

Il futuro del lavoro. Il futuro di ciascuno

Aldo Scarnera, Dirigente di ricerca. Istat, sede territoriale per la Puglia
Fano, 6-7 marzo 2014

Il futuro del lavoro

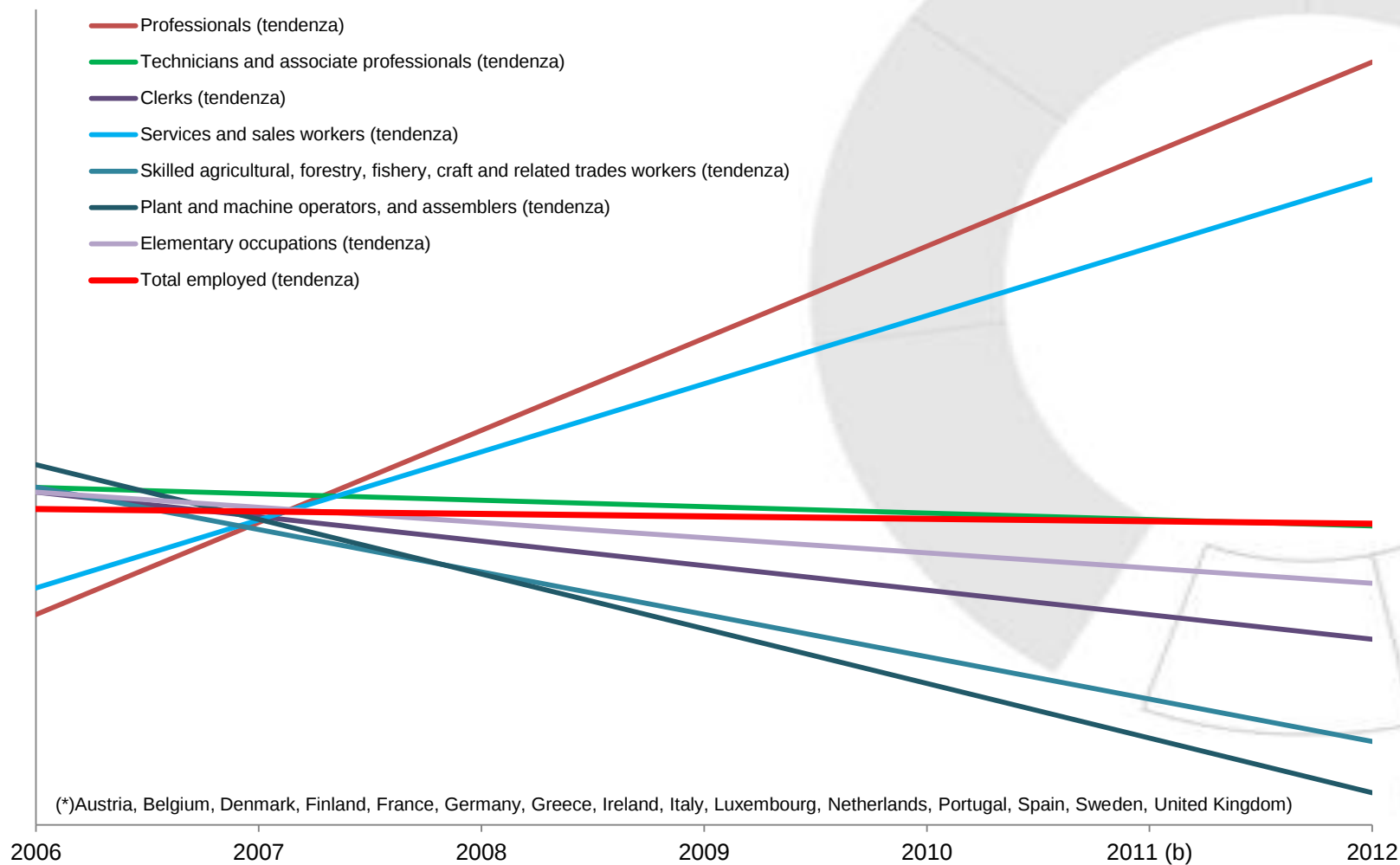
Il lavoro in dati. La struttura professionale del mercato del lavoro. E.U. 15*, anno 2012 (valori assoluti in migliaia).

Major Groups	V. A.	V. %
Legislators, senior officials and managers	10.236,3	6,05
Professionals	31.298,0	18,50
Technicians and associate professionals	28.556,2	16,88
Clerks	18.479,4	10,92
Service and sales workers	29.595,2	17,50
Skilled agricultural, forestry, fishery, craft and related trades workers	23.178,2	13,70
Plant and machine operators, and assemblers	10.726,0	6,34
Elementary occupations	16.018,3	9,47
Armed forces occupations	1.076,1	0,64
Total employment	169.164	100,00

*Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, United Kingdom

Fonte: <http://epp.eurostat.ec.europa.eu/> Labour Force Survey series.

