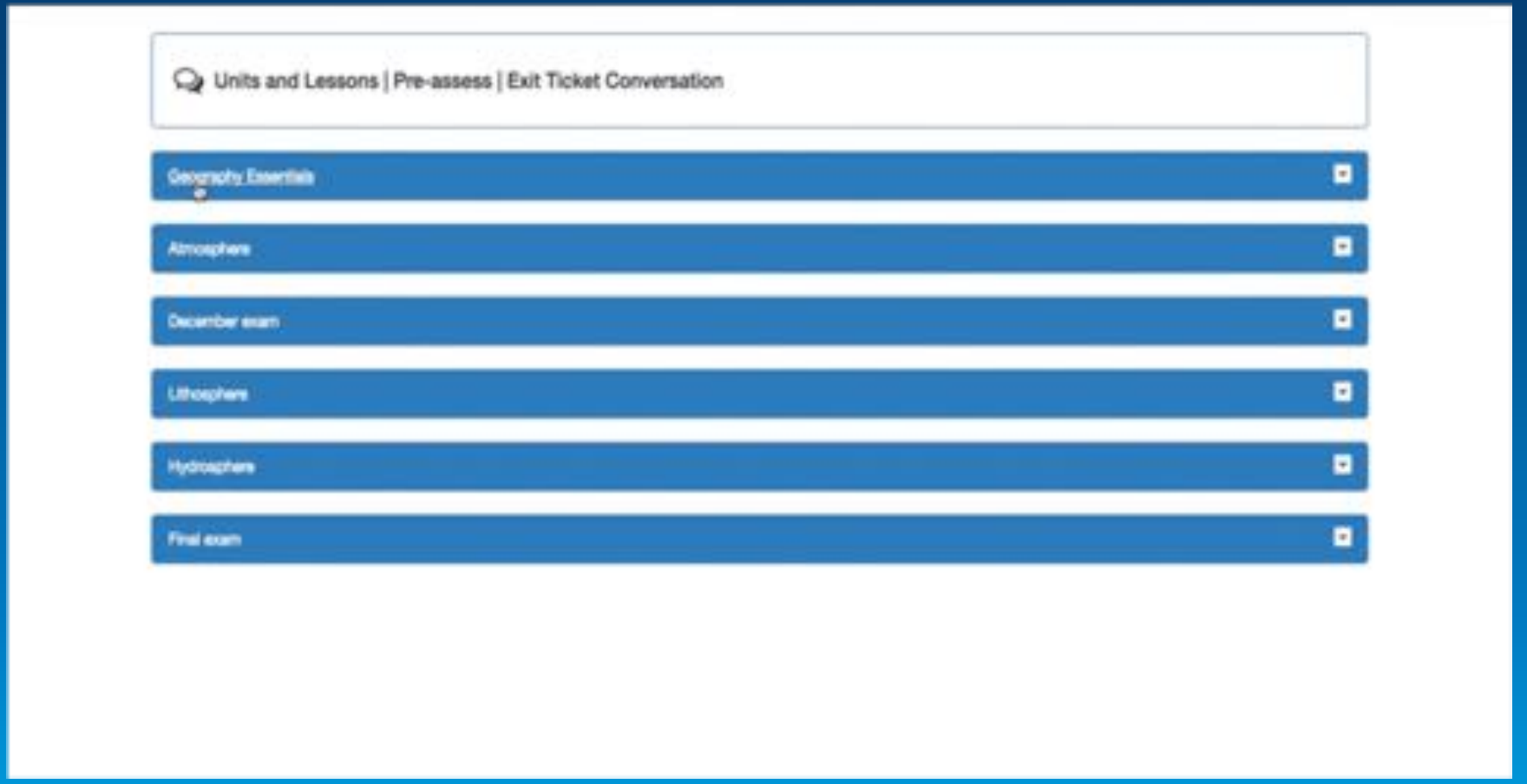
The “hook” to keep them engaged through process

