

UDL in Math

What is it and why will it empower my students?

<https://goo.gl/egr64h>



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hi, i'm john.

I am a certified Google Education Trainer and the creator of the g(Math) Add-on for Docs, Sheets, and Forms. It has recently passed 12 million total users!

Prior to joining Texthelp as the EquatIO Product Manager (aka the 'STEM Texthelper'), I taught secondary math all over the world for over 15 years and loved to adapt the fail-forward mentality and push the bounds of technology integration in the math classroom.

Follow me on Twitter:



Tweet this session:

<https://goo.gl/egr64h>



#UDL2017



Universal Design for Learning (UDL):
15 years ago people did not implement UDL widely

I want to empower students to
communicate their thought
process in the method they
prefer!



<https://goo.gl/vn4hhp>



Universal Design for Learning is
just good teaching.



Doesn't every teacher just want
to hear their students
communicate their thought
process?!

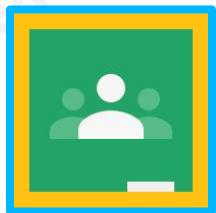


Digital Medium of Instruction



Google Classroom

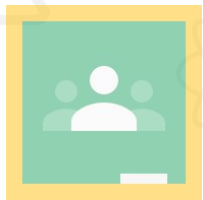
- Great way to share assignments with students
- The “glue” for my classroom.
- See [Alice Keeler](#) for amazing ways to use Google Classroom!





Google Docs

- Students familiar with format
- Great way to integrate with collaboration & comments
- Use Voice Notes with Read&Write
- Accessible math notation with Read&Write and EquatIO
- EquatIO demo



Google Forms

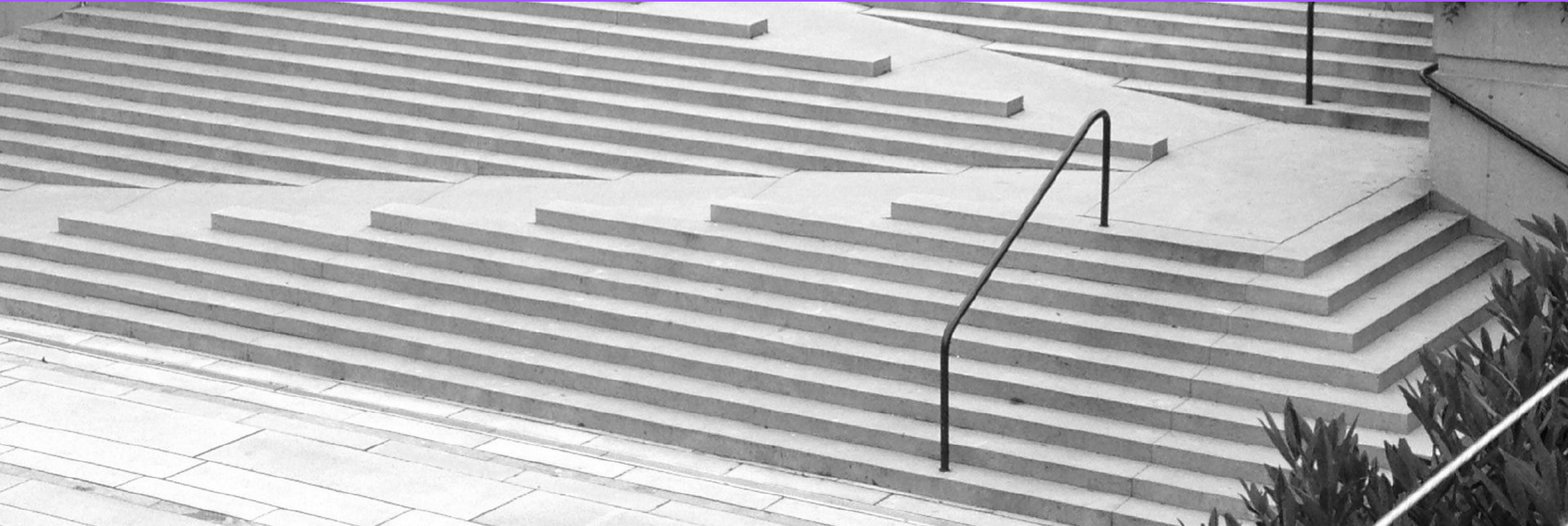
- Quick Assessment
- Use EquatIO to create math in both questions and responses!
- Easily use data in spreadsheets
- Use Quizzes
- Flubaroo for auto-grading (can even give a range for short answers!)

