



## **Cours en ligne ouverts et massifs**

*Massive open online course (MOOC)*

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et  
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**« [...] there's a tsunami coming. I can't tell you exactly how it's going to break, but my goal is to try to surf it, not just stand there. »**

-John Hennessy, président de Stanford University

*Wall Street Journal*, 4 juin 2012

Source de l'image de la diapositive précédente: <http://www.flickr.com/photos/photonquantique/1818489936/>

Source de la citation: <http://online.wsj.com/article/SB10001424052702303640104577440513369994278.html>



**"Having done this, I can't teach at Stanford again.  
You can take the blue pill and go back to your  
classroom and lecture to your 20 students, but I've  
taken the red pill and I've seen Wonderland."**

-Sebastian Thrun, fondateur de Udacity

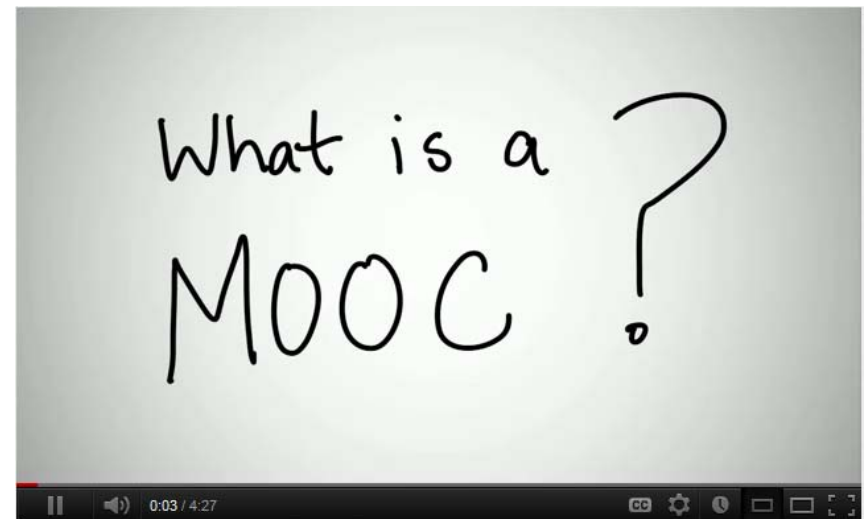
*NBC News, 25 janvier 2012*

# Au menu...

- Définition
- Principaux acteurs
- Fonctionnement
- Problématique
  - Avantages
  - Inconvénients

# Définition

- Cours à distance:
  - en ligne (*online*)
  - ouvert à tous sans aucun frais (*open*)
  - disponible potentiellement à des milliers d'étudiants à la fois (*massive*)



# Particularités des MOOC

- Participation volontaire en tout temps
- Auto-apprentissage
- Vote entre les participants pour déterminer quelle question mérite l'attention de l'enseignant (Coursera) ou points de karma pour certaines bonnes actions entre pairs (edX)
- Évaluations à l'aide de quiz mais également évaluations par les pairs de masse (sous la forme des réseaux sociaux)

# Principaux acteurs

# Coursera

- « for profit »
- Fondé par deux professeurs de Stanford
- Dates de début et de fin connues
- De 3 à 14 semaines
- Frais pour obtenir le certificat de complétion
- En novembre 2012
  - 1,8 millions d'étudiants
  - 204 cours
  - 34 universités participantes
    - UBC: 3 cours débutant en mai 2013
    - University of Toronto: 5 cours
    - Francophone?: École Polytechnique fédérale de Lausanne: 4 cours (dont un seul en français)

**coursera** Courses Universities About Login

Take the World's Best Courses, Online, For Free.

Join **1,742,660** Courserians

Signed up for 3 new courses on Coursera starting this fall. You got to love free education. :)  
- Ilias K

Learn with videos, quizzes, and assignments

Interact with thousands of other students




Advance your knowledge and career

COURSES (200)

