

STEM app developers to watch

Tinybop

One of my very favorite developers for STEM topics. All of their apps are gorgeously and very thoughtfully designed to guide the user through an open-ended learning experience. Many of their apps also include a free downloadable/printable PDF “handbook” which not only tells you how to get the most out of the app, but also offers real-world extension activities.

Don't miss: The Human Body, Plants, The Earth, Simple Machines & the Everything Machine

Urbn; Pockets

Fantastic illustrations including a racially diverse cast of kids were what drew me to this app developer, but their nicely-crafted non-fiction apps were what kept me coming back for more. Although they explore some similar topics to Tinybop (The Human Body) and MarcoPolo (Weather), German developer Urbn; Pockets is definitely worth exploring!

Don't miss: This is my weather, This is my body, This is my food

MarcoPolo

Apps about nature with a play-based format. These apps have almost no written text, but the voiceovers are available in multiple languages and support, rather than distract from, what's happening on the screen.

Don't miss: MarcoPolo Weather

Filimundus

Engineering apps that delight and engage players of all ages! Start with Pettson's Inventions to get a feel for the way this company builds Rube Goldberg-esque machines. Once you've finished those inventions, you're ready to graduate to Inventioneers where the gameplay is more open-ended and there's usually more than one way to solve each challenge. Finally, create your own Inventioneers puzzle and challenge your friends to solve it!

Don't miss: Pettson's Inventions, Pettson's Inventions 2, Inventioneers

Curious Hat

This company makes truly unique apps. Where so many other app developers seem to want to show you their own version of what everyone else is making, Curious Hat asks what new thing might today's technology be able to do for us and how we can play with that.

Don't miss: Curious Ruler

Toca Boca

No list of recommended app developers for kids is complete without the Swedish developers, Toca Boca. All of the Toca Boca apps are play-based, and a few have roots in STEM skills. Open-ended exploration with no worrying about right or wrong answers makes their apps outstanding.

Don't miss: Toca Nature, Toca Lab, Toca Builders, or Toca Store

Notable Individual STEM App Titles

KinderTown

Brief overview: an app about apps

Developer/Free?/Platform: KinderTown / free with in-app purchases / iOS only

Why I like it: In the first 5 minutes of browsing through this app, I discovered 3 new favorite apps. All the apps recommended within this app are reviewed and vetted by professional childhood educators. They're organized by target age group, then by broad subject, then narrowed down by narrower subject headings. A librarian's dream!

Bridge Basher

Brief overview: Build a virtual bridge, then test it out!

Developer/Free?/Platform: Jundroo / Paid / iOS, Android

Why I like it: Although you have unlimited resources at your disposal to build the strongest bridge you possibly can, this app does tally up the expense of your bridge so you can see how added materials will increase your cost. There are several ways to test your bridge, but my favorite is the "word test" where phrases like "really light" and "extremely heavy" walk across and test the strength of your construction.

Dreii

Brief overview: Build block towers to reach the glowing dot and move on to the next level.

Developer/Free?/Platform: Etter / Paid / iOS, Android, PC, Mac, Linux, PlayStation4, PS Vita

Why I like it: The cooperative element of this game blows my mind. When you log in to the game, you'll see tiny little dots orbiting around some of the game levels. Those dots mean that someone else, somewhere in the world is playing the game (playing that level) at that moment. If you want to join them, just go to that same level and you can work together to reach your goal. It's totally anonymous and you have a fixed vocabulary of about 4-10 words to choose from for communication (hi, bye, help, etc....), so it's a very safe first app for "interacting with strangers." I also like the potential for a parent and child or a set of siblings to work together from two separate devices.

Endless Numbers

Brief overview: Short, humorous, monster-filled animations about each number

Developer/Free?/Platform: Originator / Paid / iOS, Android

Why I like it: This developer has a whole series of "Endless" apps but most are text and reading-based. This is their foray into the world of math and numbers. I love that they "spell" the number in a variety of ways ($2+3=5$, counting by two's, etc.) and the funny little monsters are always motivating for kids to watch!

Fiete Math

Brief overview: Add, subtract, divide and more using simple virtual blocks at the seaside.

