Trends in Blended Learning

What to expect next?

Steven Latré

MOSAIC
Modeling Of Systems And Internet Communication
University of Antwerp

Thank you Google

Student anno 2016

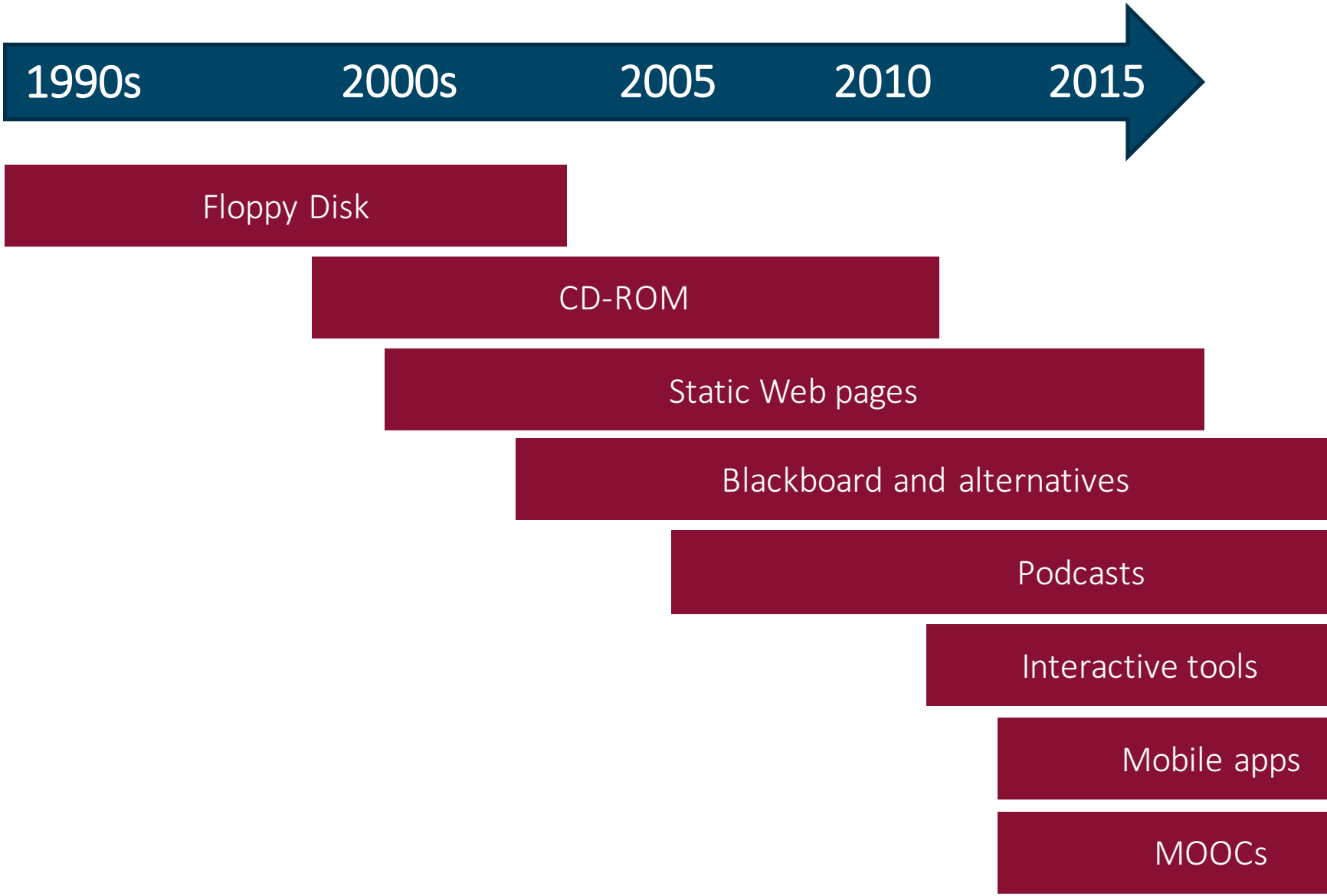
WHY (NOW)?