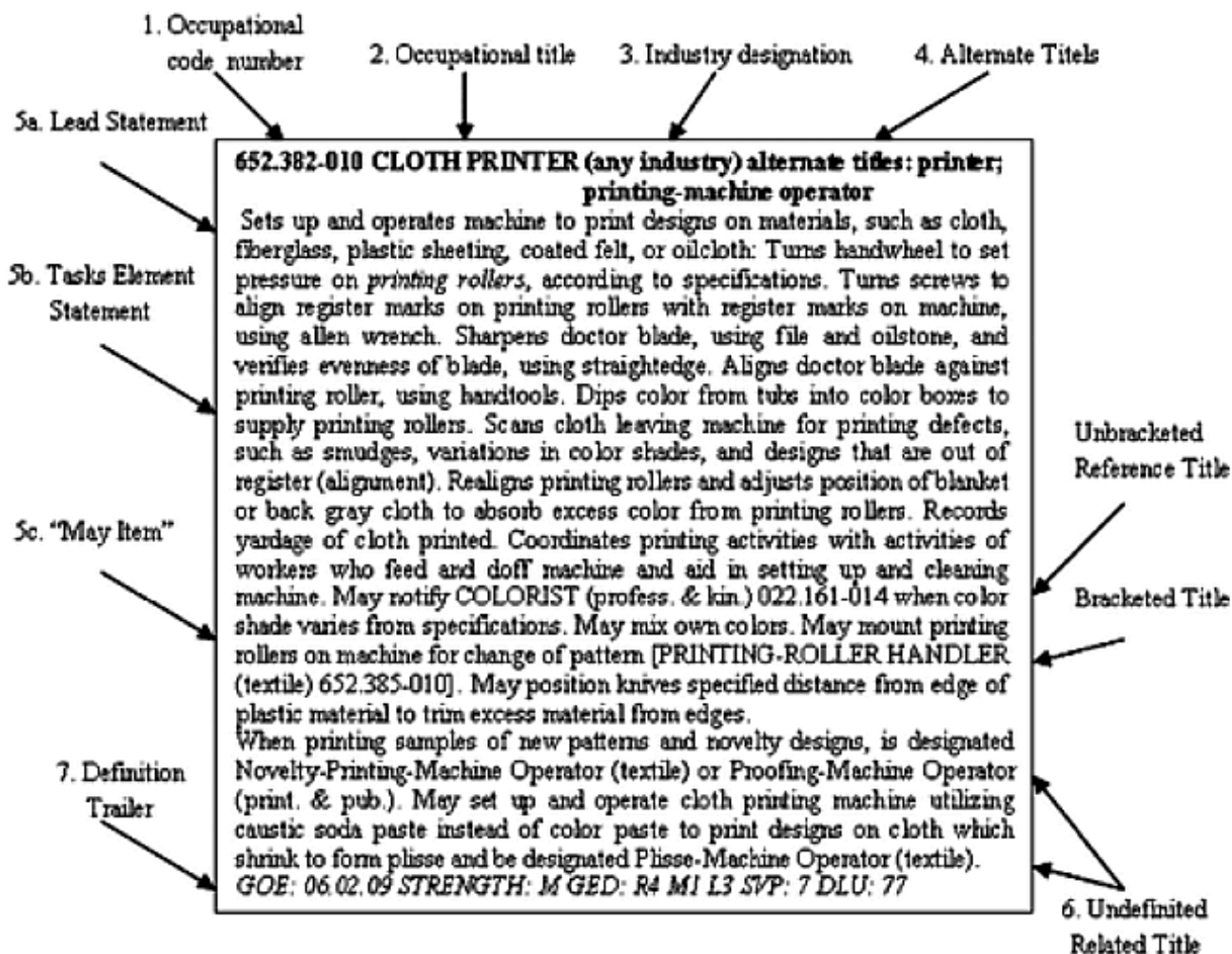
Il lavoro in dati. Il cambiamento della struttura professionale del mercato del lavoro. E.U. 15*, anni 2006-2012.



Le interpretazioni del cambiamento

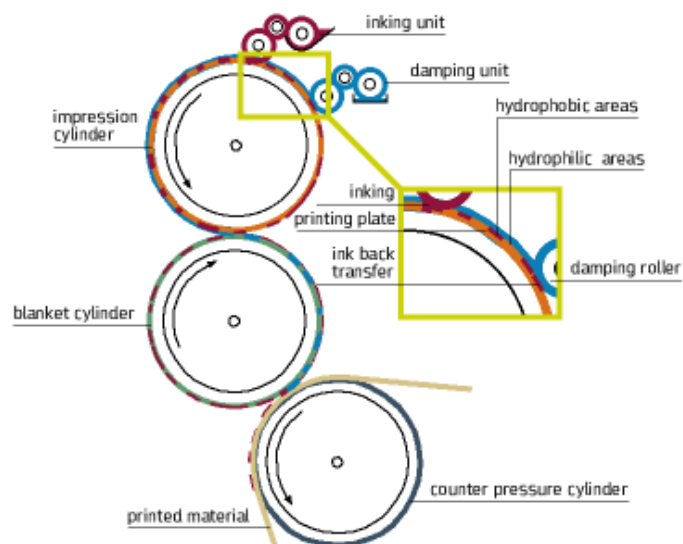
- La crescita dei Knowledge Workers e la fine dei Blue Collars (Peter Ferdinand Druker)
- La fine del lavoro e le sfide della terza rivoluzione industriale: energia, sicurezza e cambiamento climatico (Jeremy Rifkin)
- Non si tratta più e solo del passaggio di forza lavoro da un settore produttivo ad un altro e dei risvolti sociali, anche tragici, che l'hanno caratterizzato in passato

Il lavoro manuale

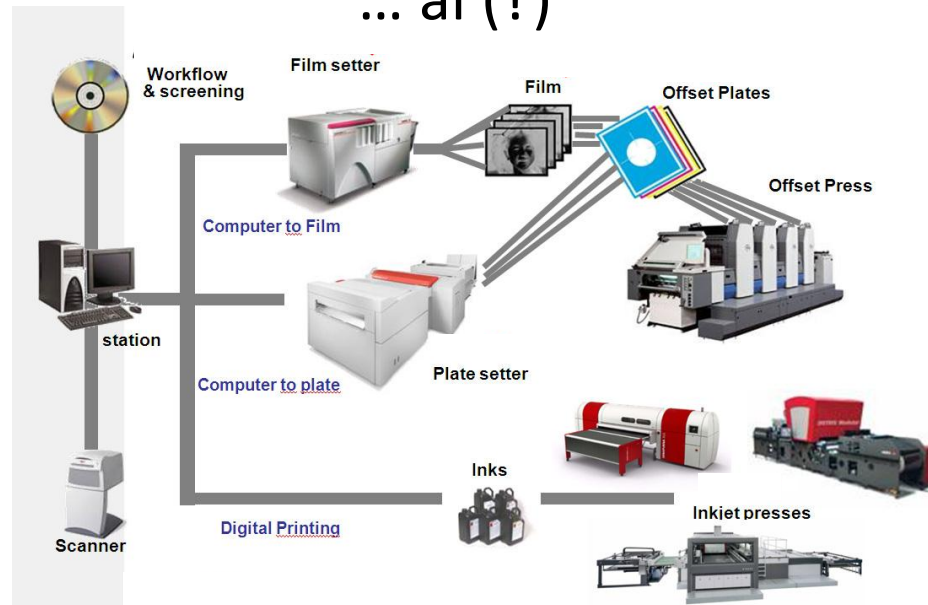


Fonte: U.S. Department of Labor, Employment and Training Administration, *Dictionary of Occupational Titles*, 4th Ed., Rev. 1991

