

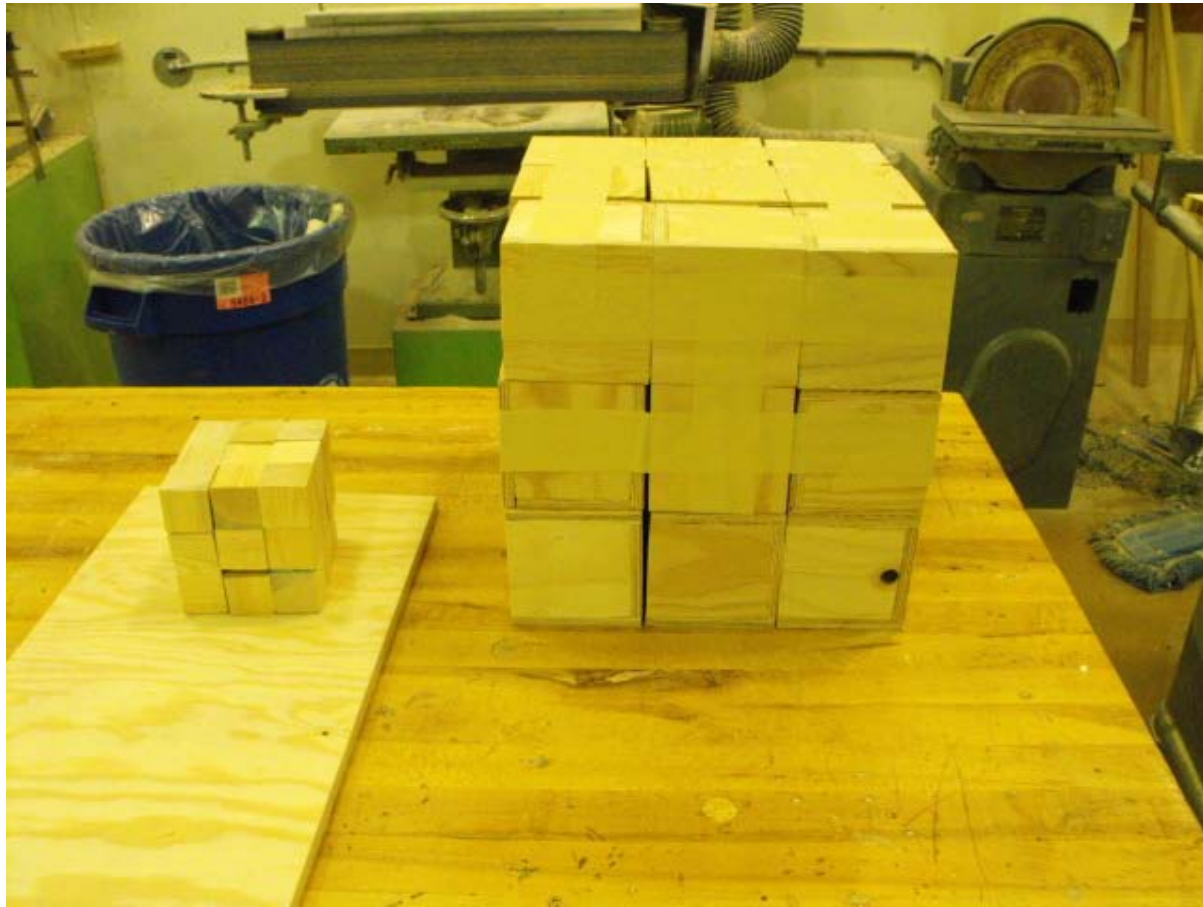
Workplace and Apprenticeship Math

Working the “Shop”
It’s All Math!!

How does this become.....



