

The Only Way to Create the Skills of the Future is to Disrupt the Education of Today

Dr Sébastien Combéfis

December 18, 2019



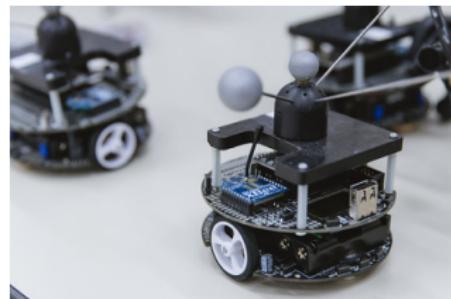


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A Big Contrast

Teaching **in the past**...

Education 1.0



Industry 4.0

The Digital World

Teaching **the wrong skills...**



Extended Consciousness



Digital Gap

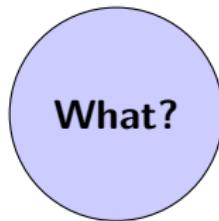


Future

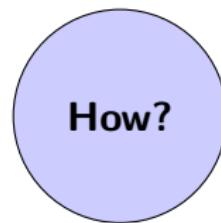
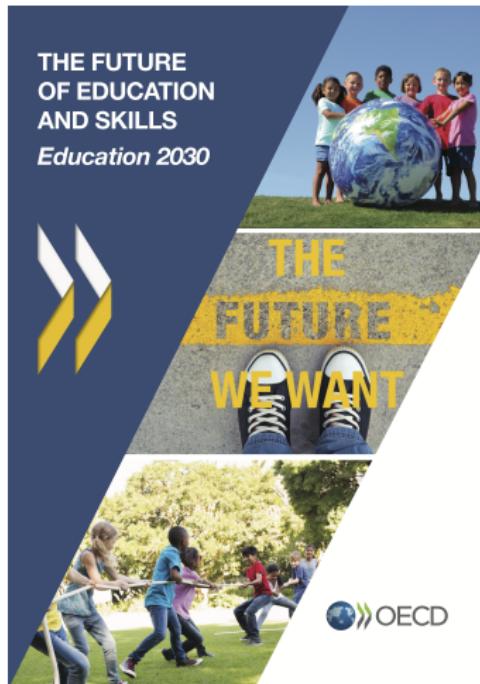


“Education is the passport to the future, for tomorrow belongs to those who prepare for it today.” — Malcolm X

Disrupting Education



*Knowledge
Skills
Attitudes
Values*



*Instructional
system*

The MOOCs (r)Evolution



Traditional on-site course

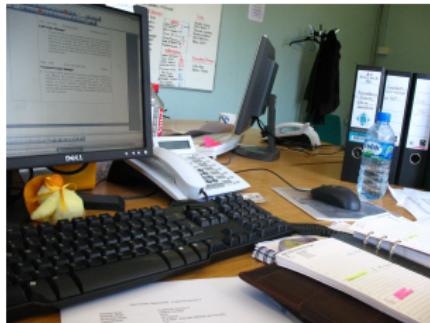
Passive learners

Professor delivers content

Professor coaches learners

Active learners

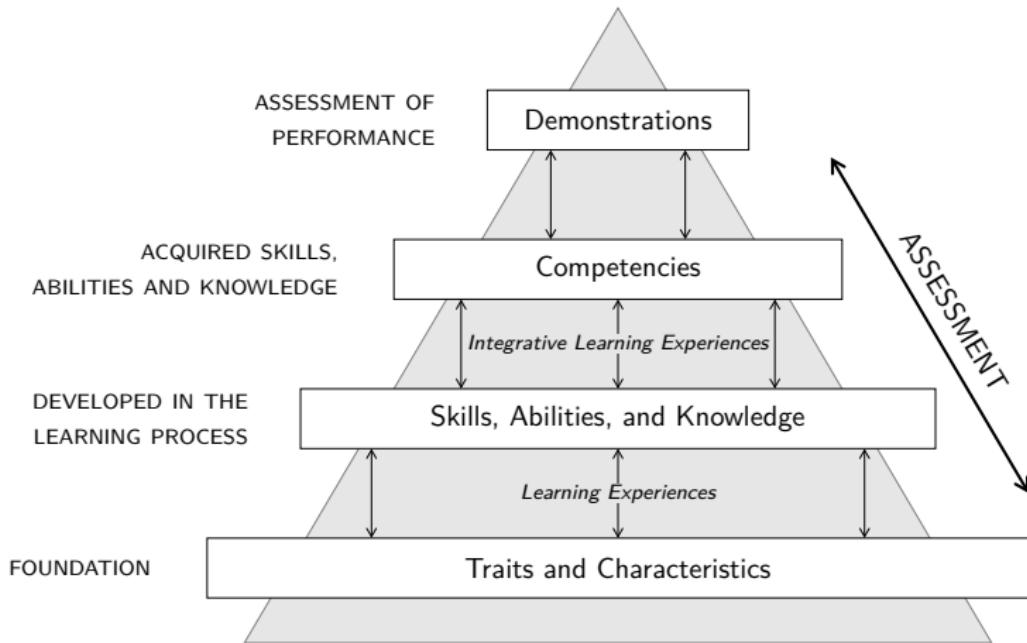
MOOC



“Technology is just a tool. In terms of getting the kids working together and motivating them, the teacher is most important.” — Bill Gates