A real GIS project == NOT trivial

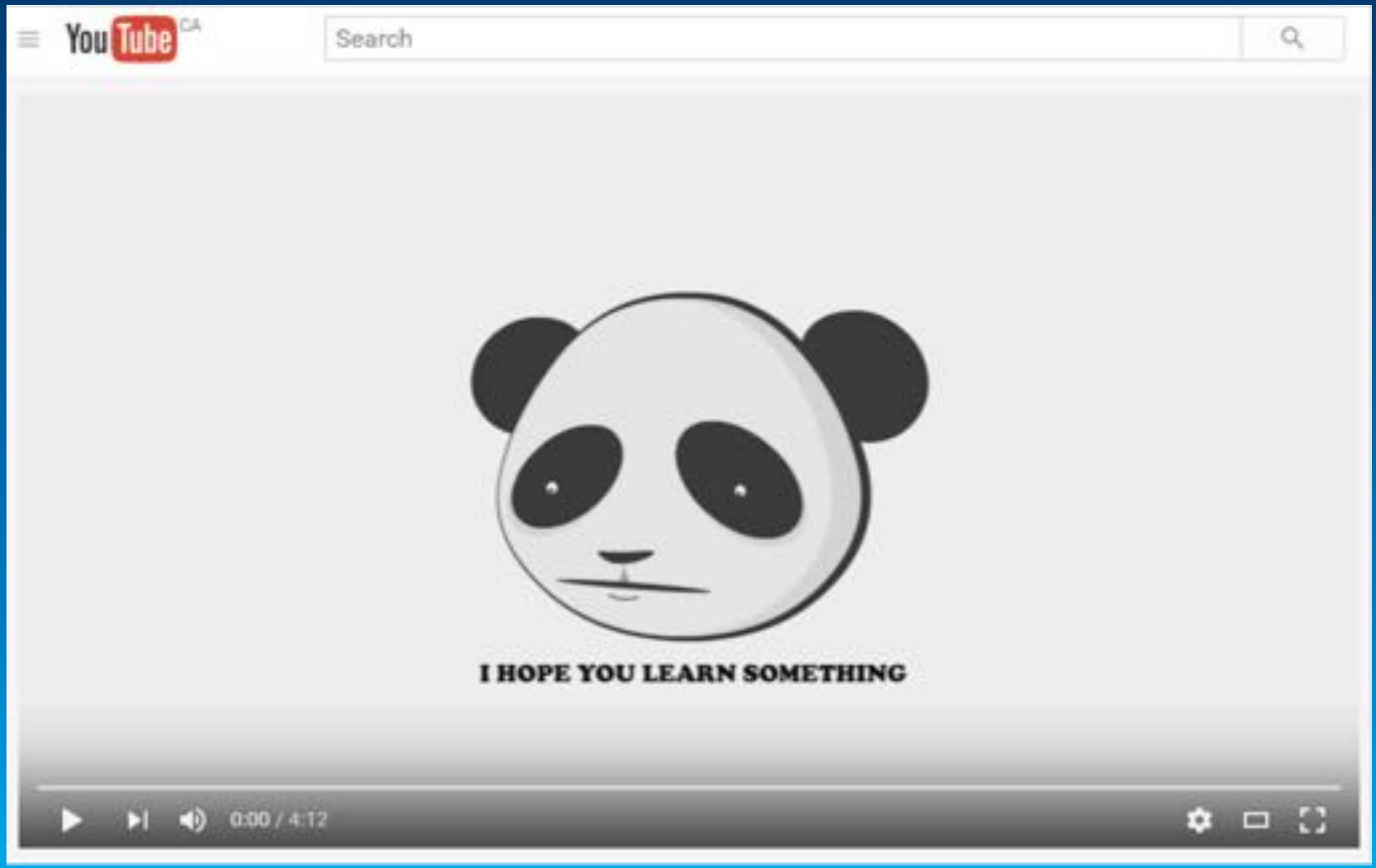


Problem - UCC uses Macs