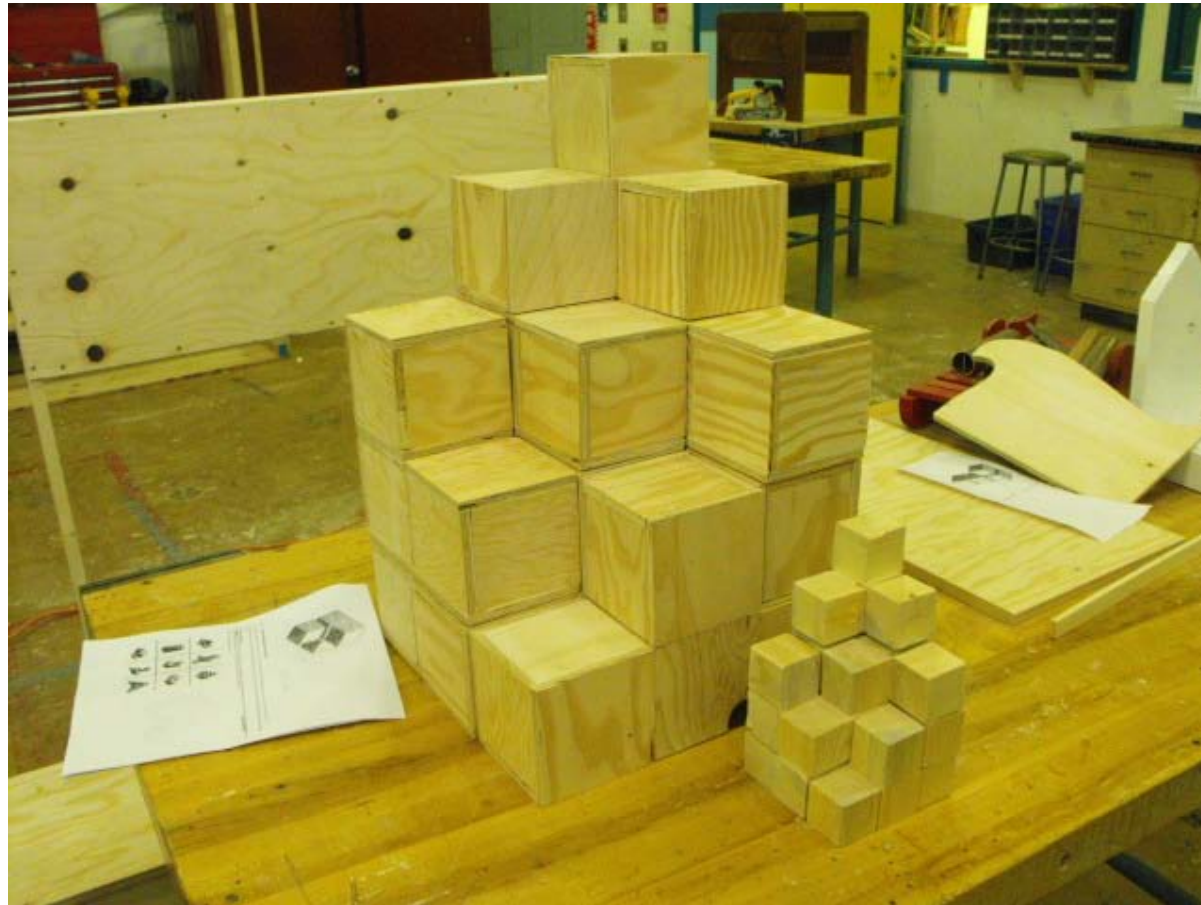
....this?



...this?