Il lavoro che scompare. Dal lavoro manuale



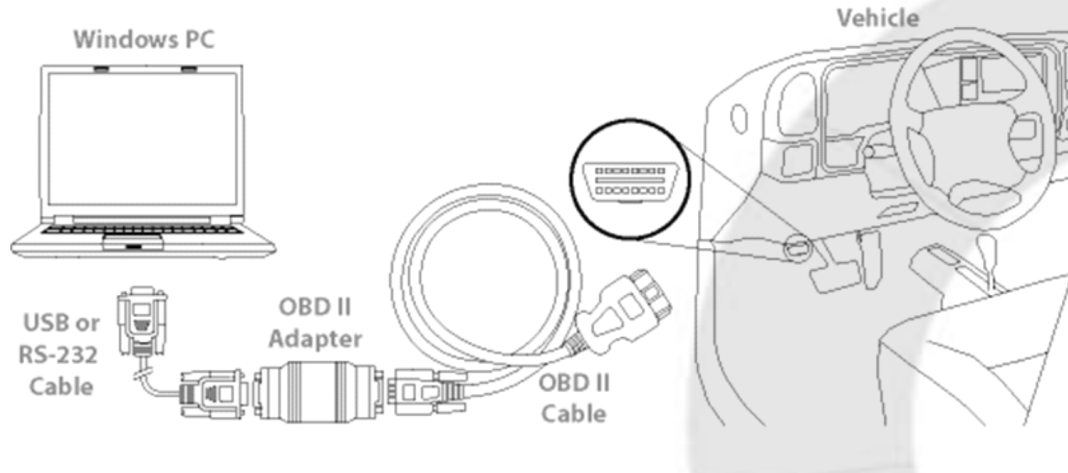
... al (?)



Il lavoro che cambia. Dal lavoro operaio



... al lavoro operaio (?)



ScanMaster-ELM

File Options Datalogging Tools ?

Start Vehicle Info System Status Trouble Codes Freeze Frames Oxygen Sensors
Monitored Test Results Live Data Grid Live Data Graph PID Config

Live Data (Mode 01)

PID	Description	Value	Units	Min	Average	Max
✓ 03	Fuel System 1/2 Status	-/-	-	-	-	-
✓ 04	Calculated Load Value	0	%	0	0	0
✓ 05	Engine Coolant Temperature	-40	°C	-40	-40	-40
✓ 06	Short Term Fuel Trim - Bank 1	0.0	%	0.0	0.0	0.0
✓ 07	Long Term Fuel Trim - Bank 1	0.0	%	0.0	0.0	0.0
✓ 0C	Engine RPM	0	U/min	0	0	0
✓ 0D	Vehicle Speed	0	km/h	0	0	0
✓ 0E	Ignition Timing Advance for #1 Cylinder	0	°	0	0	0
✓ 0F	Intake Air Temperature	-40	°C	-40	-40	-40
✓ 10	Air Flow Rate	0.00	g/s	0.00	0.00	0.00
✓ 11	Absolute Throttle Position	100.0	%	100.0	100.0	100.0
✓ 15	O2 Sensor Bank 1 Sensor 2	0.450 - 99.2	V-%	-	-	-
✓ 1F	Time Since Engine Start	00:00:00	-	-	-	-
✓ 21	Distance Travelled While MIL is Activated	0	km	0	0	0
✓ 23	Fuel Rail Pressure	14000	kPa	14000	14000	14000
✓ 2E	Commanded Evaporative Purge	0.0	%	0.0	0.0	0.0
✓ 30	Number of warm-ups since diagnostic trouble code...	0	-	0	0	0
✓ 31	Distance since diagnostic trouble codes cleared	0	km	0	0	0
✓ 33	Barometric Pressure	100	kPa	100	100	100