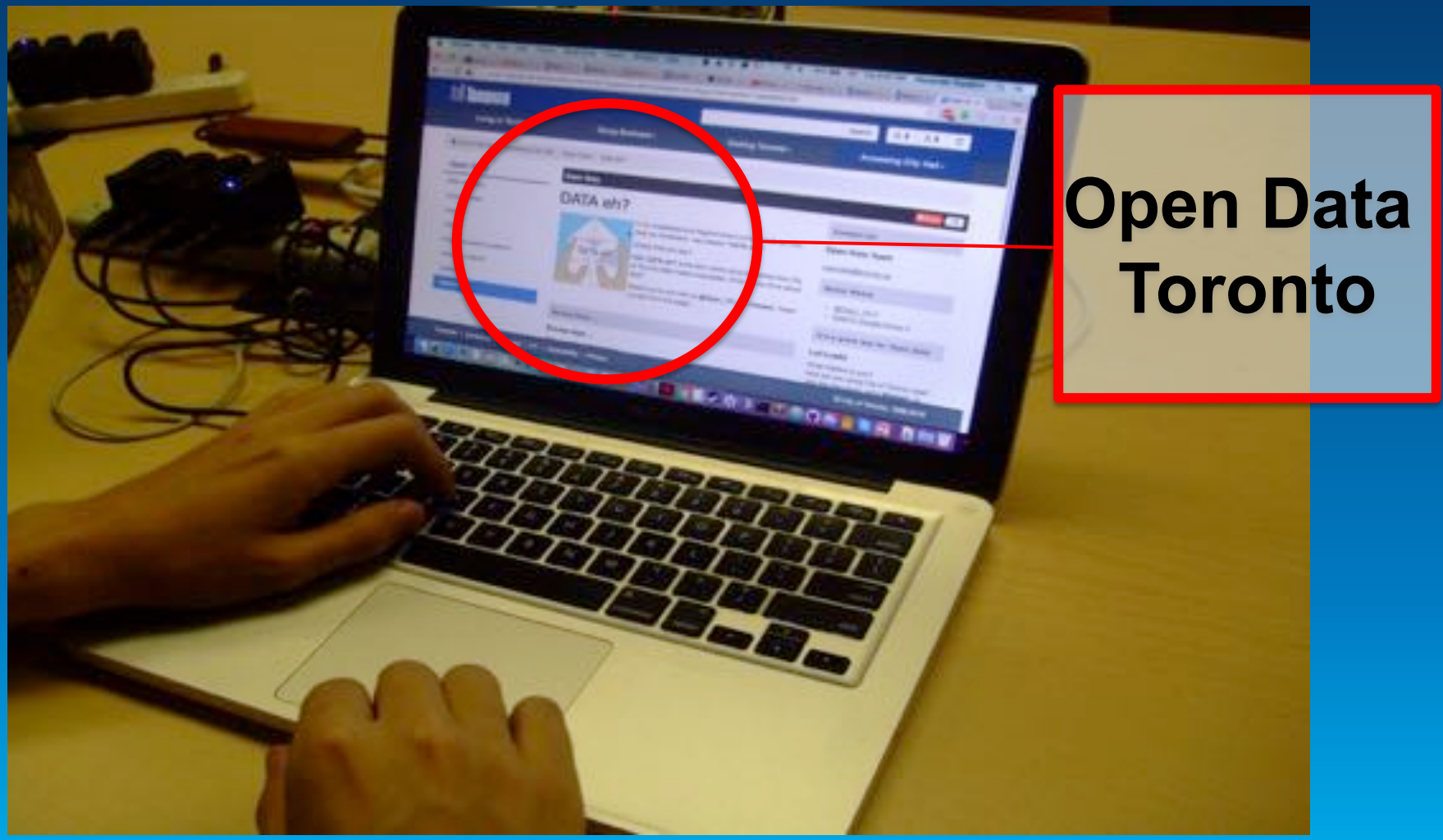
Teaching style: cookbook lessons with teacher 1 on 1