Millennium student characteristics

- **ICT-minded**
- **Multitasking**
- Media literate
- A-linear, a-synchronous
- Explorative, interactive
- With a positive attitude
- Target oriented
- Social, connected
- As partners with educators
- …

Cf. *New Millennium, New Student*, M. Moonen, MSc Thesis, KU Leuven, 2012

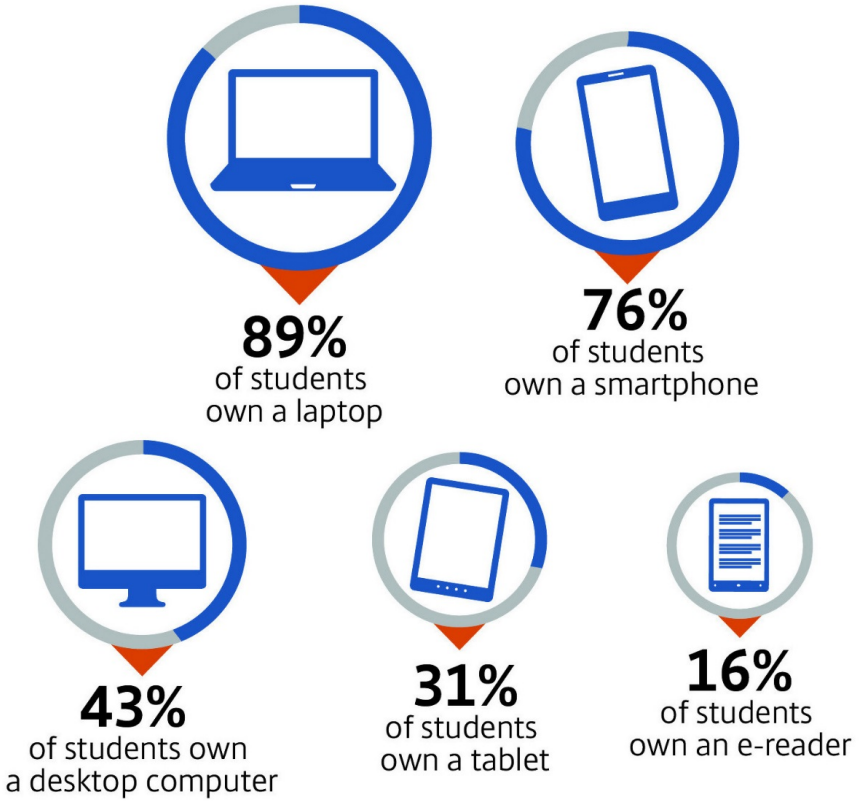
Times they are a changin: the tools are there



Anytime, anywhere learning- on campus

58% of students own **THREE OR MORE** mobile devices.

- Students say they **VALUE TECHNOLOGY** because it helps them achieve academic outcomes **76%**, prepare for future educational plans **76%**, and prepare for the workplace **61%**.
- Students also say that technology makes them feel **MORE CONNECTED** to their institution **64%**, their professors **60%**, and other students **53%**.



ECAR Study of Undergraduate Students and Information Technology, 2013

Looking at it from a societal point of view

By 2025, the global demand for higher education will double to ~200m per year, mostly from emerging economies (NAFSA 2010)

1,600,000 new teaching posts needed for universal primary education by 2015.

3,300,000 new teachers by 2030 (UNESCO 2013)

Student loan debt in US is higher than CC debt so students will demand new models of teaching and learning

Can we use technology to reduce the current staff:student ratios of higher education and maintain quality?

Opportunities

Focus on higher order thinking (deep learning)

