

# Engineering Table



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## Abstract

The aim of this project was to build a multifunctional table that would allow for a more collaborative and creative workspace than the status quo work tables. The team discussed various financial and material constraints. The table was built primarily with wood, but other materials and electronic equipment was used to build the functionalities of the table. The large workspace and attachments like speakers, whiteboard-drawers, and shelves allow for an interesting workspace, and overall the table was a success. Workspaces should become more collaborative and creative, and we hope our table is a step in the right direction.



## STEAM

Our project uses multiple subject areas. Our primary subject area is **engineering**. We had to use the engineering design process to construct our table and improve upon it. The table also uses **technology** as it incorporates a speaker and electronic system within it. The table uses **art** for staining the table and imagining different creative solutions for the table.



## Engineering Design Process

Ask

Our goal was to build a table/workspace that allows for teamwork and creativity.

Imagine

Given the task of making the table, we thought about what we really want in a table. After intensive brainstorms with our team of 4 and some other members of our classroom, we came up with a groundbreaking table. This table has everything that we need and want.

Plan

We sketched out different designs and features of the table and created a spreadsheet outlining the necessary materials and finances.

Create

We started by cutting the legs and making the overall frame. Making the frame was the most difficult part of the creating part of the project. The joints had to be dead accurate or they wouldn't fit right.

Test &  
Evaluate

Improve

After the table construction we had to focus on the wiring part of the build. We made the sound systems from scratch

## Results/Conclusion

We succeeded in making a table that emphasized both creativity and collaboration. Different features, such as speakers, make working less monotonous. The large workspace and whiteboard keyboard drawers encourage conclusion. The table fulfilled our goal.



## Future Steps & What we Learned for Next Time

Future plans for the table is making a closed bottom and having a/c fan and heater fan under the table so the people working at the table can work in a soothing environment. We hope our multifunctional table is a step towards a future with more collaborative and creative workspaces.