Example tutorial video



Download 3D Buildings, roads and DEM

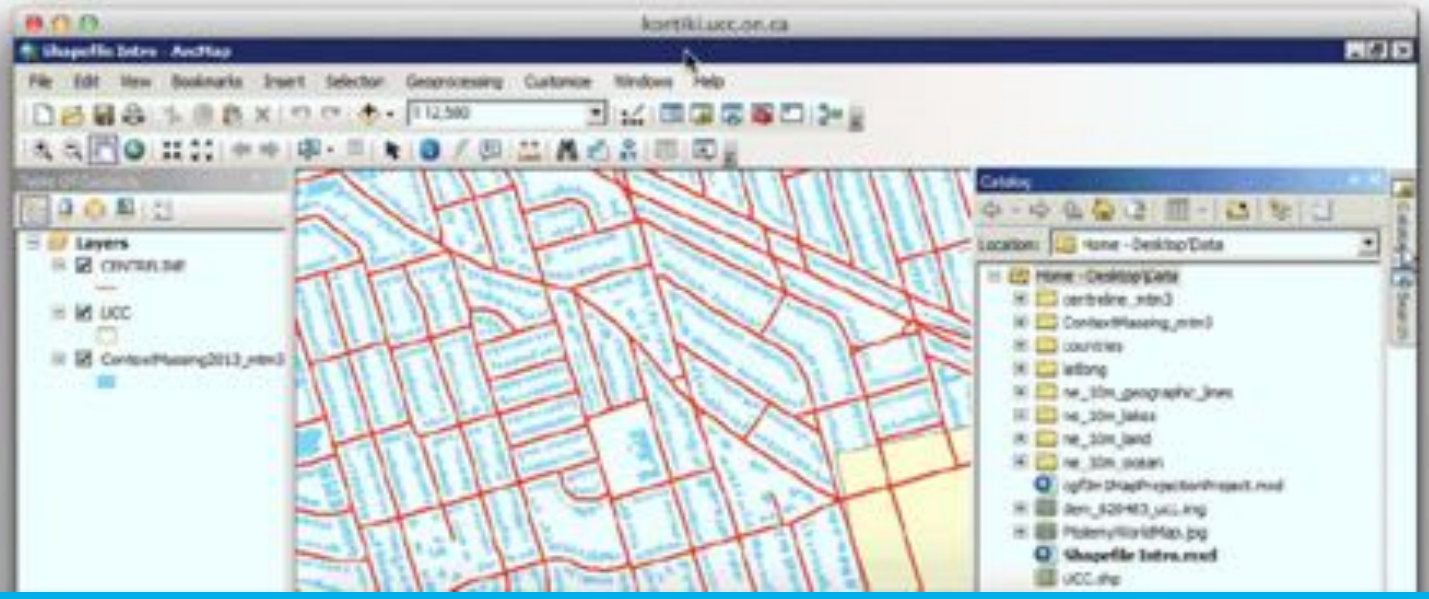


Clip data to school area – student notes

Clipping Vector and Raster Data to Create New Datasets:

Open ArcMap 10 in Window's Kontiki by connecting to RDC…

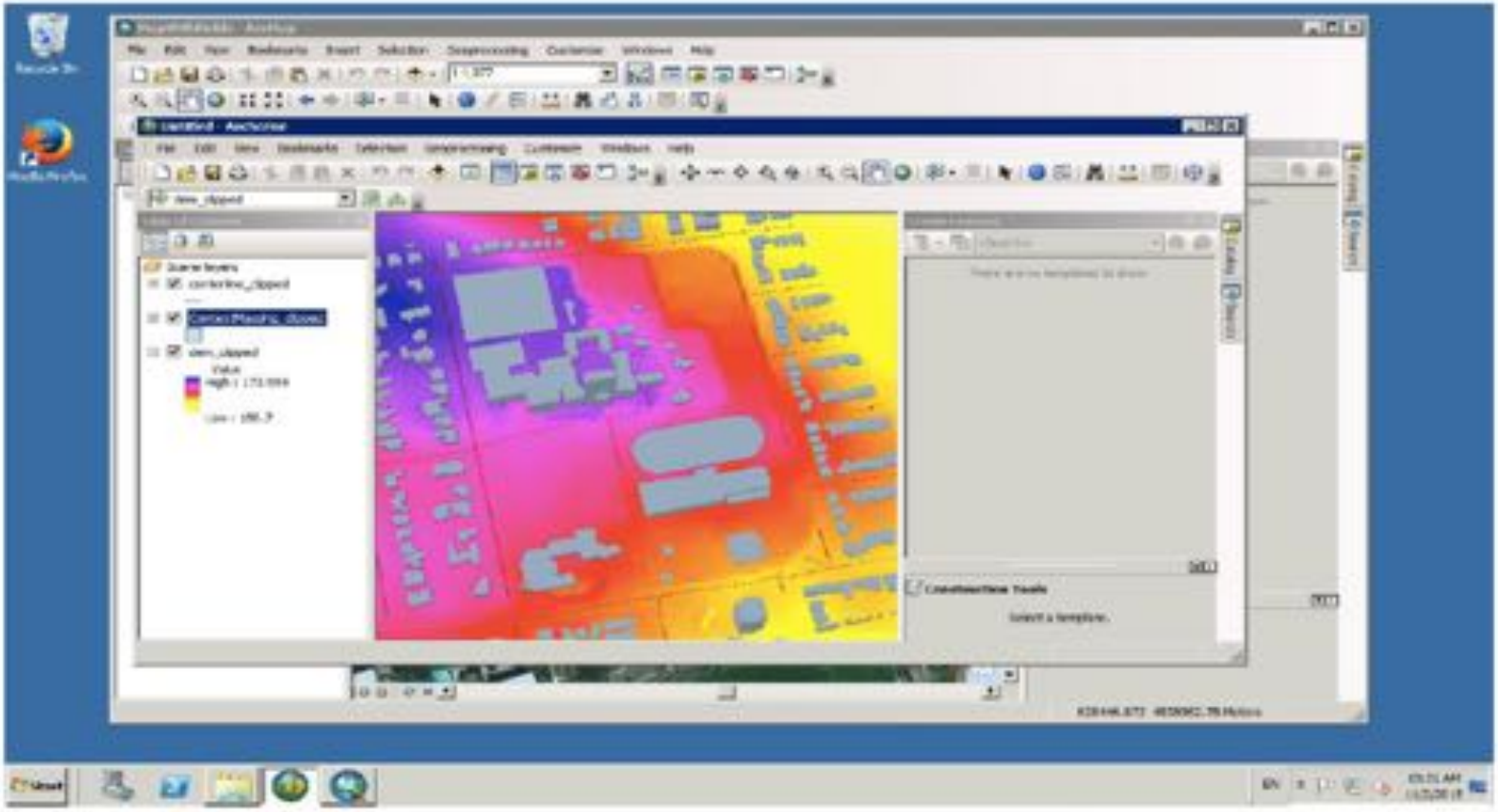
1) **Open ArcCatalog on the right sidebar.**