Read Stop

Port: COM4 Interface: ECU: VIN: WVGK73CXP128012 www.wgsoft.de

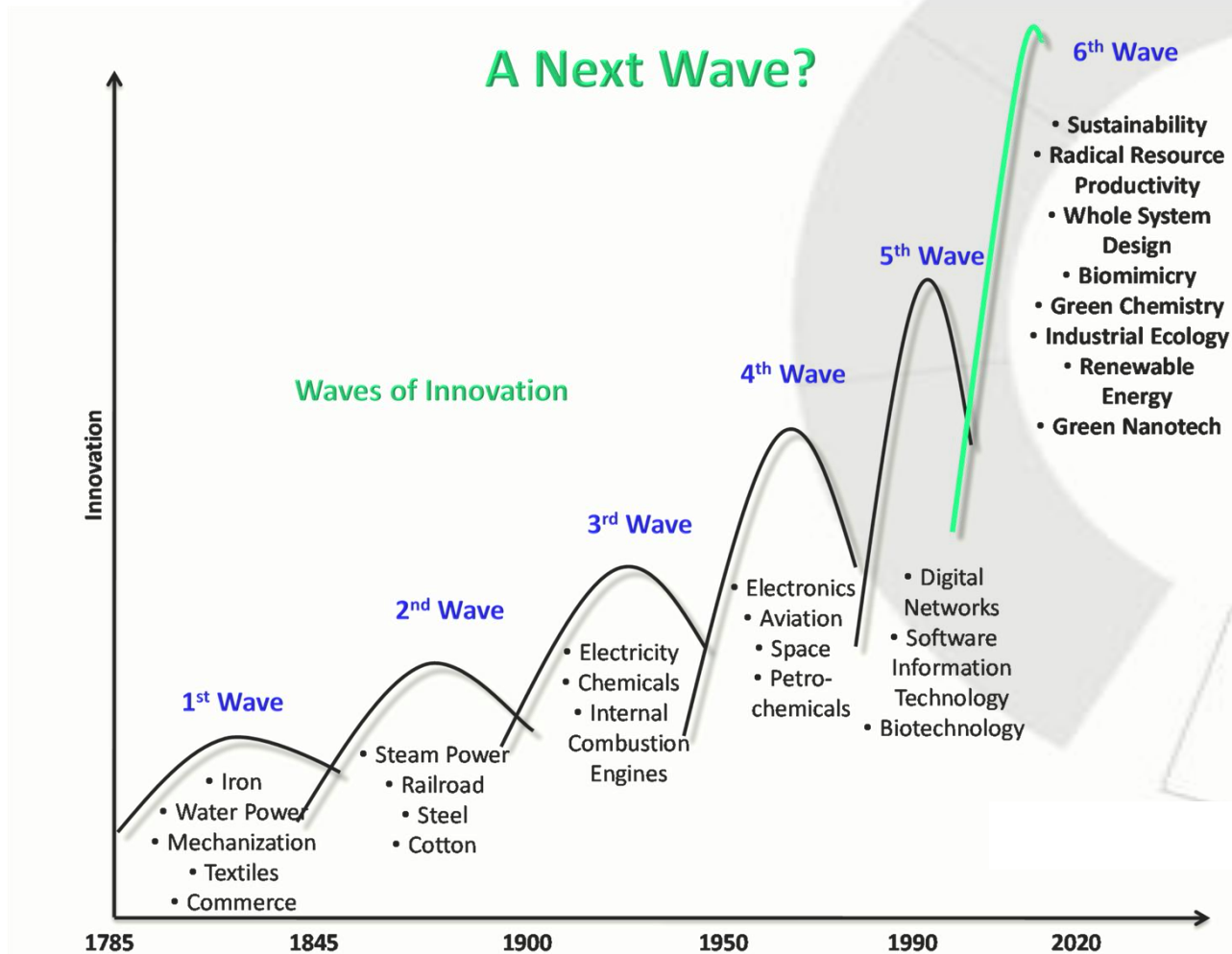


Dall'analogico al digitale. Il contesto del cambiamento

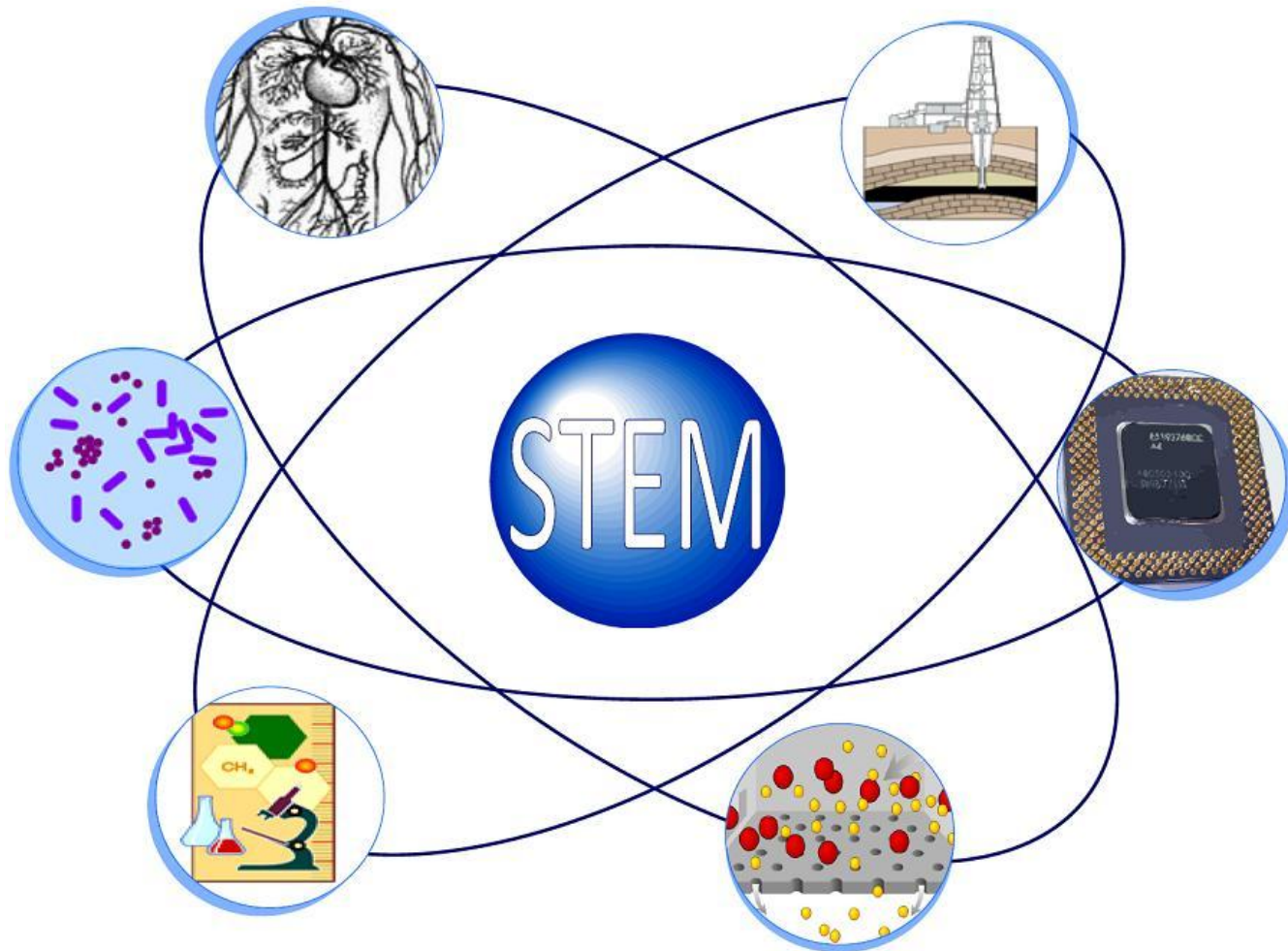
C'è di nuovo che a caratterizzare il contesto sociale in cui il cambiamento avviene è la velocità e l'estensione con cui la tecnologia si diffonde, diventa disponibile, socialmente pervasiva e, perfino, sapere depositato nella conoscenza collettiva. Qui il problema è come i sistemi dell'istruzione e della formazione professionale fanno fronte alle sfide che poste da questi nuovi, insoliti sviluppi