Death of drill & kill

More personalised learning

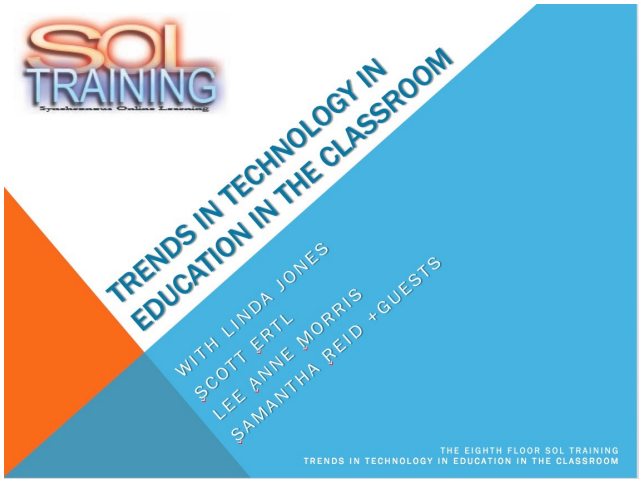
Basisprincipes van Excel

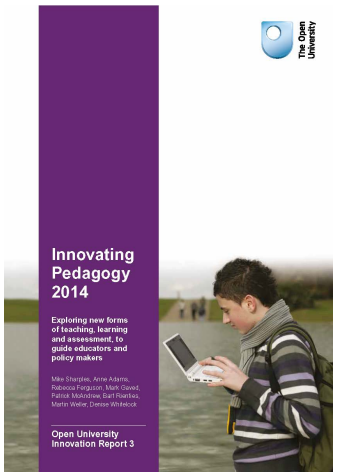
Computervaardigheden

1e bachelor Biologie

Universiteit Antwerpen

Defining 3 blended learning trends





Trend #1

Gamification


WHO IS THE BEST PLAYER
IN THE WORLD?
RONALDO
MESSI
STUB IT OUT
STUB IT OUT
1. STUB

Gamification

- Adding Game Inspired Elements to Your Course
- Applying Game Mechanics to a non-game environment to encourage behavior
- Typically Incorporates Badges, Awards, Achievements
- Experience Points (XP) may be Used as Substitute for Traditional Grades

Game Based Learning

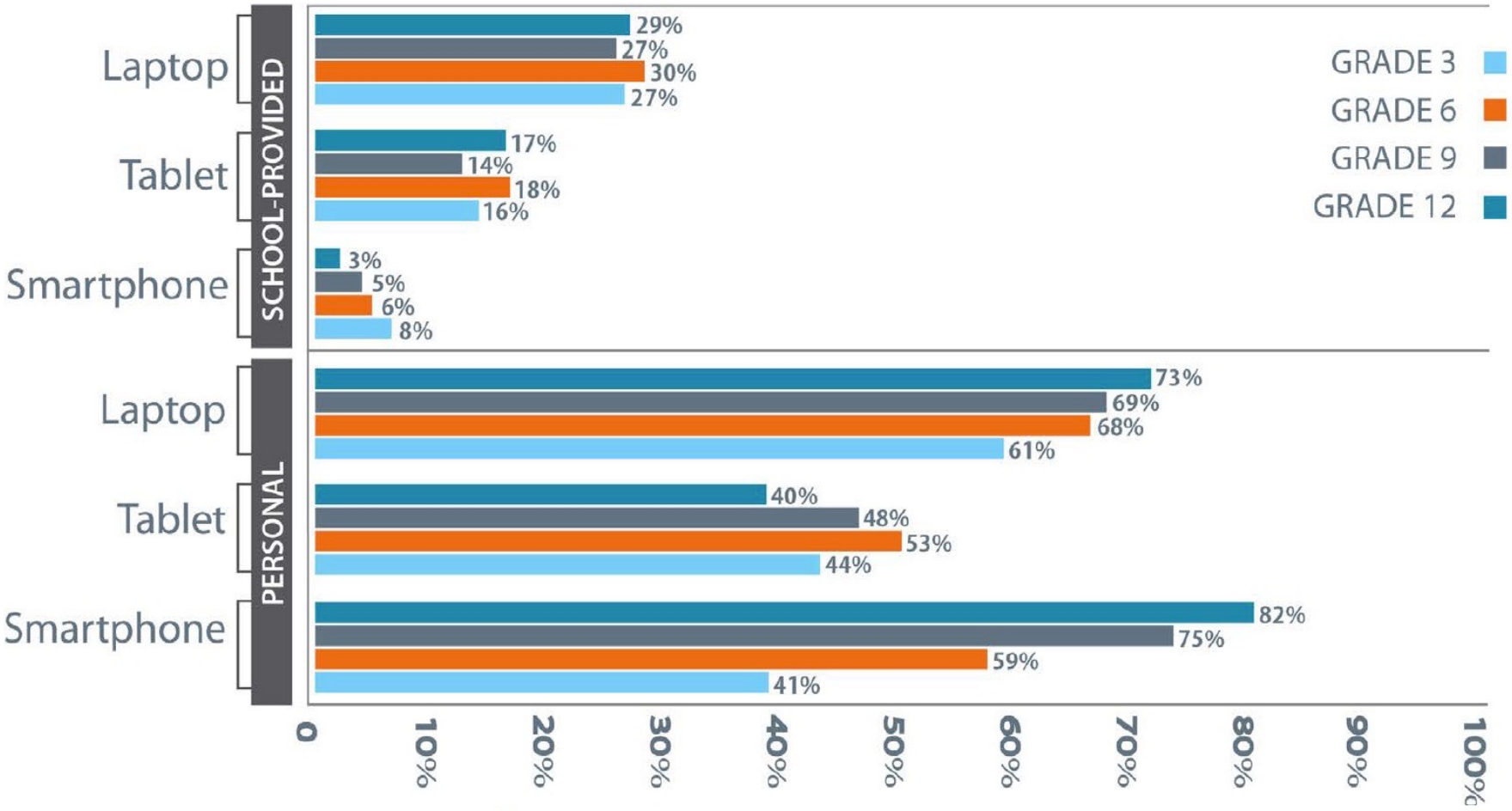
- Using Games to Meet Learning Outcomes
- The Learning Comes from Playing the Game
- Can be Accomplished Using Commercial (AAA) or Education Oriented Games
- Promotes Critical Thinking and Problem Solving