2D Edits in ArcMap / 3D edits in ArcScene

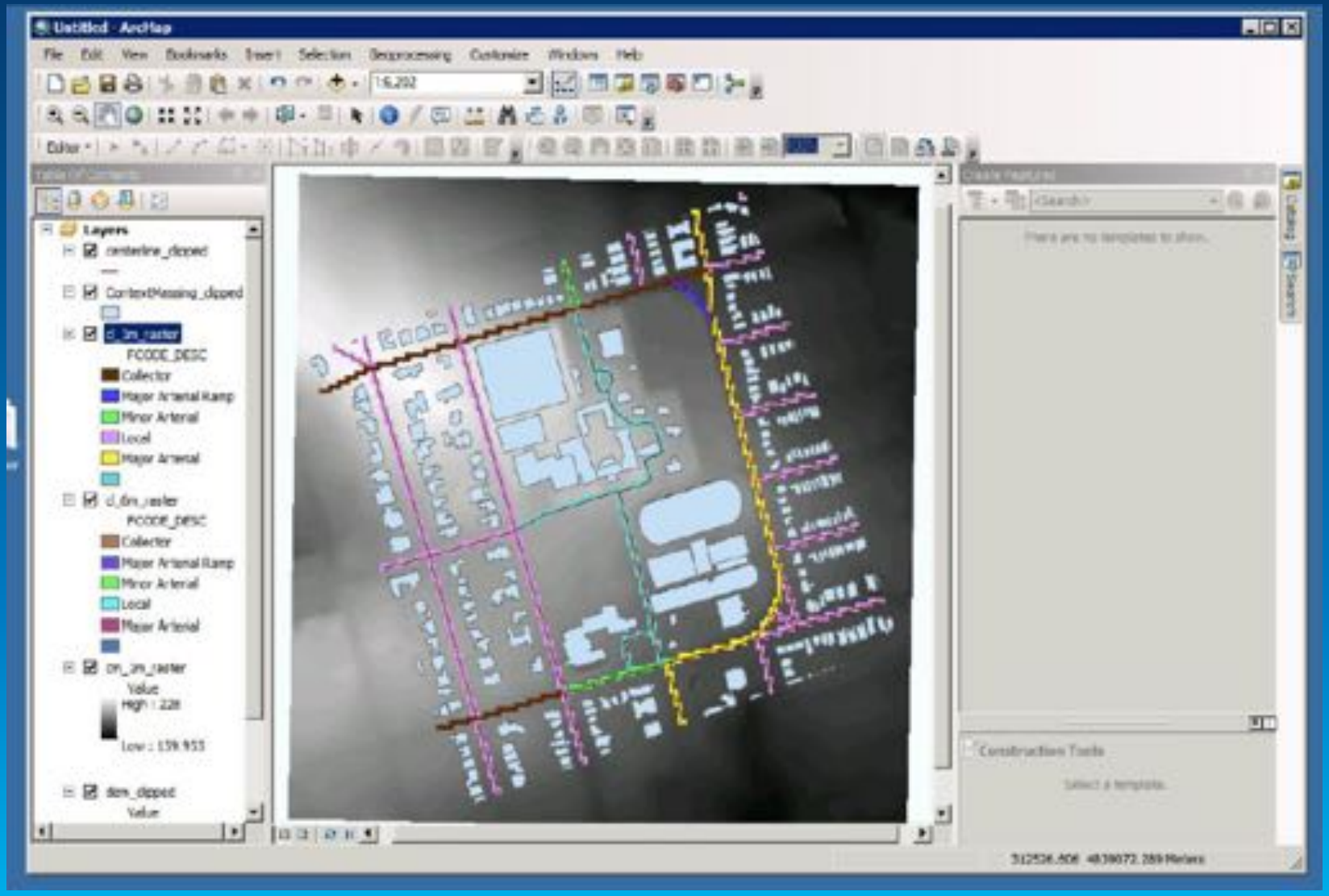
Vector to Raster Data Conversion and Resampling

First, I made some changes to my data in ArcScene.