Il futuro di ciascuno

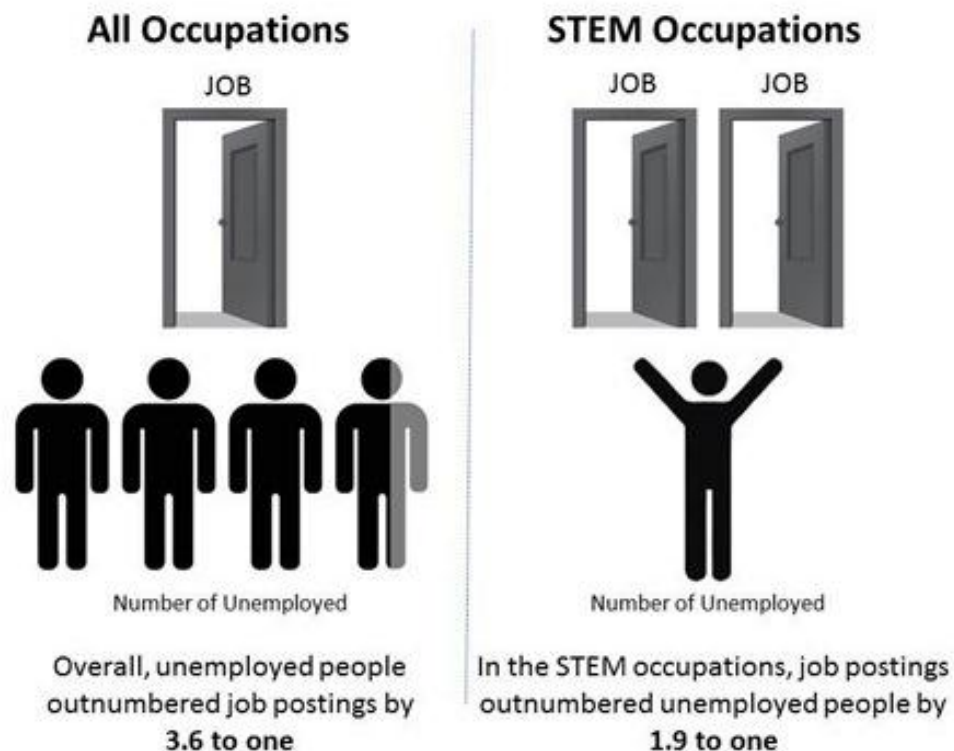
Mondo, scienza e tecnologia



Science Technology Engineering Mathematics



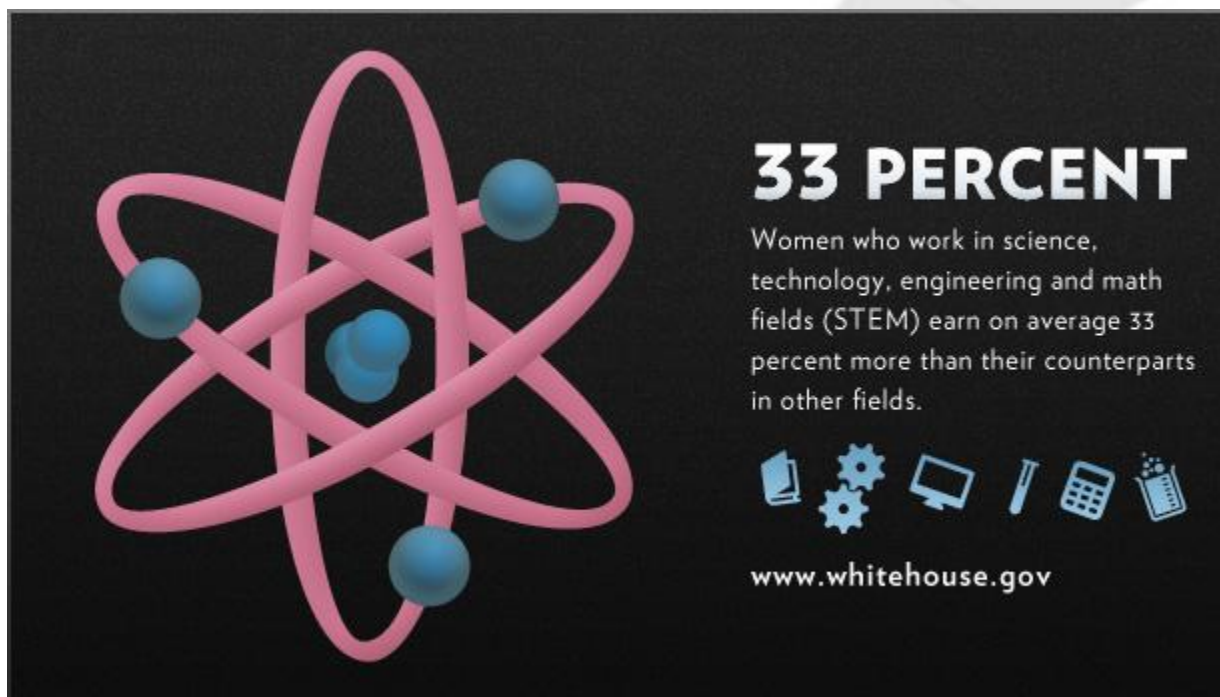
Offrirebbero certezza di trovare un lavoro, coerente,



“STEM employment is expected to have grown 17 percent between 2008 and 2018, far faster than the 10 percent growth projected for overall employment”*

*http://changetheequation.org/sites/default/files/CTEq_VitalSigns_Supply%20%282%29.pdf