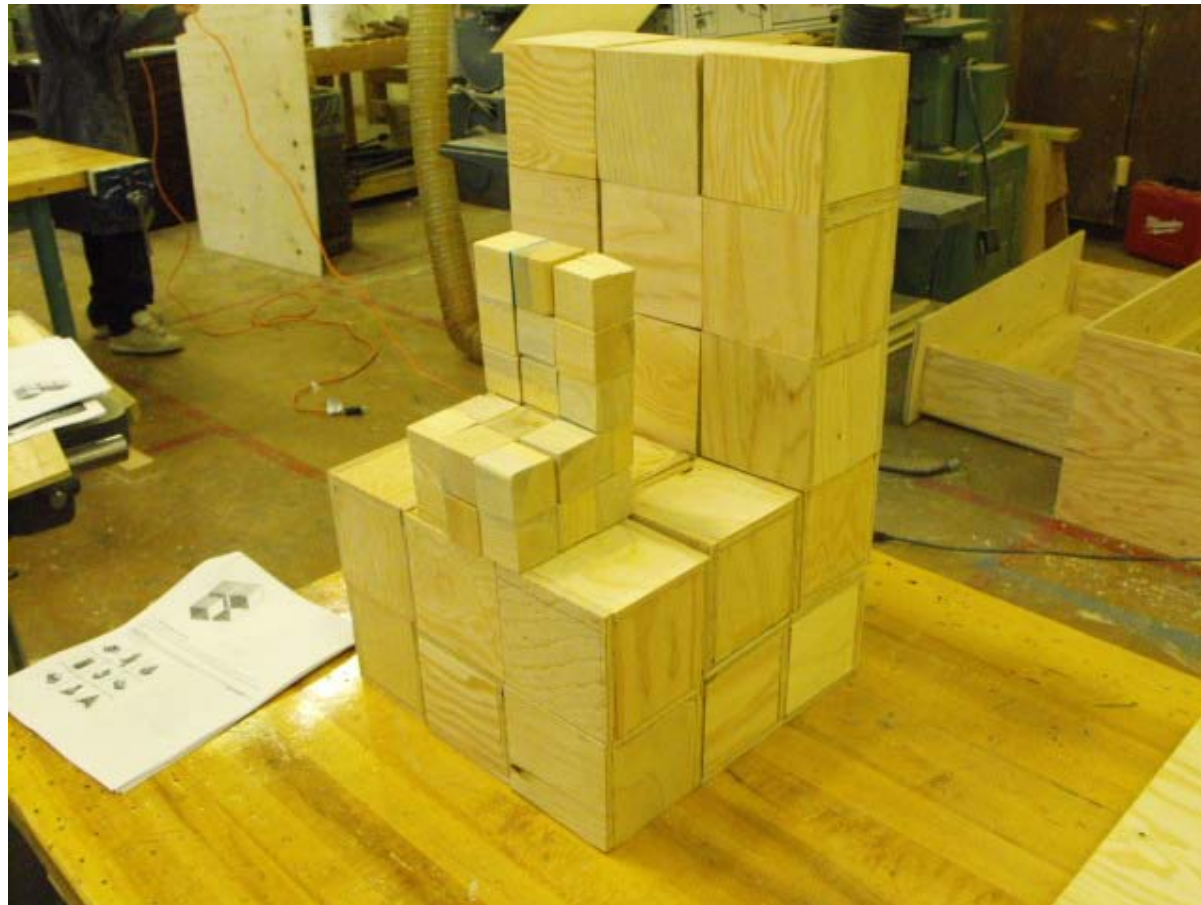
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