**Vaccine Trials: Methods and Best Practices**  
Johns Hopkins University  
Starts in 2 days (7 weeks long)

**Cryptography**  
Stanford University  
Starts in 9 days (6 weeks long)

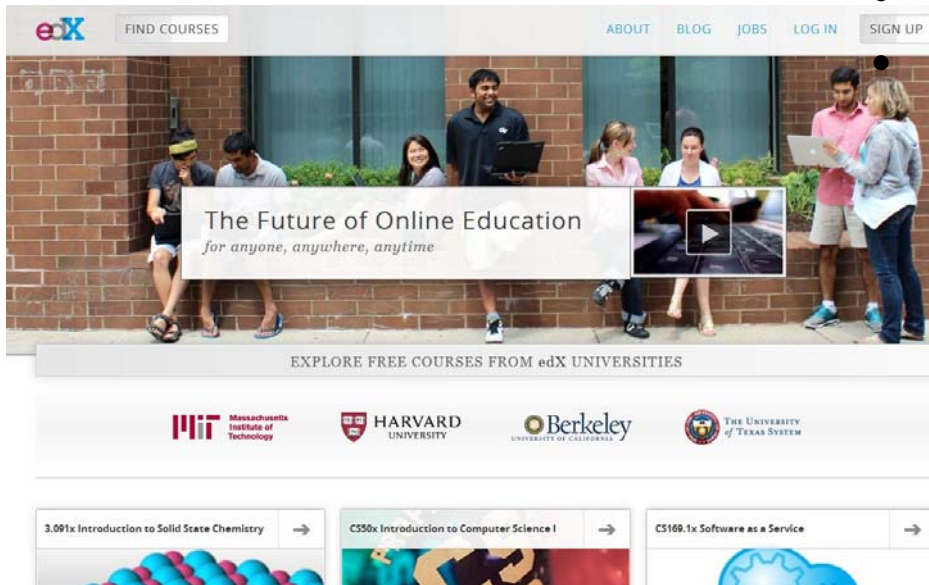
**Principles of Obesity Economics**  
Johns Hopkins University  
Started 5 days ago (4 weeks long)





# edX

- « not for profit »
- MITx, HarvardX, BerkeleyX, UTx
- 350 000 étudiants (selon *Time*)



- 9 cours
  - 3.091x Introduction to Solid State Chemistry
  - CS50x: Introduction to Computer Science I
  - CS169.1x: Software as a Service
  - CS169.2x: Software as a Service
  - 6.002x: Circuits and Electronics
  - PH207x: Health in Numbers: Quantitative Methods in Clinical & Public Health Research
  - CS184.1x: Foundations of Computer Graphics
  - 6.00x: Introduction to Computer Science and Programming
  - CS188.1x: Artificial Intelligence
- A2012: Aucun frais pour l'obtention d'un certificat de complétion. Par la suite, des frais « modestes »

# Udacity

- Fondé par 3 ex-Stanford
- 400 000 étudiants (selon *Time*)
- 18 cours dans 3 catégories (débutant, intermédiaire, avancé)
- 112 091 étudiants actifs (octobre 2012)
- Examens sous surveillance (89\$) pour obtenir la certification
- Système de « karma » pour l'encadrement
- Traduction (sous-titres) par les pairs (25 langages pour certains cours)

The screenshot displays the Udacity website interface. At the top right, there are links for "Sign Up" and "Sign In". The main header features the Udacity logo (an orange 'U') and the tagline "Learn. Think. Do. Higher Education for Free". Below this, two featured course cards are shown. The first card, titled "Travel around Europe studying physics with Andy Brown", includes a "Watch Now" link. The second card, titled "Learn the key tools and steps to build a successful startup with entrepreneur Steve Blank", includes a "Watch Now" link and a hand-drawn business model canvas diagram with sections for Key Partners, Key Activities, Value Propositions, Key Resources, Cost Structure, Revenue, and Channels. Below the featured courses is a "Browse Our Course Catalog" section, which is organized into three columns: Beginner Courses, Intermediate Courses, and Advanced Courses. Each column lists several courses with their respective icons and titles.

Udacity

Learn. Think. Do.  
Higher Education for Free

Travel around Europe studying physics with Andy Brown. [Watch Now](#)

Learn the key tools and steps to build a successful startup with entrepreneur Steve Blank. [Watch Now](#)

Browse Our Course Catalog

Beginner Courses

- Introduction to Computer Science
- Introduction to Physics
- Introduction to Statistics

Intermediate Courses

- Algorithms
- Web Development
- Software Testing
- Programming Languages

Advanced Courses

- Differential Equations in Action
- HTML5 Game Development \*Coming Soon
- Software Debugging
- Interactive Rendering \*Coming Soon
- Design of Computer Programs
- Intro to Parallel Programming \*Coming Soon
- Functional Hardware Verification \*Coming Soon
- Artificial Intelligence

# EDUlib (HEC)



- Objectif: « Rendre disponible au plus grand nombre de personnes une formation universitaire de haute qualité en français dans le domaine de la gestion »

- Cours « calqués » sur ceux offerts en présentiel
- « On peut désormais compter EDUlib parmi les services que l'École rend à la collectivité [...] »

2200 étudiants inscrits au cours  
*Introduction au marketing*  
(message de bienvenue du 12 novembre)

(Michel Patry, directeur HEC)

# Fonctionnement

## MOOC behavioriste « xMOOC »

- « knowledge duplication »
- [Introduction au marketing](#) (HEC)

## MOOC connectiviste « cMOOC »

- « knowledge creation and generation »
- [ITyPA - Internet: Tout y est Pour Apprendre](#) (Collectif français)
- [Comment fonctionne ce MOOC](#)

# Problématique

# Mode passagère ou phénomène durable?

- Passerelle et accessibilité aux études universitaires?
- Service public ou avantage compétitif?
- Paiement à la pièce en fonction des services (utilisateur-payeur)?
- Démocratisation ou « McDonaldisation » de l'enseignement universitaire?<sup>1</sup>
- Taux de rétention/de persistance: 5% - 10%

# Quelques pistes de réflexion

## Organisation du travail

- Charge de travail
  - Conventions collectives?
  - Correction des travaux?
  - Encadrement des étudiants?
- Support administratif
  - Qui inscrit qui de quelle façon?
  - Examens sous surveillance?
- Support technique
  - Portail des cours?