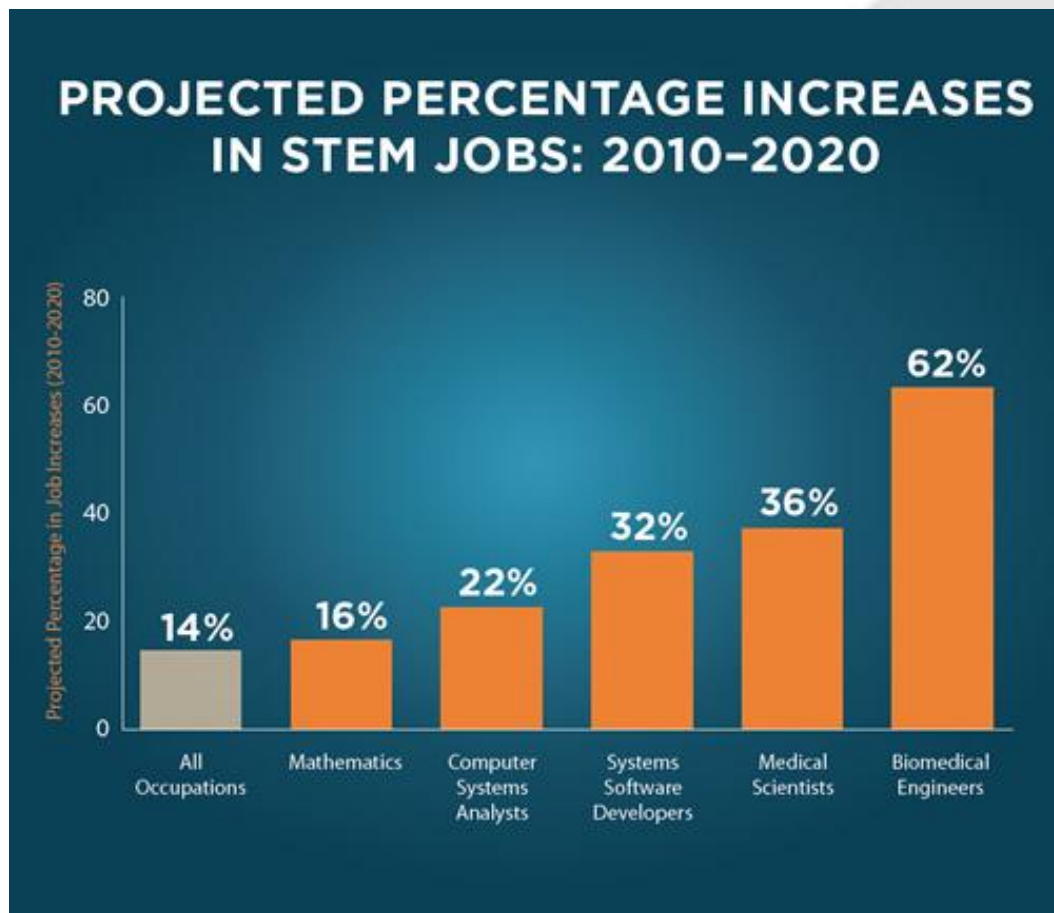
dove non pesano le discriminazioni di genere



“If we’re going to out-innovate and out-educate the rest of the world, we’ve got to open doors for everyone. We need all hands on deck, and that means clearing hurdles for women and girls as they navigate careers in science, technology, engineering, and math.” (First Lady Michelle Obama, September 26, 2011)*

*<http://www.whitehouse.gov/administration/eop/ostp/women>

e di cui si prevede espansione e tenuta nel tempo.



“We’ll reward schools that develop new partnerships with colleges and employers, and create classes that focus on science, technology, engineering, and math – the skills today’s employers are looking for to fill jobs right now and in the future.” (President Barack Obama, February 2013)*

*http://www.whitehouse.gov/sites/default/files/microsites/ostp/2014_R&Dbudget_STEM.pdf

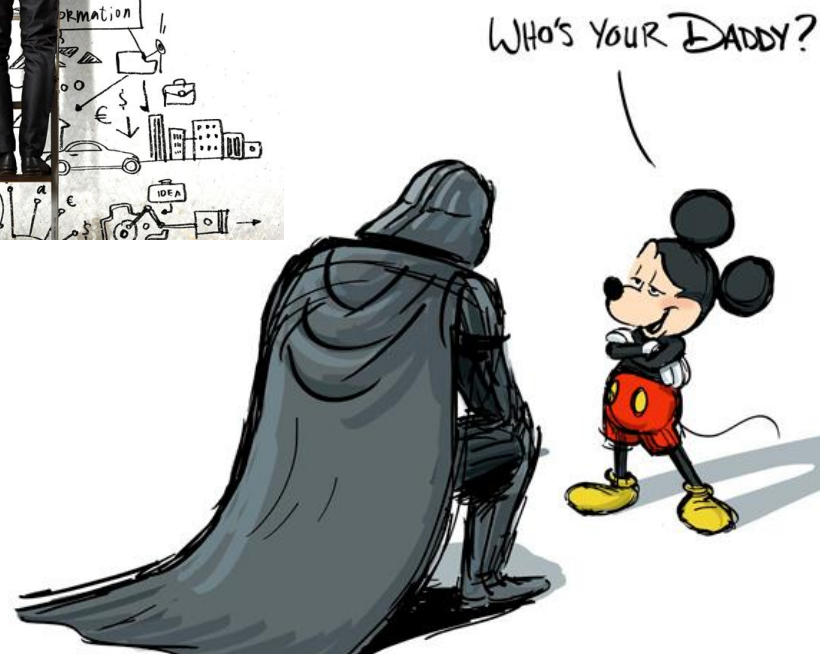
Non senza qualche dubbio, però ...

- There isn't a STEM shortage. America is producing more than enough STEM students.
- If there were a STEM shortage, one would expect that the price paid for STEM labor would rise. That hasn't been the case.
- There is, however, a disparity between what STEM majors want to do and what the tech community is offering.