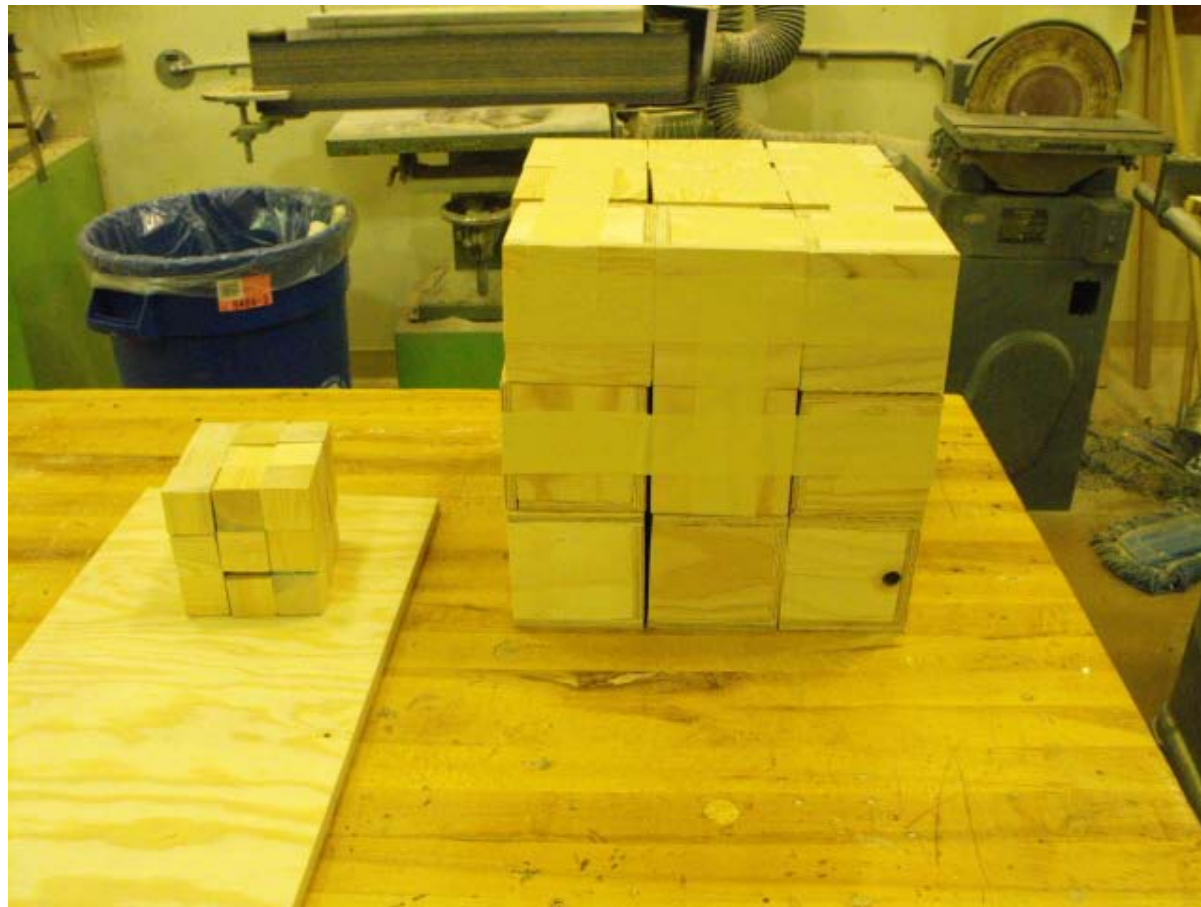