Trend #2

Bring Your Own Device (*)

(*) And do something with it!

Kids going mobile



Adapted from Project Tomorrow 2013.[42]

Your poll will show here

1

Install the app from pollev.com/app

2

Make sure you are in Slide Show mode

Still not working? Get help at pollev.com/app/help

or

Open poll in your web browser

Experiences @ “Inleiding Programmeren”

Not only for large groups

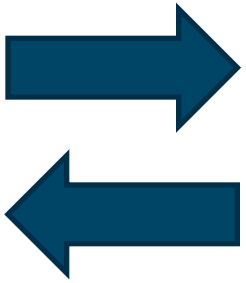
Removes a barrier

Stimulates independent thinking
(75% response rate)

Simple form of gamification

Quickly taken for granted

What's next?



Interactivity

Complex answer possibilities

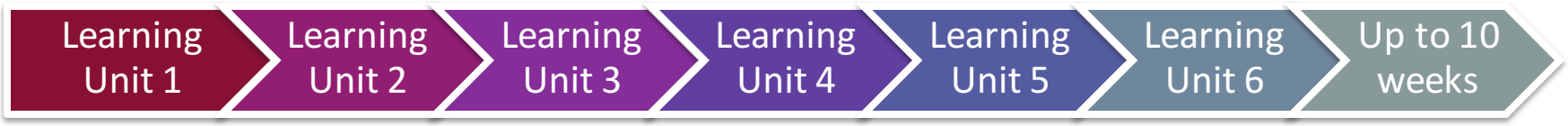
Personalization

Trend #3

MOOCs

What is a MOOC?

