

Circle in a Plane

Can math circle activities be done *well* with tablets?

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The Problem

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Outline

Introduction

Can tablets be used effectively to deploy math circle activities?

Answer is audience-dependent. Teachers and students have different needs.

The Goals are Unchanged

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- Facilitate mathematical investigation
- Facilitate mathematical communication
- Target to audience

Why iPads?

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- Ubiquitous
- Kids like them
- Schools have accepted them
- Donors like them
- Sometimes the facilitator is far away!

Pros and Cons for Tablets

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Pros

- Portable
- Encourages more person-to-person communication compared with computers
- Immediate feedback possible
- Engaging graphics are possible (including video, sound, etc.)
- Myriad possibilities for connectivity and communication
- Autonomy can be non-threatening

Pros and Cons for Tablets

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Cons

- Tablets do not promote *physical* interaction
- The “hat problem”
- Immediate feedback possible
- Autonomy can be isolating

A Decent Tablet Framework for Kids

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- Must be fun and easy to use
- Should promote “introspective” investigation
- Multiple modes of investigation should be possible
- Autonomy should be controllable, to some extent, by the teacher with graded access and some monitoring

If you'd like to help me beta-test apps...

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or if you want more information, please contact
me at

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Changing the subject...

- What if HCSSiM and Moscow's School #57 got married, and had a baby in San Francisco?
- A high-level 7–12 school for “math kids” to open in downtown San Francisco in fall 2015.
- Some of the people who will be involved in planning are PZ, Tatiana Shubin, James Tanton, Josh Zucker, Richard Rusczyk, Mira Bernstein, Mark Saul, Ravi Vakil, Glen Van Brummelen, Zuming Feng, Art Benjamin, Francis Su
- Visit **proofschool.com** for more information.