

More Educational Opportunities

Helping Your Students Find Them

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Outline

What this session is about
General strategies for finding opportunities
So, my kid likes...
How to engage your child
Thank you!

- 1 What this session is about
- 2 General strategies for finding opportunities
- 3 So, my kid likes...
- 4 How to engage your child
- 5 Thank you!

What this session is about.

Splash is a **start**.

What next?

There's a *tremendous* amount out there.

- We'll start general and then get specific.

General Web Resources

- Google.
- Wikipedia.
- Online communities exist for everything. (And kids will like interacting with adults as equals.)
- E-mail.
- TED — www.ted.com
- NPR's Science Friday, Radio Lab; PBS' web page; BBC podcasts; Netflix PBS specials.
- Online content, from the *New York Times* to www.seedmagazine.org to www.sciencedaily.com.

Online Courses

- Coursera, Udacity, edX: college courses online with deadlines.
- EPGY, CTY, Art of Problem Solving: high school, smaller courses (some delivered live), more interaction.
- Khan Academy, iTunes University, The Learning Company DVDs, MIT OpenCourseWare: courses to do at your own pace.

Universities

This shows my personal biases, but universities are a center of human knowledge. Take advantage of them!

- Courses at colleges (including community colleges).
 - Summer courses .
- Student groups.
- Talks and seminars.
- Professors.
- When in doubt, e-mail and ask. (Especially secretaries.)

The Community

- Community service. (In interesting places!)
- Community theater.
- Libraries.
- Museums.
- Meetups, other groups that get together.
- Wonder Fest — www.wonderfest.org
- Local 4H group.

Summers

- Good times for relevant work, labs, or volunteering.
- Summer programs, especially residential ones. (e.g. www.explo.org)
- More intense, interesting academic programs.
- Summer internship programs (list incl. research at people.rit.edu/~gtfsbi/Symp/highschool.htm).
- <http://www.discoveryoursummer.org>
- Academic Talent Development Program at UC Berkeley — atdp.berkeley.edu
- Free time to pursue projects.

Miscellaneous

- Magazines or other periodic interesting sources of knowledge.
e.g. Science News, history.com.
- TimeWarner Cable's Connect a Million Minds Initiative —
www.connectamillionminds.com

So, my kid likes...

math!

So, my kid likes math!

Real mathematics is very different from school mathematics.

- Mathematics competitions have a strong record of getting students involved:
 - Within school, MATHCOUNTS, Continental Math League, Mathletes teams (local to national), the AMC, etc.
 - COMAP.
 - USAMTS.
- Math circles (all over the Bay Area — mathcircles.org).
- Online communities (especially www.artofproblemsolving.com).
- Most importantly, summer programs.
 - I like Mathcamp (www.mathcamp.org), but there are many others.
 - Investigate what people say online or ask someone, because reputations vary widely.

So, my kid likes...

astronomy!

So, my kid likes astronomy!

- Observatories have public observing times and programs. You can also volunteer!
- Universities: work with a professor or take a class.
- Build a telescope (or buy one) and go out with a star map.
- Subscribe to *Sky & Telescope* or *Astronomy* and let your child read and decide to go out.
- NASA, the Sloan Digital Sky Survey — www.sdss.org — and their education links like SkyServer.
- heavens-above.com
- iPhone Apps — Go Skywatch (see the sky as you point it), NightSky (live views of the Earth, Sun, etc.)
- Summer programs will often take kids on amazing trips to observatories for several weeks. (Investigate them online.)

So, my kid likes...

writing!

So, my kid likes writing!

- Find a community writing circle or group; they will be very inviting.
- Create your own writing circle.
- Join the school newspaper or literary magazine.
- Submit work to competitions, online magazines, or others. (e.g. NPR writing competitions.)
- Join an online community and share writing, publish on a blog.
- Summer programs.
- NaNoWriMo — November, <http://www.nanowrimo.org/>.
- Subscribe to a writers' magazine or buy a guide for where to submit your work.

So, my kid likes...

building things!

So, my kid likes building things!

- Let them play!
- Hackerspaces — www.hackerspaces.org
- Maker Faire, "the world's largest DIY festival" — www.makerfaire.org (Bay Area, Detroit, New York)
- Competitions: Tech Challenge — techchallenge.thetech.org, FIRST Robotics — www.usfirst.org, Science Olympiad — www.soinc.org
- NerdKits (www.nerdkits.com) and kits from science museums.
- Rubik's cubes.
- Howtoons — www.howtoons.com.
- MAKE Magazine (www.makezine.com), Instructables (www.instructables.com), Adafruit (www.adafruit.com — electronics).
- Odyssey of the Mind/Destination Imagination.

So, my kid likes...

computer games!

So, my kid likes computer games!

This seems like the least productive interest. So let's see how to turn it around to something productive.

- Create your own computer games (through lots of online software).
- Study interactive storytelling.
- Computer programming, through camps or other programs.
- Learn to program with the Game Maker website, Scratch, Alice.
- Follow blogs of game designers.

So, my kid likes...

everything

So, my kid likes everything!

- Help them explore many interests.
- Let them explore a few things in-depth as they're interested.
- Find online communities.
- Find summer programs with a variety of courses.
- Look into programs like Academic Decathlon.

So, my kid...

doesn't like anything!

So, my kid doesn't like anything!

- Let them explore: Splash!
- Build on their Splash experience: expose them to stimulating ideas that further the classes they liked.
- Encourage them to stay in contact with Splash teachers; e-mails are available.
- Try out lots of things, from sports to after-school. Don't force it; they'll find what they like.

How to engage your child

- You want to build genuine interest in your child.
 - Genuine interest comes from a feeling of ownership; “doing what your parents want” doesn’t help.
 - Build their own initiative and interest, not outcomes.
- Judge your own relationship. If pushing your child to do something will push them away, then back off.
- *Provide* opportunities.
 - Provide exciting books or trips without forcing them.
 - Share what *you* love.

How to engage your child (cont'd)

- Be genuinely curious, and share your curiosity.
 - Explore a Wikipedia article and pass it on.
 - See a webcomic that is interesting and pictures a scientist or an artist or a writer? Pass it on. (www.xkcd.com is a good example).
- Seek out talks at universities.
- Lastly, don't violate your child's independence. That just invites rejection.

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