Basic ingredients of a MOOC



MOOC is divided into weeks. From 3 to 10 weeks

4 to 12 hours study time
Clear learning goals, end-of unit assessment

Each with a couple of self-contained learning blocks

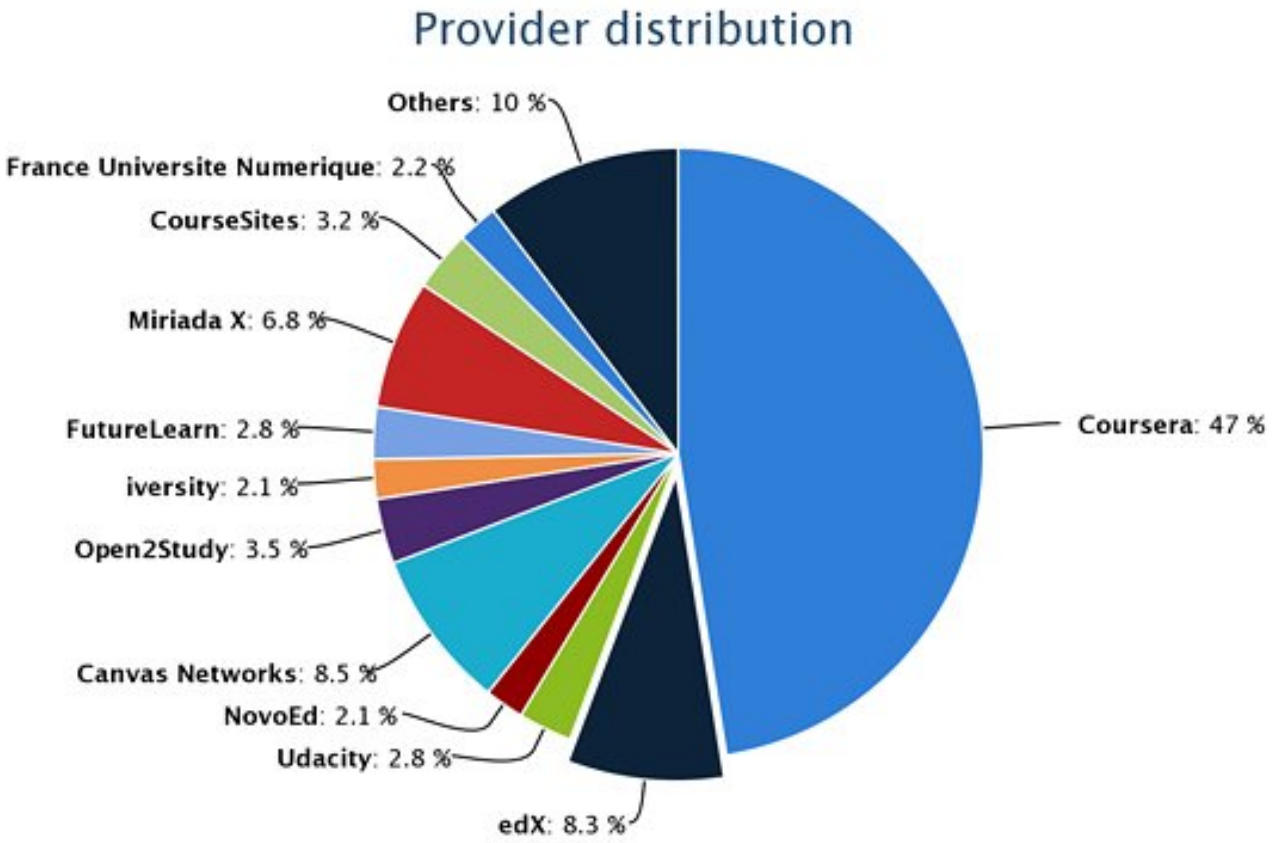
Short (recent) history

- Initially started in 2008 with small-scale experiments

- First really massive MOOCs in 2012 from Stanford
  - Artificial Intelligence (Sebastian Thrun, Peter Norvig):
    160 000 registrations
  - Machine Learning (Andrew Ng)
    160 000 registrations

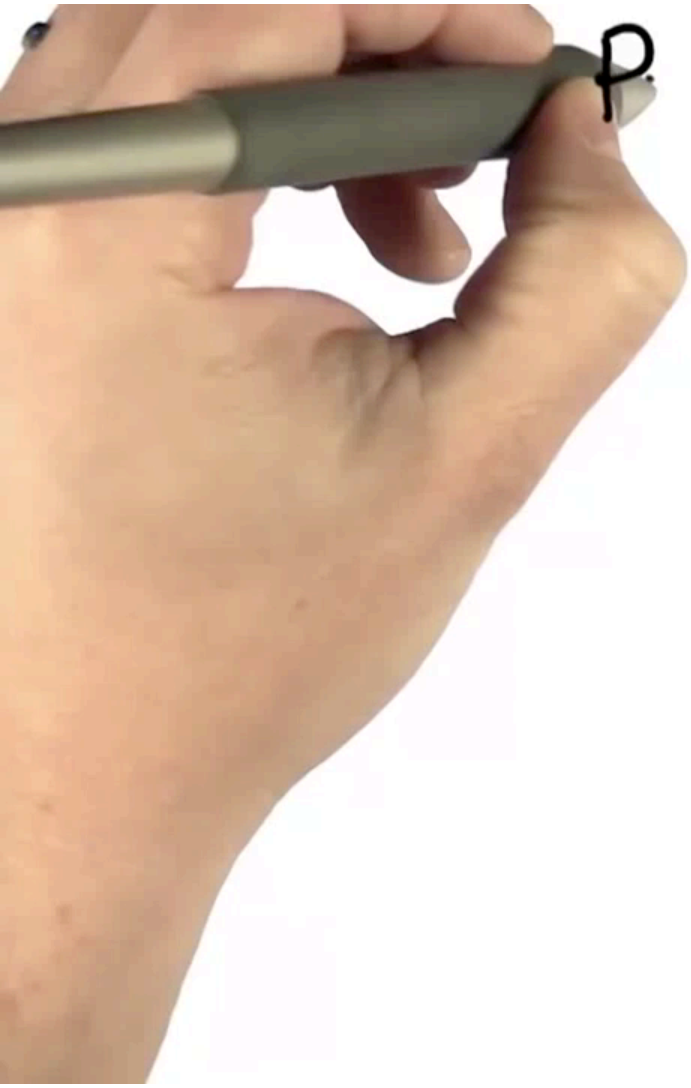
Massive success, massive impact, massive audience

Professional organizations soon followed



Current situation

- Move from free to paid registrations (at fraction of tuition)
- In return: “accepted” credits
- Nano degrees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Why should you bother?

