Harvard Advanced Leadership Initiative

THINK TANK

Relevant Education in a Changing World April 23 - 25, 2015

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The role of public education

The enterprise's lack of agreement about

- Teaching the classic curriculum
- Teaching preparation for further learning
- Preparation for the work force
- ----as if all of these are mutually exclusive.

Claims/generalizations

- Children are natural scientists and engineers
- Schools do not support #1 above because of the way they are organized/structured & because elementary teachers are not prepared to teach STEM
- Educational leaders are not knowledgeable about STEM instruction
- Schools are not preparing students for the 21st workforce.

Statistics

- There are 14,000 school districts in the country
- Most states require school districts to teach for 180 days a year.
- 3,823,142 teachers in public, charter, private & Catholic elementary & secondary schools (2010)
- Taught 55,203,000 students in 132,656 schools.

From Wikipedia



Just by the numbers, the challenge is monumental.



New Apps

- Gro Garden Grades K-2
- Little Green Island *Grades 2–4*: Solving puzzles, problem-solving, strategy, ecosystems, respect for the environment
- iBiome Wetland *Grades 4–8*: Ecosystems, energy, the food chain, life cycles, biology.
- Ansel and Clair *Grades 1-3:* Little Green Island: kids are put in charge of the ecological health of the island



Waste not, want not

• This proverbial saying was first recorded in 1772 but had an earlier, even more alliterative version, willful waste makes woeful want (1576).

• From Dictionary.com. The American Heritage[®] Idioms Dictionary. Copyright © 2002, 2001, 1995 by Houghton Mifflin Company.

Heroes, Pop & Movie stars They play an important role in educating the young They all practice sustainable behavior

- Angie Harmon
- Leonardo DiCaprio
- Robert Redford
- Pierce Brosnan
- Brad Pitt
- Gisele Bunschen
- Blake Lively
 - Boston Globe 4/19/15 Parade Insert



What would the schools look like?

• Active relationships between practicing STEM professionals & educators in the schools & between students & the community...students working collaboratively to solve authentic challenges the world faces...such as sustainability

• Places in the schools where kids could play, make "things" with their hands (Maker spaces!), experience materials

A technology device for everyone

Green Schools Alliance

http://www.greenschoolsalliance.org/ Addressing climate & conservation challenges

"the mission is to connect & empower schools worldwide to lead the transformation to global sustainability. GSA believes schools are transformational hubs of their communities that build resilience, transform markets & policy, shift behavior, & prepare the next generation of innovators to become environmental stewards"

According to the Boston Globe

"MA is No 1 as the most energy efficient state"

Sunday Parade section April 19, 2015



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