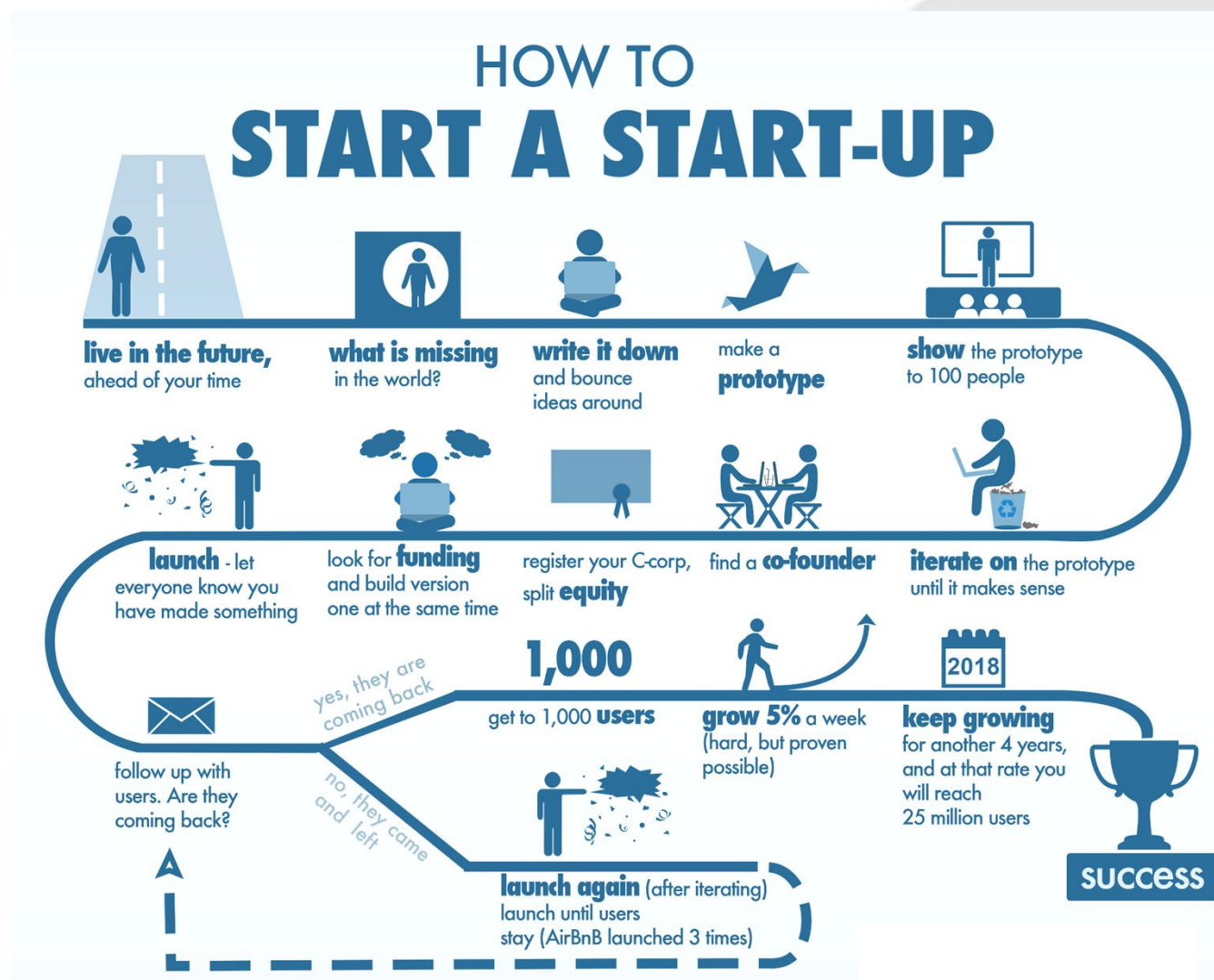
BUSINESS
INSIDER

[*http://www.businessinsider.com/zuckerberg-h-1b-visa-system-2013-5?op=1](http://www.businessinsider.com/zuckerberg-h-1b-visa-system-2013-5?op=1)

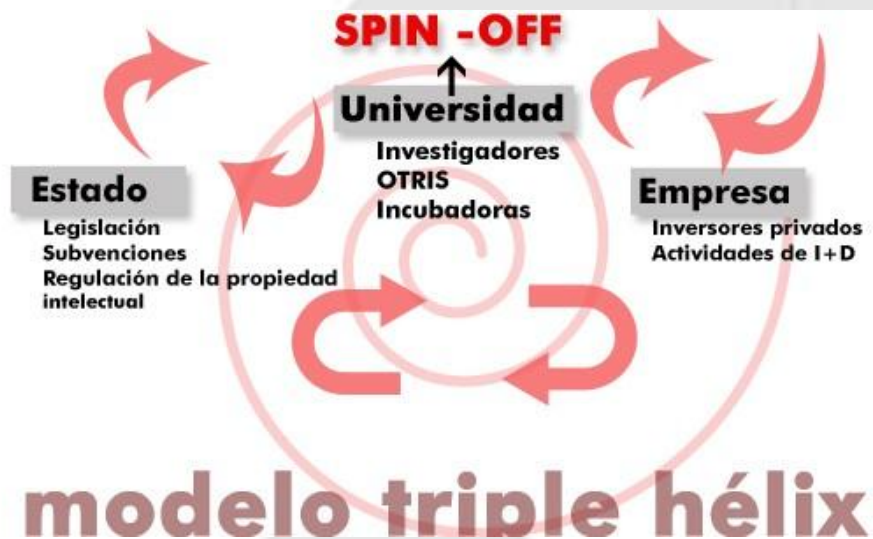
Start-up&Spin-off



Solo genio e organizzazione?