Developer/Free?/Platform: Ahoiii / Paid / iOS only

Why I like it: Although adults often take it for granted, the skill of translating abstract numerals into concrete quantities is a basic math skill that needs to be learned. This app does an excellent job of building that very skill, bit by bit adding in new elements (including cute blocks disguised as animals!) to ease the user into new skills. Very thoughtfully developed and I love this developer's eye for design!

Geoboard

Brief overview: Like a real geoboard, but without the danger of snapping rubber bands.

Developer/Free?/Platform: Math Learning Center / free / iOS, Windows or Chrome

Why I like it: Geoboard's simple, clean design is intuitive to use and easy to learn. In addition to creating the outline of shapes with the colored bands, the app has the added feature of being able to fill a shape with color, making it easier to see and compare to other shapes. There are two different sized pegboards to choose from. Fun for preschoolers to play with, but also useful for school-age kids who might be using geoboards in their classrooms. Geoboard is also available as a web app and can be played on your computer.

Little Alchemy

Brief overview: Can you recreate the world using only the four basic elements?

Developer/Free?/Platform: Jakub Koziol / Free / iOS, Android, Chrome

Why I like it: Starting with four basic elements (air, fire, earth, water), see what you can mix together to create new things. Earth + Water = Mud! Fire + Earth = Lava! There are 550 different items that can be created using different combinations. (note: some combinations can result in mild drug/tobacco references)

Odd Bot Out

Brief overview: Challenging logic and engineering puzzles

Developer/Free?/Platform: Martin Magni / Paid / iOS, Android

Why I like it: Help a small robot work his way through 100 levels of increasingly challenging obstacle courses. Each level presents logic challenges where the players must think through the order of their actions and sometimes employ trial and error as they learn new techniques to maneuver through the bot's world.

Star Walk Kids

Brief overview: Explore the stars above you, even in the middle of the day!

Developer/Free?/Platform: Vito Technology / Paid / iOS, Android

Why I like it: Using the built-in gyroscope, the app shows you a map of the stars, planets, constellations in relation to your current position. The app is also packed with tons of great scientific information about astronomy and mythology (in relation to the constellations), all shared in a variety of written and spoken word, kid-friendly cartoon illustrations, and a few animated video explanations.

Symmetry Lab Basic

Brief overview: Deceptively simple and mesmerizing app about symmetry

Developer/Free?/Platform: Luke Bradford / Free / iOS only

Why I like it: This app appeals to all ages. Babies will be entertained by the kaleidoscopic swirls, toddlers will love the opportunities to create swirls of color using the slightest of touches, older kids will enjoy making careful spirograph-like works of art and adults can spend a long time exploring the many different effects made possible by switching up the settings. Wonderful opportunities for open, creative play, subtly reinforcing the concept of symmetry.

Weigh the World

Brief overview: A great introduction to the concept of measuring weight!

Developer/Free?/Platform: Ravensburger / paid / iOS only

Why I like it: An app all about weighing things may sound fairly dull, but it's actually filled with humor as you are asked to do things like guess the weight of the sun or decide which is heavier--a rabbit and a car or a brontosaurus. The app presents several different ways to approach the question of weight, and kids will benefit from that variety.

Wonderbox

Brief overview: New content on every topic under the sun added daily, very inspiring!

Developer/Free?/Platform: Duck Duck Moose / Free / iOS only

Why I like it: An astounding amount of interesting information and inspiring invitations to create and share your own ideas are packed into this fantastic app. With content curated by educators and well-organized into subject areas, there's something for everyone (including STEM fans) here! The videos and creativity prompts are engaging for kids and adults alike!

Want to find more great apps?

<http://www.madisonpubliclibrary.org/kids/apps>

(you can sign up for the newsletter to get each month's reviews delivered to your inbox!)

Monthly app storytime at the Alicia Ashman Library – **"The Supper Club"** meets at 6:00 on the Third Tuesday of each month. Bring along a picnic dinner for the family and eat while you discover new apps!

Want to learn more about apps, kids and the library?

Read the free e-book from Little eLit: <http://littleelit.com/book/>

Read the ALSC white paper here: <http://www.ala.org/alsc/mediamentorship>

Watch this video by Amy Koester: <https://www.youtube.com/watch?v=tSxdxYIWilQ>

Questions? E-mail me:

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