For students…

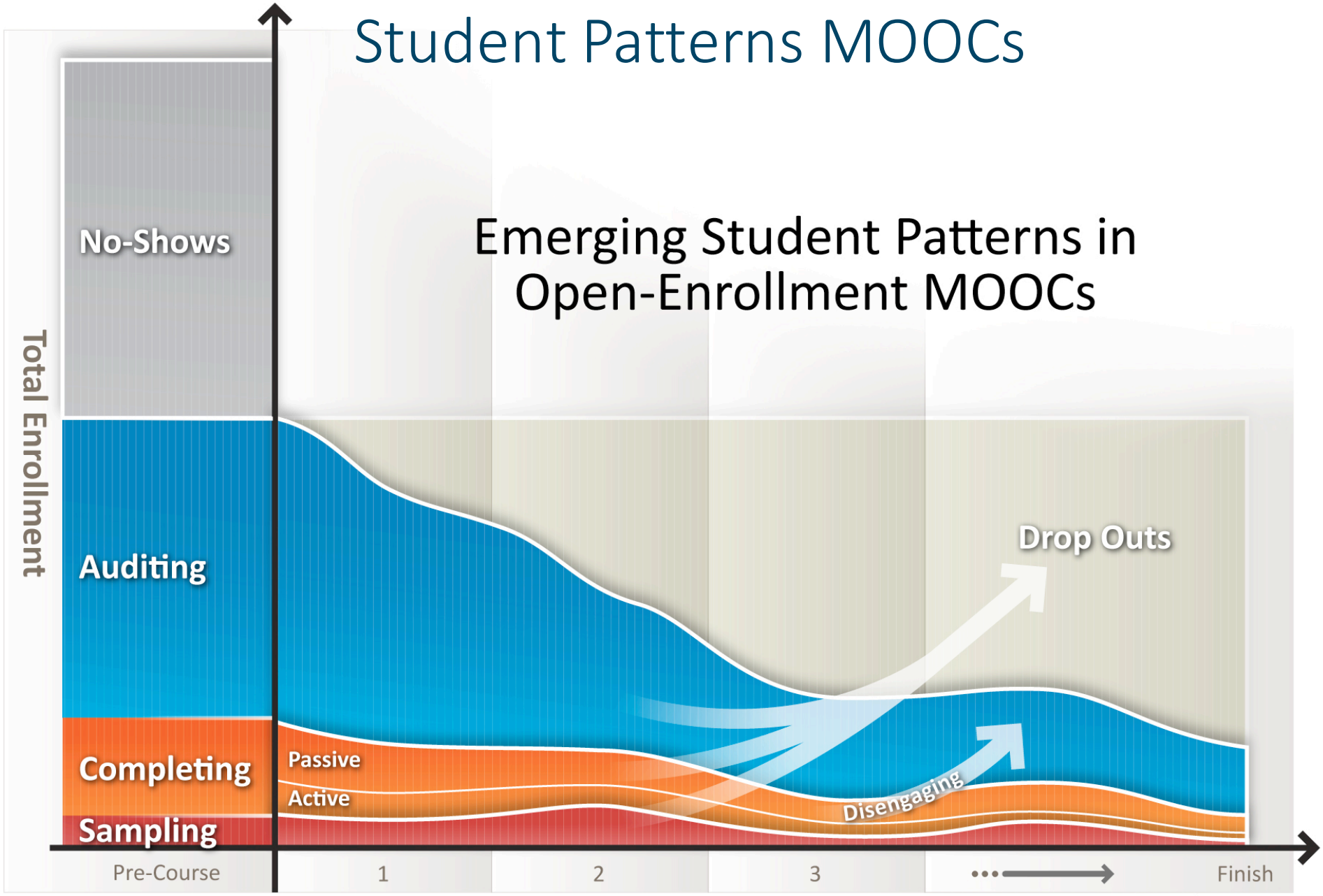
- Do course at your own pace
- Often linked to interactive experience
- Lecturers with international acclaim
- Continuous learning (nanodegree)

For teachers…

- If you choose your topic right potentially high impact
- Perfect your lectures
- Focus on the deep learning during class