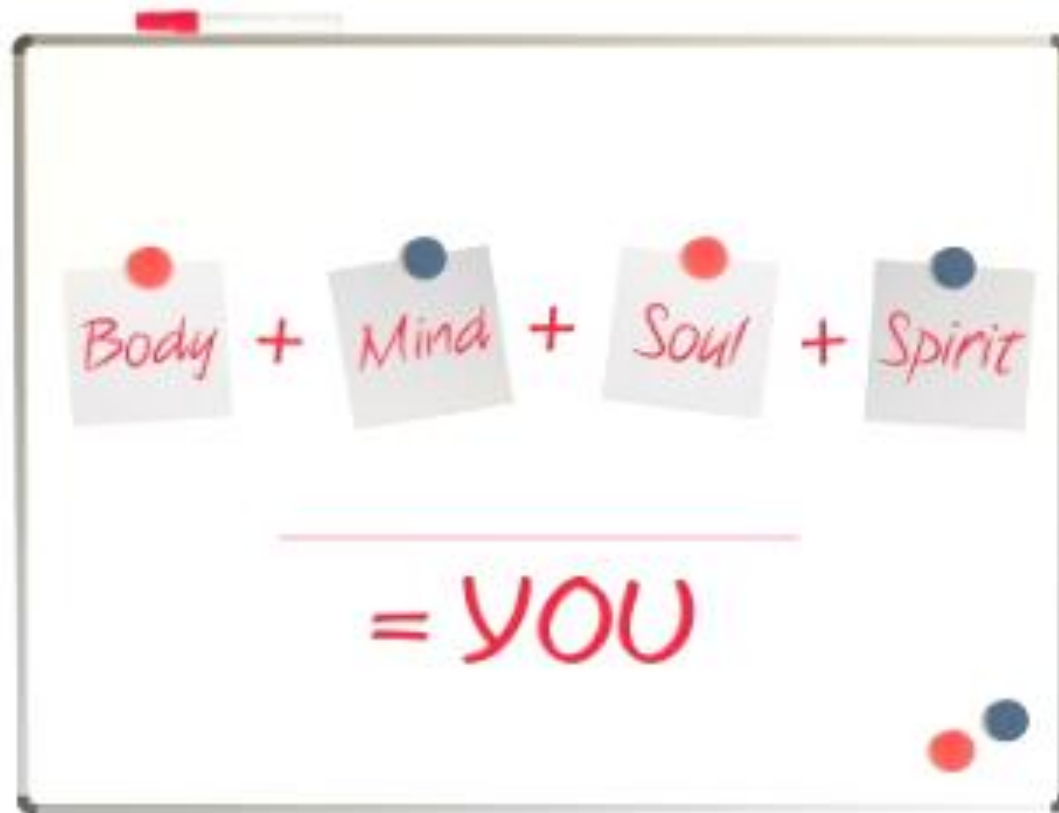


... e clima, e ambiente sociale, e accesso all'informazione?

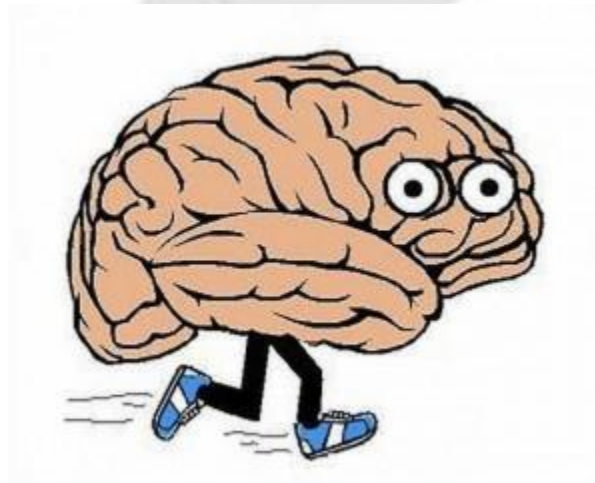


Che fare?

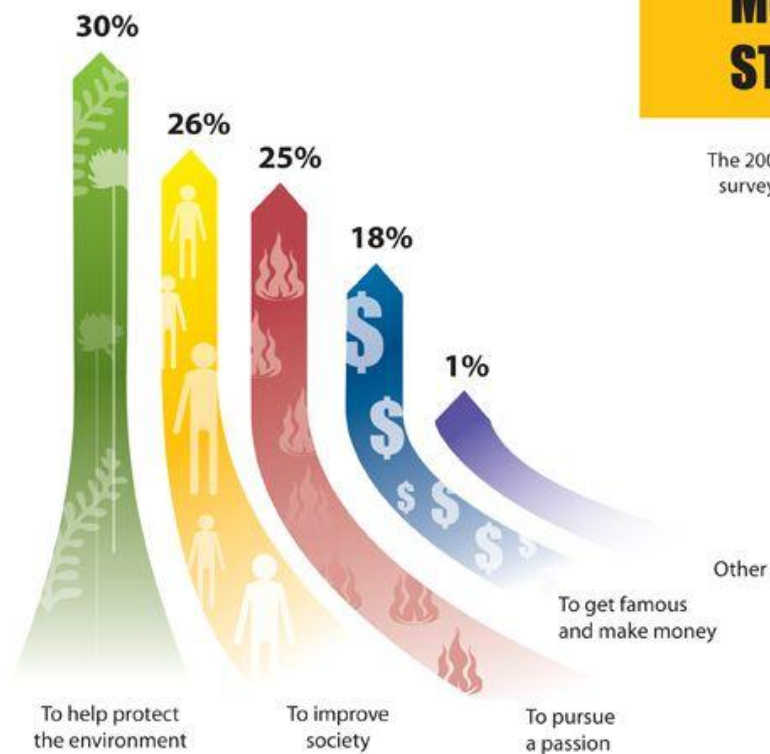
Investire su di se



Cogliere tutte le opportunità per valorizzare se stessi
e crescere



Metterci entusiasmo e passione



Motivations for STEM Careers

The 2009 Lemelson-MIT Invention Index is a survey that gauged teens' inspirations for pursuing STEM careers.

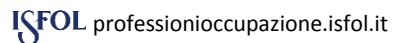
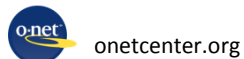
*2009 Lemelson-MIT Invention Index includes a nationally representative survey sample size of 500 teens.

Tenere quello che si è deciso di diventare, prevedendo
anche di poter cambiare idea



Qualche risorsa

Sulle professioni:



Sulle opportunità:



Tools:



Grazie per l'attenzione