# Quelques pistes de réflexion (suite)

## AVANTAGES

- Gratuit pour l'étudiant
- Apprentissage beaucoup plus informel au rythme de l'étudiant
- Procédure administrative légère
- « Loss leader »?

## INCONVÉNIENTS

- Gratuité soutenable?
- Soutien technique
- Taux d'abandon élevé
- Plagiat
- Dilution de la marque
- Cannibalisation des cours  
Formation à distance



# À afficher dans son bureau?!?

UDACITY

CERTIFICATE OF ACCOMPLISHMENT  
WITH HIGHEST DISTINCTION

*This is to certify that*

**YOUR NAME**

*Has successfully completed*

COMPUTER SCIENCE 101:  
Introduction To Computer Science  
Building A Search Engine

  
David Evans, Ph.D.

  
Sebastian Thrun, Ph.D.

DATE  
Date



# Tony Bates

## Emerging business models for MOOCs

“But just in case you were under the impression that it is openness that these institutions are interested in, I need to disabuse you. You have to wonder why publicly-funded universities in particular (such as the University of Toronto) want to join Coursera if it’s not to make money. Isn’t there though some conflict of interest here, or am I missing something? (Perhaps we should change the name to MOCCs – Massive Online Corporate Courses).

What elite institutions such as the University of Toronto are doing in fact is trying to get into online learning on the cheap, and for profit, after years of turning their noses up at it. But now Stanford, MIT and Harvard are doing it, it’s OK. Shame on them.”

EDUCATION | February 7, 2013

# Big MOOC Coursera Moves Closer to Academic Acceptance

By MELISSA KORN

Online-education provider Coursera is one step closer to academic acceptance, saying Thursday that the American Council on Education would recommend colleges grant credit for the successful completion of some of its free classes.

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- [B-Schools Give Extra Help for Foreign M.B.A.s](#)
- [Does an 'A' in Ethics Have Any Value?](#)

Whether schools follow that suggestion remains unclear. Even the three institutions whose instructors teach those online courses—Duke University, University of Pennsylvania and University of California, Irvine—so far don't plan to award credit to students who complete the massive open online courses, known as MOOCs.

ACE, a higher-education industry group, has a network of about 2,000 schools that consider granting credit for nonclassroom programs, such as military or corporate training, based on its recommendations. Those schools "may be interested" in offering credit for the handful of MOOCs, "but we don't know," said Cathy A. Sandeen, an ACE vice president.

Coursera, which has amassed more than 2.5 million registered users across 217 classes, had asked the council in November to assess five of its offerings, in hopes that an ACE seal of approval would lead schools to further embrace MOOCs as legitimate vehicles for learning. (One Coursera class, not reviewed by ACE, was called off earlier this week due to technical problems.)

# 2013, l'année des Moocs en français ?

Créé le mardi 12 février 2013 | Mise à jour le mardi 12 février 2013

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RECOMMANDER

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Les Moocs étaient des grains de sable, ils sont en train de se transformer en rochers. Pas une enceinte universitaire dans laquelle on n'évoque ces cours en ligne massifs et ouverts, qui attirent des millions de participants sur les plateformes américaines. À première vue, il semblerait que ce mouvement soit en capacité d'emporter tout l'enseignement supérieur mondial dans une avalanche dont sortiront bien peu de survivants. Mais, à y regarder de plus près, on voit que les choses ne sont pas aussi catastrophiques qu'elles en ont l'air pour les prestataires d'enseignement supérieur francophones et européens.





## How online class about online learning failed miserably

Posted by Valerie Strauss on February 5, 2013 at 6:00 am

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(by Shamus Ian Fatzinger/ Fairfax County Times)

In the you-can't-make-up-this-stuff category, here's an amusing piece about the failure of a MOOC (massive open online course) that was designed to teach more than 40,000 students the fundamentals of how to create an online course. It was written by Jill Barshay, a contributing editor to The Hechinger Report, a nonprofit, non-partisan education-news outlet affiliated with the Hechinger Institute on Education and the Media, an independently funded unit of

Teachers College, Columbia University. She has been a radio and print reporter for two decades. This appeared on The Hechinger Report's Digital blog.

Incidentally, Wednesday is Digital Learning Day.