MOOC CHALLENGES

Student Patterns MOOCs

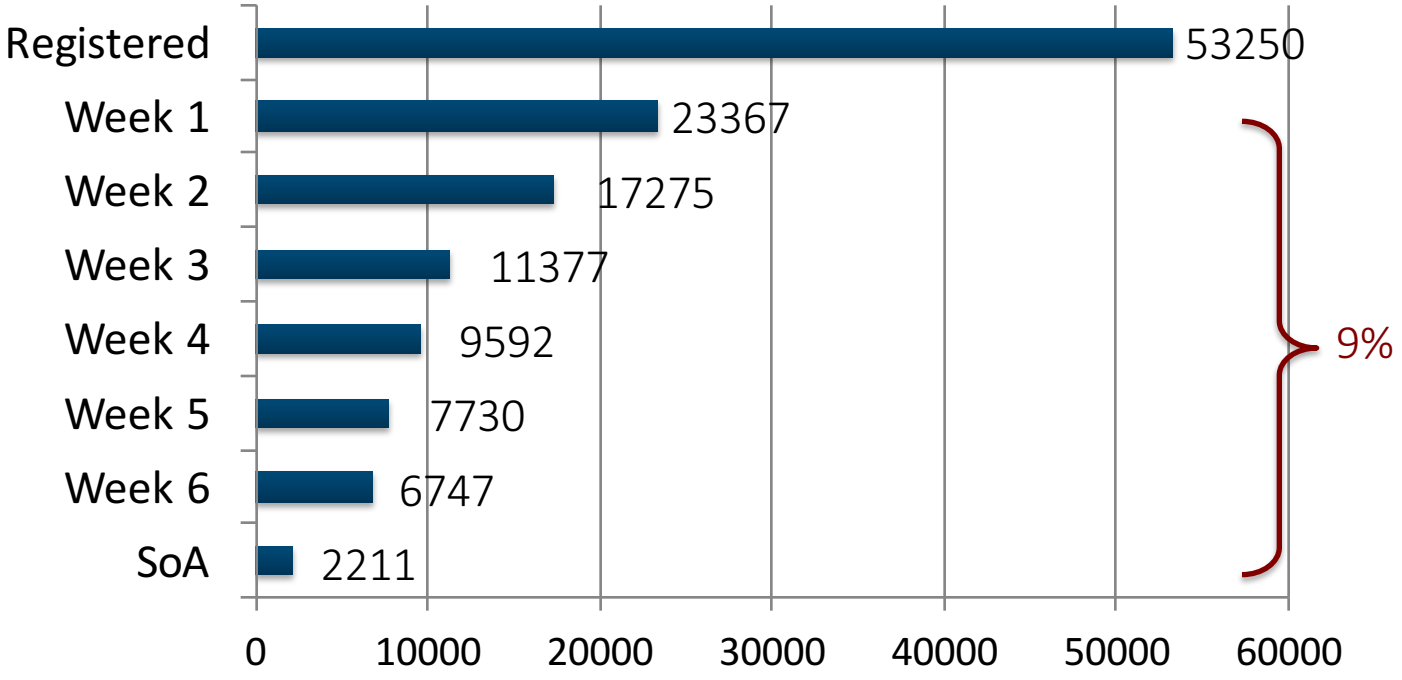


Phil Hill (@PhilOnEdTech)

