Do We Really Need Dedicated Ed-Tech?

No, we don't—and making and buying it wastes badly-needed technology money and effort

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Do we really need to continue to create, sell, and buy dedicated "educational" hardware and software"? Venture capitalists think so—I just saw an investment figure of over $9 billion per year. But I believe this is huge waste, both for investors and for students.

Our kids live in a world where almost any technology they could possibly need is available in a general-purpose, easily-configurable-to-whatever-the-need form—often free. It lets them do much more than just academic work—it empowers them to accomplish real things. General-purpose technology (e.g. writing tools, communication tools, video tools, analytical tools, databases, google docs, programming and app-building tools and much more), as it quickly evolves—when used well—works fine for this, and is the bulk of what today's kids will be using for the rest of their lives. Our kids—and their educators—need to be finding, creating and inventing ways to use these new general-purpose communication tools, collaboration tools, programming languages, big-data and other analysis tools, simulation engines, robotics tools, AI, AR, VR and more, in ways that will empower them to achieve their dreams and become good, effective world-improving people.

Today's dedicated "ed tech" is almost entirely about supporting our old, "academic" paradigm of education. It is dedicated almost entirely to doing things we could do before—e.g. delivering and receiving content, doing research, or keeping records—in faster, and sometimes marginally better ways. In the age of iPhones, academic education doesn't need dedicated technology—a lesson Rupert Murdoch learned painfully with his Amplify tablets. In the age of You Tube, highly-funded startups making "content" are finding that, no matter how good or beautiful that content may be, no one will buy it.

Our kids, with their extended brains all networked together, need little more than powerful devices and a really fast connection to the web. Once we forget about "ed-tech"

we can deal with the ***real*** educational question—how to use the powerful technology we already have—and will have—to achieve our kids' and our goals. We should be thinking about what role the new technologies can play in a world of *post*-academic, empowerment, accomplishment-oriented education—the education of the future, now emerging around the world.

Although creating dedicated "ed tech" may make economic sense in the short-term, it is disastrous in the longer-term—it ***holds us back*** from moving to a new educational vision. Creating new and expensive technology just to do the "same old education" in different ways is almost certainly the most wasteful use of our resources for educating our kids there is. Using technology in this way both trivializes technology's real potential, and fails to empower our kids further to do anything new that they need. Compared to how technology *could* be helping our kids become educated for the future, using ed tech only—or mainly—to do "old things better" is trivial—no matter what the complexity and sophistication level of the products themselves.

The best role for those technology start-ups and researchers interested in our kids' future is to begin thinking about using technology *to replace* the academic K-12 education system we have today with an empowering, real-world project-based education, in which kids—of all ages—do work that makes a measurable positive impact on the world. That kind of education requires inventing more innovative and imaginative ways for us to use the powerful tools that we already have—and that will continue to emerge. It means more free, general-purpose tools like Google docs and fewer products "dedicated" to learning STEM or anything else.

The main arguments I hear in favor of dedicated ed-tech are (1) that kids need "better" content and "interactivity," and that (2) that we need such dedicated tools to maintain our kids' "privacy." I believe both justifications are going away. Almost all "content" is already on the Internet for free, and is daily improving. (In fact, the kids who care about each kind of content can be, and should be, improving it as part of their education.)

Expectations of "privacy" are also fast changing in the digital age, as young people's attitudes towards a great many things morph to fit their new times. As they do, there will certainly be issues to deal with, but anyone who thinks their salary, health records, or their kids' school records will not be findable by anyone online in the near future is kidding him or herself. We live in a new world, and preparing our kids for it involves a lot more important tasks than making new products for the education of the past.

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Marc Prensky is an internationally acclaimed speaker, author, and "practical visionary" in the field of education. Coiner of the term "Digital Native," Marc currently promotes "civilization-level change" in global education, championing an emerging paradigm of "Empowering Kids to Better Their World." that

more directly benefits all of us. Marc has spoken in over 40 countries, authored seven books, and published over 100 essays; his writing has been translated into 11 languages. He is currently the founder and Executive Director of the ***Global Future Education Foundation and Institute.*** *Marc's latest book,* ***Education to Better Their World: Unleashing the Power of 21st Century Kids*** *(Columbia TC Press, 2016), won the FOREWORD INDIES 2016 Book of the Year Awards in Education. To learn more about the New Educational Paradigm, check out* bettertheirworld.org | btwdatabase.org | global-future-education.org and marcprensky.com . *Contact Marc at marcprensky@gmail.com.*

P.S. Below are 4 graphics that illustrate where we are going (for use now, or perhaps in another column):