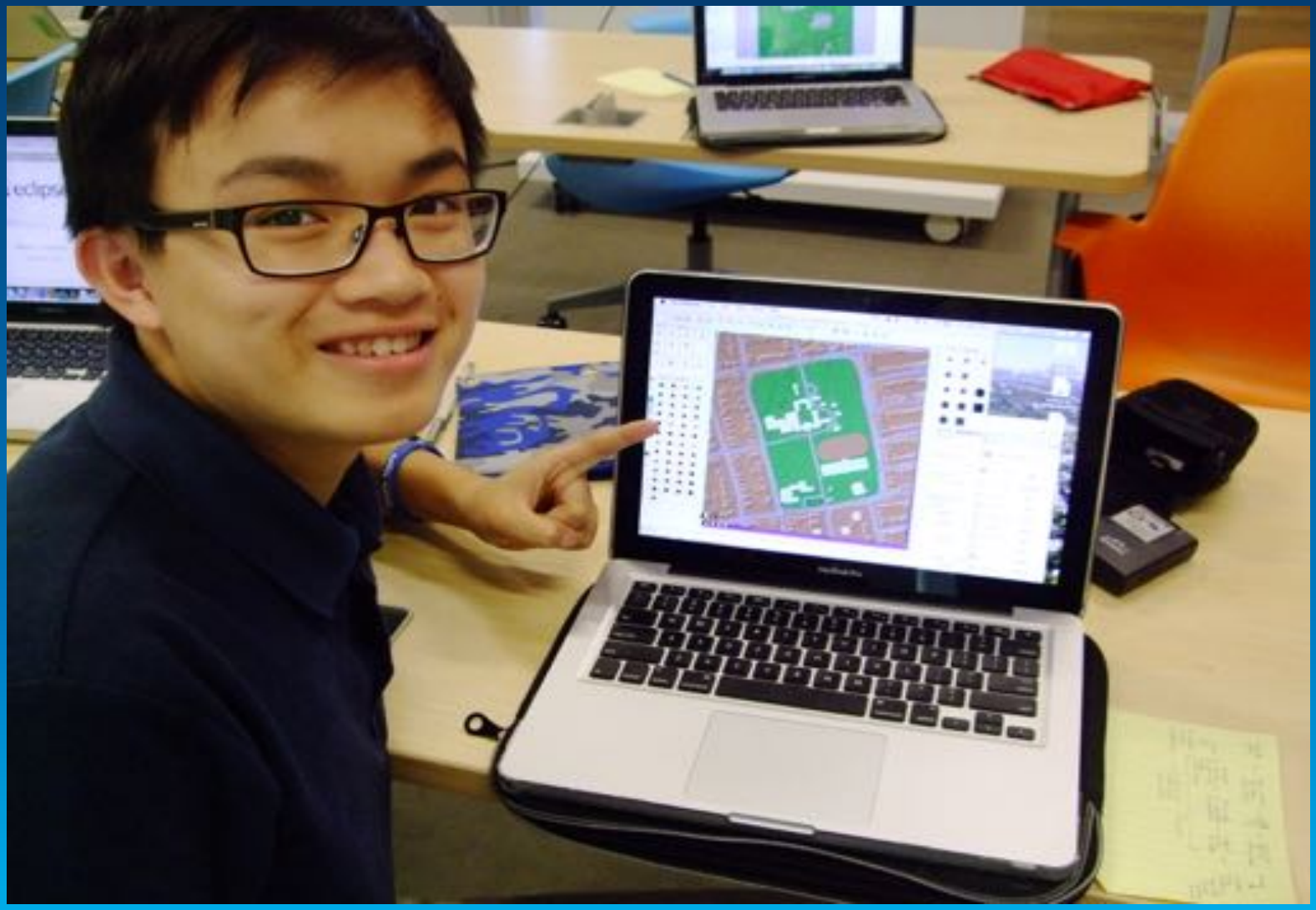
Pumped for 3D editing!

Raster conversion and Resample to Height map



ArcToolBox is full of goodies

Terraform with Worldpainter / export to Minecraft



How did I get Minecraft for free for my students?

Demo time