Want the Best Network?—Use the Kids!

We are completely ignoring our best technology resource: Our kids could give us the best technology network in the world—if we'd let them!

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Published in *Educational Technology*, May-June 1013

[1124 words]

Anyone who has had any real contact with kids these days (i.e. outside of our rigid schools and testing-oriented classrooms) knows how excited, smart and capable today's young people can be— especially around technology, and particularly when properly challenged. Our school-age kids are, in fact, our very best resource for getting many things we need done—it's hard to beat the combination of capable, enthusiastic and free!

So how could we channel and make use of this powerful resource?

Well, if we change our perspective about kids for a moment—from that of students competing individually with each other for grades (and for places in college and in life) to one of a powerful cohort working together to accomplish goals useful to all—answers begin popping out at us.

Perhaps the easiest and most useful challenge we could give this cohort would be to make the U.S.' (or whatever country does this') technology network the very best in the world.

How? you might ask. Doesn't a great technology network require professionals? Big companies? Big investments? ADULTS, in short?

I don't think so. The adults and the technology companies would need to be involved, of course, but they don't have to be the drivers, or even the doers. The kids can be.

I'd propose we start with our schools, move to our neighborhoods, and eventually connect all of us.

Suppose, for example, we want to powerfully bring the most powerful network possible into a school. How does it get there? Cable? Kids can lay it from the nearest point, and learn how to splice it. Satellite? Kids can build a dish. The cable and phone companies could help here (all have philanthropic arms.)

Then we need routers. Kids can build these, or adopt existing ones. Cisco would be the great partner here.

Wi-fi in every classroom? Kids can build wi-fi amplifiers—using tin cans!

The instructions for doing all these things are already on You Tube (Fiber Optic Mechanical Splice: http://www.youtube.com/watch?v=haey8XdILf0 Building a satellite dish http://www.youtube.com/watch?v=YgLfP_S3iQE Wi-fi repeaters with tin cans: http://bit.ly/gSnMJh

What's left? Getting the highest bandwidth signal. (All our schools already get at least low bandwidth.) This signal is, of course, already available from many carriers—they just charge more for it. So either we get the carriers to subsidize it and provide it cheaply to schools (e.g. at the same price the schools are paying for the current, inferior bandwidth) and/or we get government, or a company or philanthropy like Google or Gates to foot the bill. The point is, the labor is free. And it's fantastic learning. (Additionally, points out consultant Mark Anderson, many schools already own airwaves (spectrum), which can be used or traded here.)

Once the schools are done, the next step is to extend the fast network to the neighborhoods where the kids live. Bringing access to the community is also not that hard—it's already been done in several places (like low-income Lemon Grove CA, whose network, built with federal and other grants, is used as backup by the local police and fire departments). Google is currently making free wi-fi available in the multi-block area around its offices in New York City (and, I assume, lots of other places). Why not enlist nearby school kids as free labor (with company/school guidance) in exchange for learning something useful? Google already brings groups of school kids to its offices frequently. How about teaching them these skills while they're there?

Could our kids self-organize in this way? I.e. could they start and run a school-based, district-based, state-based and national-based "tech corps"? Yes they could. In fact, it *shouldn't* be done "top-down"—like scouts or 4H, although some of those organizations' knowledge may be useful. There are already good examples of large groups of young people self-organizing—from street gangs to video game guilds. Could we turn our kids' organization skills to the useful side? I bet we could.

Picture a tech corps in each school, self-organized by kids, based on merit alone, with a non-voting volunteer faculty sponsor to keep an eye on it. Kids would make the rules, set the priorities, figure out how to get things done. Their "prime directive," and only goal, would be this simple one: "Make your school's network equal to the best in the world." We'd encourage them to meet with whomever they can, and to beg and borrow (but not steal!) whatever they need. Our main role as adults would be to make sure they don't hurt themselves, get into trouble, or do anything illegal. Our secondary job will be to pick up our jaws when they drop at what the kids are capable of when unleashed.

Each school would be trying to be the best—not in competition for prizes, but in a common effort towards a collective goal. The school teams would also be meeting district- state-, and country-wide—mostly virtually, perhaps sometimes in person—to coordinate, set standards, and share good ideas. Future members would maintain and upgrade the system, keeping it the best as technology advances. Does anybody think that the money (and the necessary volunteer supervision) could not be found for this?

In fact, why not make the whole challenge worldwide, with a dedicated, kid-created You Tube channel and other tools supporting the effort in multiple languages, and promoting worldwide student-created networking paradigms?

Let me summarize:

A continually ongoing project (first building the networks and then keeping them running and current as technology improves) that involves useful and important learning, that kids could point to as their own and be proud of, that everyone would benefit from, and that would require little additional work from overworked adults. And that would also be a laboratory and paradigm for other good uses of student resources. Sound good?

What problems and issues could we foresee? Quality? The kids can work with experts to set and enforce their own quality standards. Safety? We can supervise. Security? We can put the top kids in charge of ensuring this. Taking adults' jobs? Hardly, given the project's limited scope (schools, educational use). Intellectual property theft? None involved. Adult's time and physical resources? That's what philanthropic arms and foundations are there to support. Plus today's kids are great at recycling and reusing stuff. Internal Politics? I bet these kids could show us all a thing or two about getting things done.

Once our networks are the best and our kids have some experience under their belts in working together, the young people could move on to other badly needed projects about which they are passionate—health, environment, sanitation and literacy spring immediately to mind.

All this requires, really, is saying to the kids: "Go." Who might be against it?

Your comments are welcome at marcprensky@gmail.com .

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