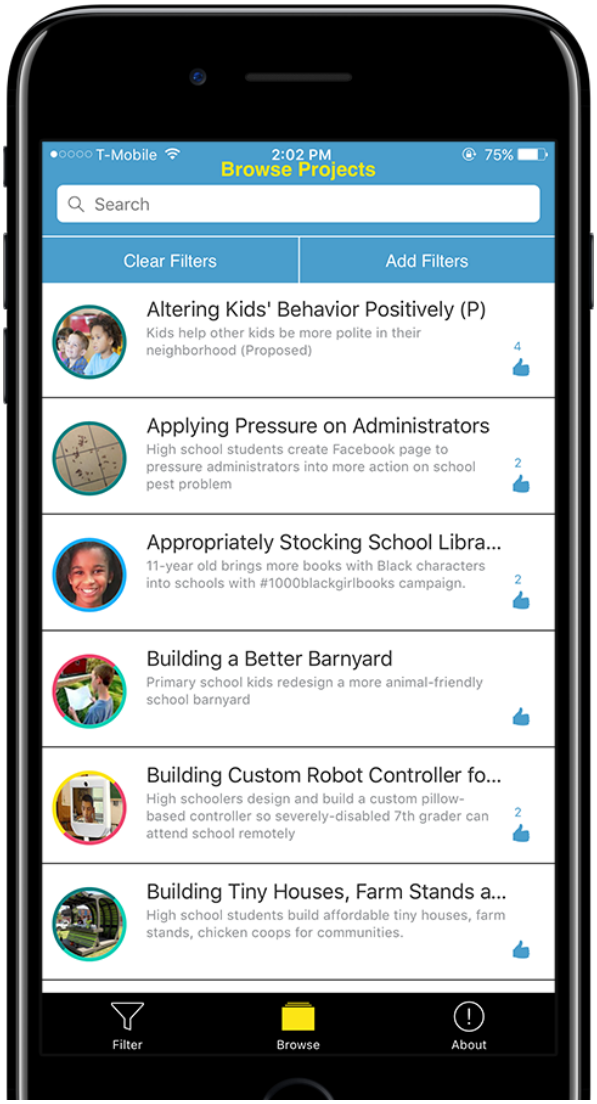
1. The New Educational Paradigm

THE NEW EDUCATIONALPARADIGM

EMPOWERING KIDS	BETTERING THEIR WORLD	A BROADER SET OF SKILLS
T.R.I.C.K. FROM TEACHERS (Trust, Respect, Independence, Collaboration & Kindness) e.g. Esther Wojcicki	REAL-WORLD PROJECTS with teacher and expert coaching e.g. BTWDatabase	MOVING FROM "UNIVERSAL CONTENT" TO "UNIVERSAL SKILLS" –effective thinking – effective action – effective relationships – effective accomplishment e.g. Certain schools
EMPOWERING USES OF TECHNOLOGY - Leveraging social media &worldwide inter-connectedness - Simulation - Polling, Video, Apps - AR, VR, Robotics e.g. Individual schools & teachers	A CULTURE OF MAKING THE WORLD A BETTER PLACE replacing the culture of individual academic success e.g. Design for Change, Ashoka	INDIVIDUALLY DESIGNED EDUCATIONS based on interests, strengths, and emerging passions: Projects, not courses ????
GREATER SELF-KNOWLEDGE & CONNECTION OF KIDS' DREAMS TO A WIDER RANGE OF OPTIONS e.g. SPARK, Pymetrics	MUCH CLOSER INTEGRATION OF SCHOOLS AND COMMUNITIES e.g. David Engle	REQUIRING "FAR LESS OF THE MESS" FOR ALL by focusing more on essentials & eliminating detail e.g. (Finland?)

2. Why it works:

3. A database of Real, world-improving student projects (bywdatabase.org)



4. A broader range of skills:

EFFECTIVE THINKING	EFFECTIVE ACTION	EFFECTIVE RELATIONSHIPS
Understanding Communication	Habits of Highly Effective People	Communication & Collaboration
Quantitative & Pattern Thinking	Body & Health optimization	• One-to-one
Scientific Thinking	Agility	• In teams
Historical Perspective	Adaptability	• In families
Problem-Solving	Leadership & Followership	• In communities
• Individual	Decision Making Under Uncertainty	• At work
• Collaborative	Experimentation	• Online
Curiosity & Questioning	Research	• In virtual worlds
Creative Thinking	Prudent Risk-taking	Listening
Design Thinking	Reality Testing/Feedback	Networking
Integrative Thinking	Patience	Relationship-building
Systems Thinking	Resilience & "Grit"	Empathy
Financial Thinking	Entrepreneurship	Courage
Inquiry & Argument	Innovation	Compassion
Judgment	Improvisation	Tolerance
Transfer	Ingenuity	Ethics
Aesthetics	Strategy & Tactics	Politics
Habits of Mind	Breaking Barriers	Citizenship
Positive Mindset	Project Management	Conflict Resolution
Self-knowledge of one's:	Programming Machines	Negotiation
• Passions	Making Effective Videos	Coaching
• Strengths & weaknesses	Innovating with Current & Future Technologies	Being Coached
Stress Control		Peer-to-peer
Focus		Mentoring
Contemplation & Meditation		

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