Educational challenges

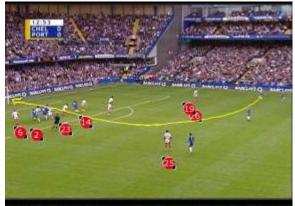
António Câmara

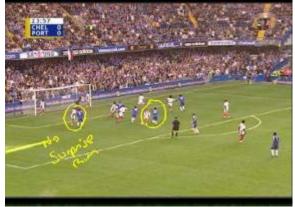
YDreams

October, 2011









Educating "explorers"

Fortune Favors the Bold*

The challenge is to educate a new generation of "explorers" for the civic life, science and economy. The success of a country depends on their existence.

^{*}Lester Thurow, "Fortune Favors the Bold", 2003

Educating "explorers"

"Explorers" have

Passion

Energy

The ability to handle stress and ambiguity

Self-confidence

Ability to work in groups

Ability to deliver



Guy Kawasaki, The Macinstosh Way, 1990

Quality

If you want to build a factory, or fix a motorcycle, or set a nation right without getting stuck, then classical, structured dualistic subject-object knowledge, although necessary, isn't enough. You have to have some feeling for the quality of the work. You have to have a sense of what's good. That is what carries you forward

R. Pirsig
Zen and the Art of Motorcycle Maintenance
1984

Richard Sennett "The Craftsman" 2008

Communication

"We sell computers direct. By building only to order, outsourcing most manufacturing and selling over the Web, we have the lowest cost and highest return on invested capital in the industry"

Michael Dell

Communication

"I took a course in speed reading. For the final exam, I had to read War and Peace from Tolstoi in 20 minutes. It deals with Russia"

Woody Allen

Uncertainty

Students need to be trained for ambiguity and uncertainty

"Back of the envelope calculations"

http://netlib.bell-labs.com/cm/cs/pearls/bote.html e
http://www.yorku.ca/bquine/ENG1000/lectures/ENG1000_6_2_BOTE_B
Q_rev2.pdf

How many lamps exist in Portugal?

How to make almost anything

Neil Gershenfeld at MIT

How to Make Almost Anything" http://fab.media.mit.edu/classes/863.04/

Entrepreneurship

"The technical excellence of an invention matters far less than the economic willingness of the customer or client to explore it. A customer's readiness to innovate is what makes invention possible"

Michael Schrage, "Much Ado about Invention", Technology Review, May 2004

Entrepreneurship

http://www.entrepreneur.com/

http://www.chrisoleary.com/projects/Communication/ElevatorPitchEssentials/index. html

http://www.paulgraham.com/articles.html

http://www.mit100k.org/entrant/resources.php

http://paginas.fe.up.pt/miete/

http://www.iapmei.pt/iapmei-bimindex.php