...this?

...this?



....and back to this?



Why this project?

- Give a student a challenge.
- Create a project that takes time and attention to detail.
- High entertainment value at the end.
- Create opportunity to talk shape, area and volume.
- Keep this student coming to school.
- Create a useful teaching aid.

Bed Frame Project

- Fractions/Ratios
- Cost Estimates
- Real scenerio -- student takes it home
- Understand implications of design changes.
- Keep the student in school.
- Student has something to take home his last year -- he's earning a leaving certificate.

Prototype - 1:5 (inches)



Project 75% complete --
\$250.00!



Is it worth \$250.00??

- Limited Math gains
- Large work ethic and tool use gains
- He mostly coming to school.
- His Mom is glad he has something to leave school with.
- He change the design on his 3rd cut!

Where's the Math?



Where's the Math?



Where's the Math?

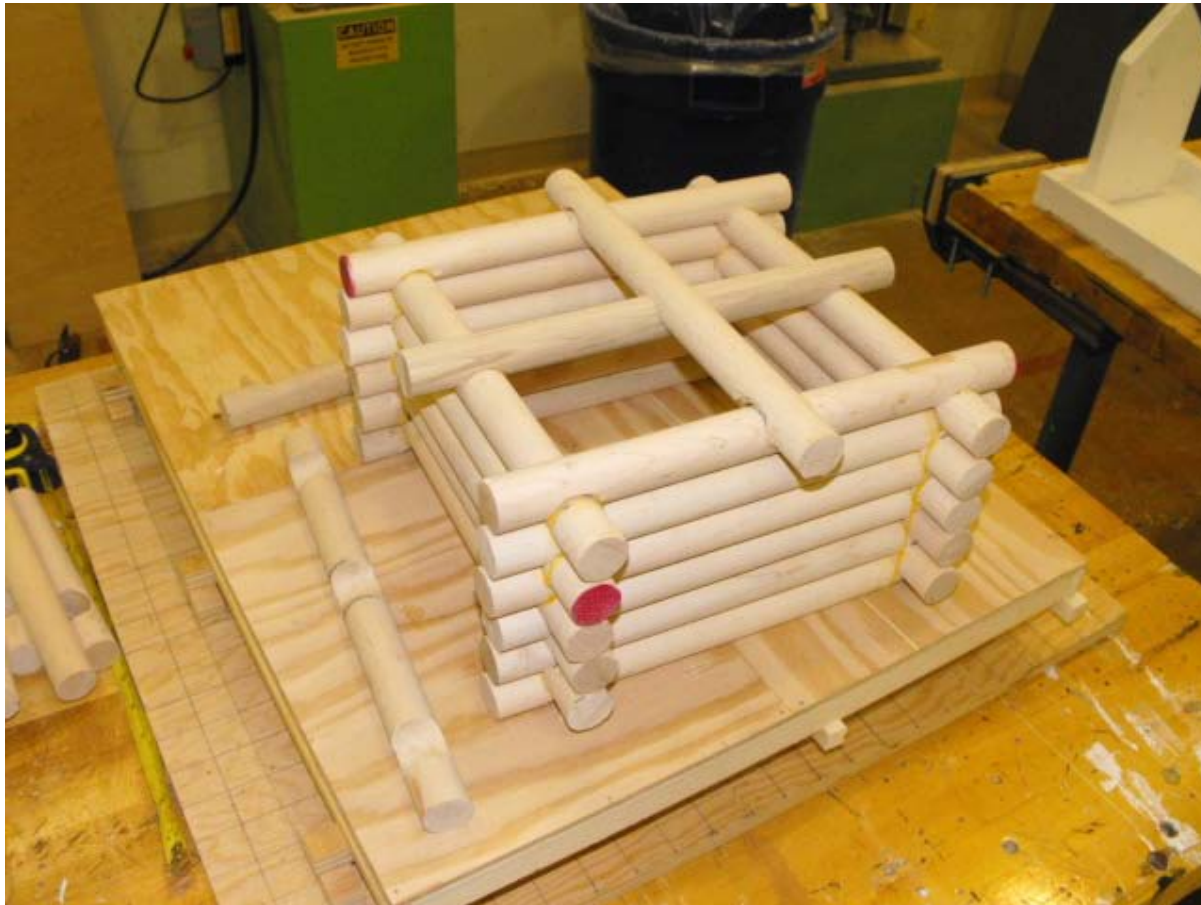


Where's the Math?



Where's the Math?

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Where's the Math?



Where's the Math?



Where's the Math

- It's everywhere!!
- Only two students worked with Math to these projects!!!
- The vast majority of students either don't use Math or find ways to get around using the Math.

What I'm Doing

- Delivery Workplace Math in the shop.
- Collaborate with Grade 6 teacher.
- Deliver pre-shop Math classes in Grades 7-9 before students go to the shop.
- Searching Workplace Testimonials
- Create Trades and Technology Stream
- Collaborate with Math Committee

Major 3 Challenges

- Raise the perceived value of the ‘shop’ and remove “dumping ground” mentality.
- Help Grade 10 students who are several years behind.
- Create a Pathway to Trades and Technology (Skills Canada, THFN, CO-OP program)

