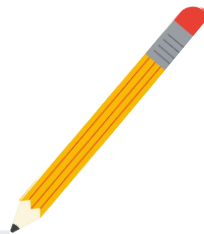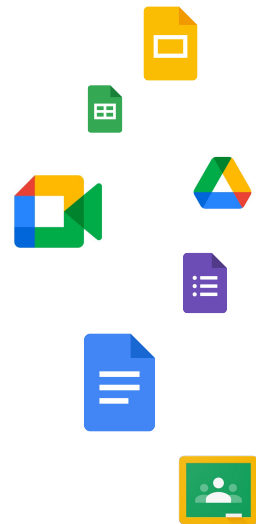Google for Education

CAD-ding on Chromebooks

Teach with Chrome Series

March 8, 2022

Speaker

Allen Smith, BSIA, MSIS, MBA, Six Sigma

STEM Engineering Teacher, Chester STEM Academy

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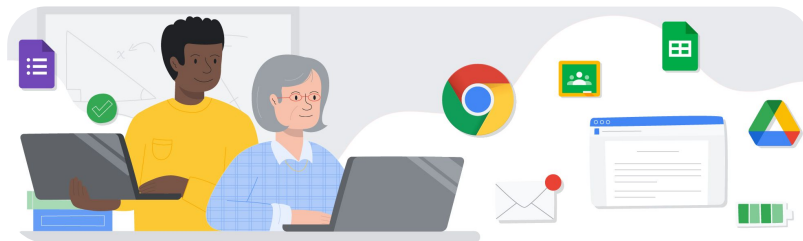
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Agenda

1 **2**

Introduction
Chromebooks Challenge
Microsoft Surface

Web Engineering Apps

Cloud Assisted
Engineering Apps

Introduction:
Chromebooks CAD-Doing
in Engineering Apps for Students

Web Apps for Engineering

AutoCAD Web (2D)

AutoDesk TinkerCAD (3D)

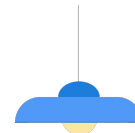Engineering Simulators

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CAD online

Internet dependent CAD apps

The STEM Engineering program first accomplished the CAD requirements of the Pennsylvania Department of Education standards for Career and Technical Education Engineering 15.999 by using online apps that were not installed on Chromebooks such as:

AUTODESK® AUTOCAD®

TINKERCAD AUTODESK® TINKERCAD®

These programs are adequate for high school introduction to engineering CAD. Touchscreen Chromebooks plus a mouse, removed the need to turn to Microsoft Surface Tablets.

Cloud Apps for Engineering

AutoCAD 2022

Inventor Professional 2022

Revit

Google for Education
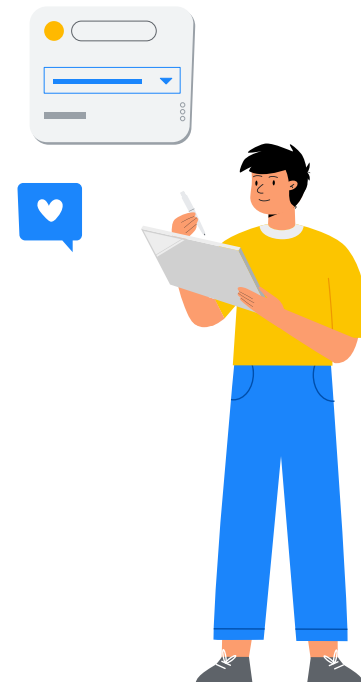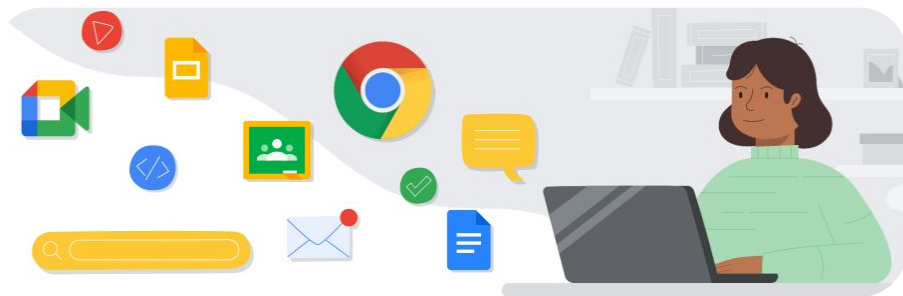
Cloud installed engineering CAD apps

Itopia Cloud installed CAD apps

By adding Cloud Computing access to Chromebooks, the Engineering program is now able to teach real day CAD concepts using touch screen Chromebooks with a mouse.

Most notable, is that there was no appreciable latency with the professional version of AutoCAD 2022 on which includes 3D capability on Itopia Cloud, versus latency MOST of the time using AutoCAD Web online.

Students are also able to learn AutoDesk Revit, the professional (AEC) Architectural Engineering & Construction industry standard for (BIM) Building Information Modeling. Most high school programs are teaching Sketchup or BricsCAD. Most are also using PC based tablets. We are able to teach Pro level concepts using the Chromebook and Itopia.

Thank you

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