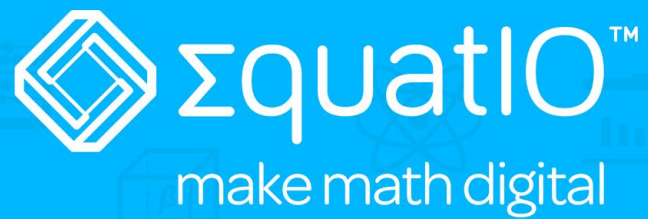
Google Slides

- Not constrained to document format (align however I like)
- Additional helpful tools (Scribble tool)
- Students can be creative in their responses (insert Video from Youtube)
- [Example Lesson](#)

#UDL2017

we wanted to build something that would feel like
UDL was built in from the start...





let's break it down

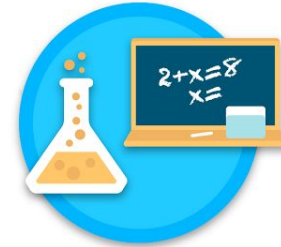


Built on UDL
principles

Prediction
Handwriting Recognition
Speech Input
LaTeX



Math-to-Speech



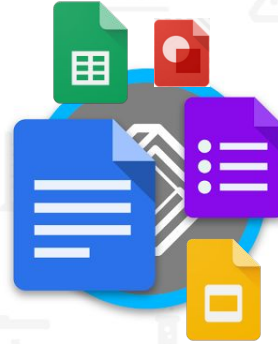
First STEM solution -
Math AND Chemistry



let's break it down



Chrome
extension



Full G Suite integration:
Docs, Forms, Slides,
Sheets, and Drawings!



Works on Windows,
Mac and Chromebook



why did we build EquatIO?

- ✓ Math and STEM subjects have been left behind
- ✓ Rather than enhancing learning and improving communication, technology has created barriers in the math classroom
- ✓ We wanted to create a tool that makes math and STEM more accessible, engaging and rewarding for every student
- ✓ An extension gives us the freedom to expand our reach across platforms so all teachers & students can benefit



demo time!





what is equatio?



“EquatIO is what every math and science student and educator has been longing for. It brings math out of the ‘Pen and Paper Required’

bubble and into the world of collaboration and communication; allowing students to **digitally produce clear and proper mathematics**, without hours of learning and practicing. If you are wondering how to begin to integrate meaningful technology into the classroom, EquatIO is where I would recommend to start.”

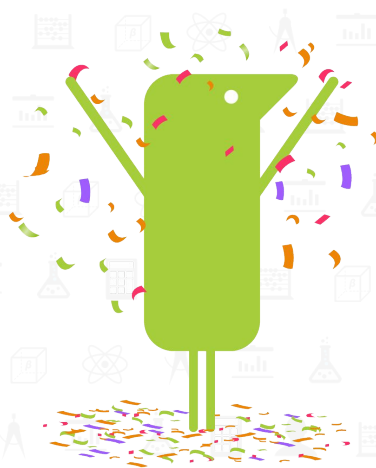
Emily Fitzpatrick, EdTechTeam Canada

what's coming next

- ✓ A rich-math workspace:
 - Real-time collaboration
 - Geometry
 - Graphs
 - Sketch Diagrams
 - Visual Manipulatives
 - Lab report sketches
- ✓ Google Classroom integration
- ✓ Accessibility for third-party math resources on the web like Kahn Academy and Wikipedia

EquatIO is free & will be forever.

We are constantly developing EquatIO with monthly releases and continually adding more premium features. Wait until you see our back to school update!



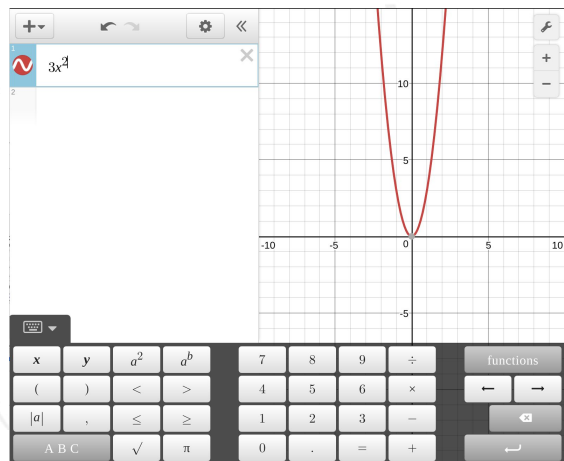
Premium features

Google Forms, Slides, Sheets, and Drawings integration

Math & chemistry prediction

Unlimited Handwriting recognition

Desmos



- Amazing Graphing Calculator
- Activity Builder is awesome
- New (Beta) Desmos Geometry



GRAPHING
CALCULATOR



FOUR
FUNCTION



SCIENTIFIC
CALCULATOR



GEOMETRY
(BETA)



CLASSROOM
ACTIVITIES



CREATE
YOUR OWN
ACTIVITY



REQUEST PD



PD PACKS

Other Apps

$$e^{i\pi} + 1 = 0$$



- [Google Science Journal](#)
(Android app, on next gen Chromebooks)
- [Explain Everything](#)
- [Screencastify](#)
- [Geogebra](#)
- [Squid](#)
- [MyScript Nebo](#)
- [WolframAlpha](#)

Disseminate Info

- Google Classroom
- Google Tone
- Email
- Goo.gl Chrome Extension
- QR Code
- Bit.ly
- ShoutKey

Thanks for your time and please let me know if you have any questions & feature requests!



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