Learning Model

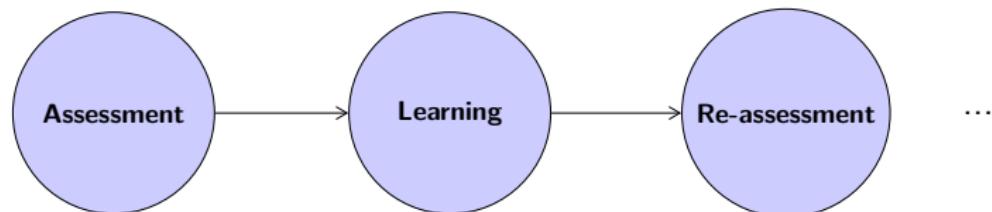


Source: U.S. Department of Education, 2001.

Competency

Definition of **competency** according to NPEC work group

*"a combination of
skills, abilities, and knowledge
needed to perform a **specific task**."*



Competency Based Assessment

UDKA beta Courses Sébastien Combéfis

Manage / Courses / QC101μ / Registrations / Yannis Argyrakis

Introduction to Quantum Computing with IBM Q Experience

Evaluate

Basic competency Advanced competency

QC101 – Understand the notions of qubit, qubit state and qubit system.	★★★★★
QC102 – Understand the superposition and entanglement operations.	★★★★★
QC201 – Understand the notions quantum logic gate and perform simple operations on quantum circuits (X, H,	★★★★★
CNOT).	
QC401 – Program a quantum circuit with IBM Q Experience and simulate it.	★★★★★

Information

Yannis Argyrakis
Tue Dec 3, 2019

Progress

60% Basic 7% Advanced

Powered by Sébastien Combéfis.

“Success is not final, failure is not fatal: it is the courage to continue that counts.” — Winston Churchill



μ Course

Customised Choice



PM701 μ Design Thinking Approach
for Computer Science Projects

Session 1

**Design Thinking Process
and Problem Solving**

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QC101 μ Introduction to Quantum
Computing with IBM Q Experience

Session 1

**Quantum Computing,
Qubits and Operations**

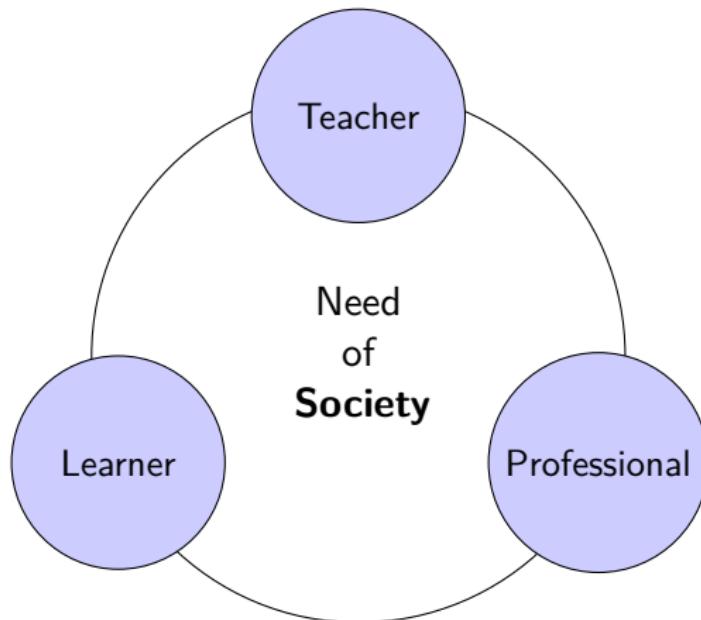
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Smaller Unit

Disruptive Education

Personalised, individualised, accessible, innovative, etc.



Future Skills

Rapidly **changing world**...

with environmental, economic and social challenges



Soft Skills

The end of “pure” knowledge...



Leadership Skills

Future Schools

Focusing on **the learner**...

with sense of responsibility to participate in the world



Innovation

The end of “vertical” education...



Motivation

*"The best way to predict the future
is to invent it." — Alan Kay*

FUTURE



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