MINDWIRES delta initiative

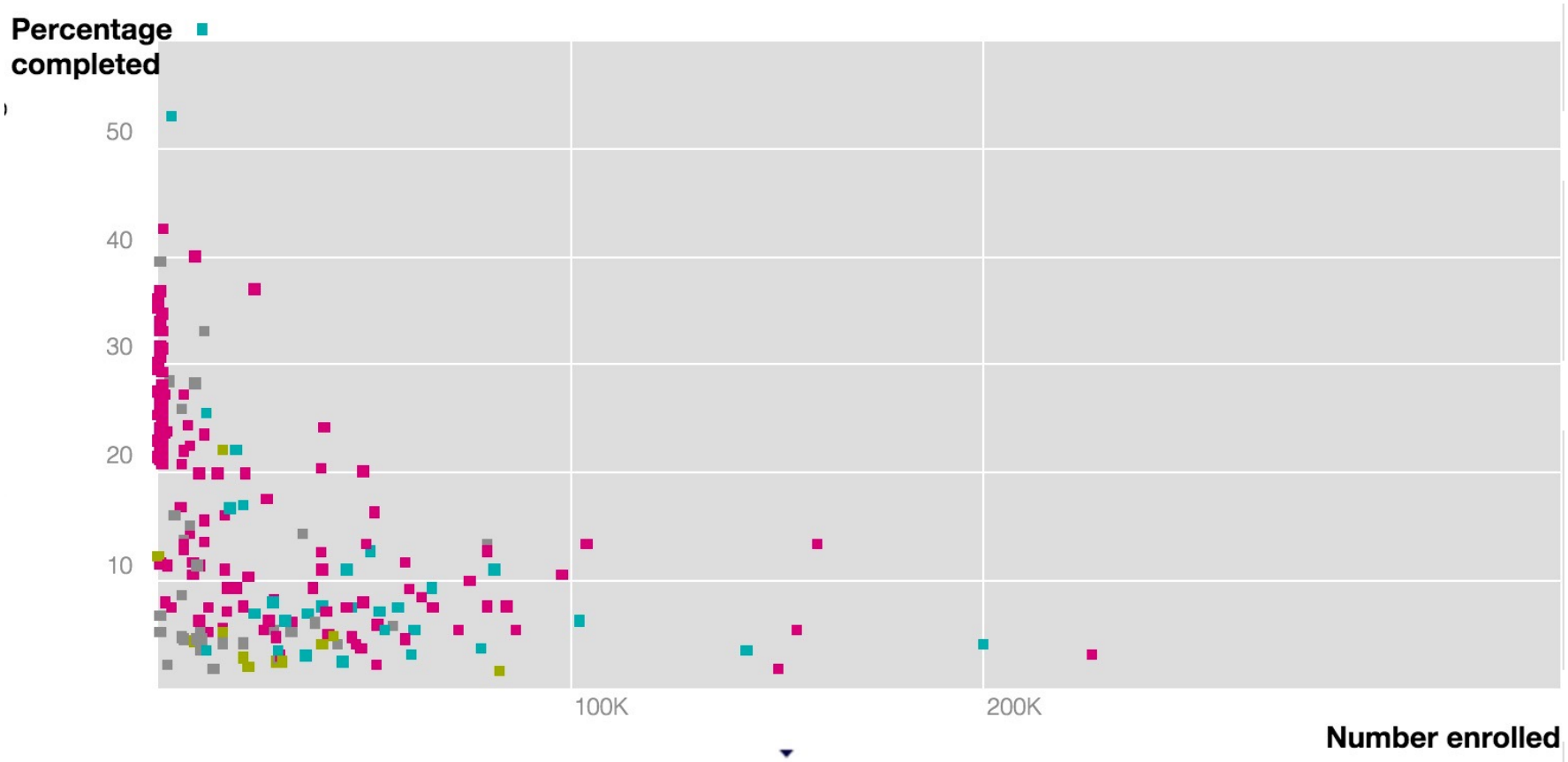
9% of all starters complete a MOOC

Average student numbers per course - UoL



Completed = 9% of 'starters'

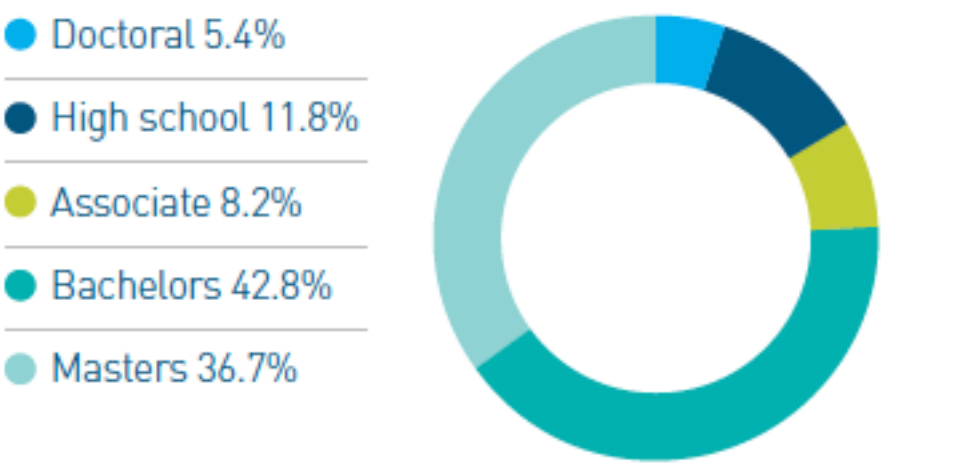
MOOC Report 2013: University of London


Percentage completed
50
40
30
20
10
100K
200K
Number enrolled

MOOCs don’t reach everyone

Profile of students

Figure 3: Coursera survey data of prior level of education, January 2013



85% have degrees

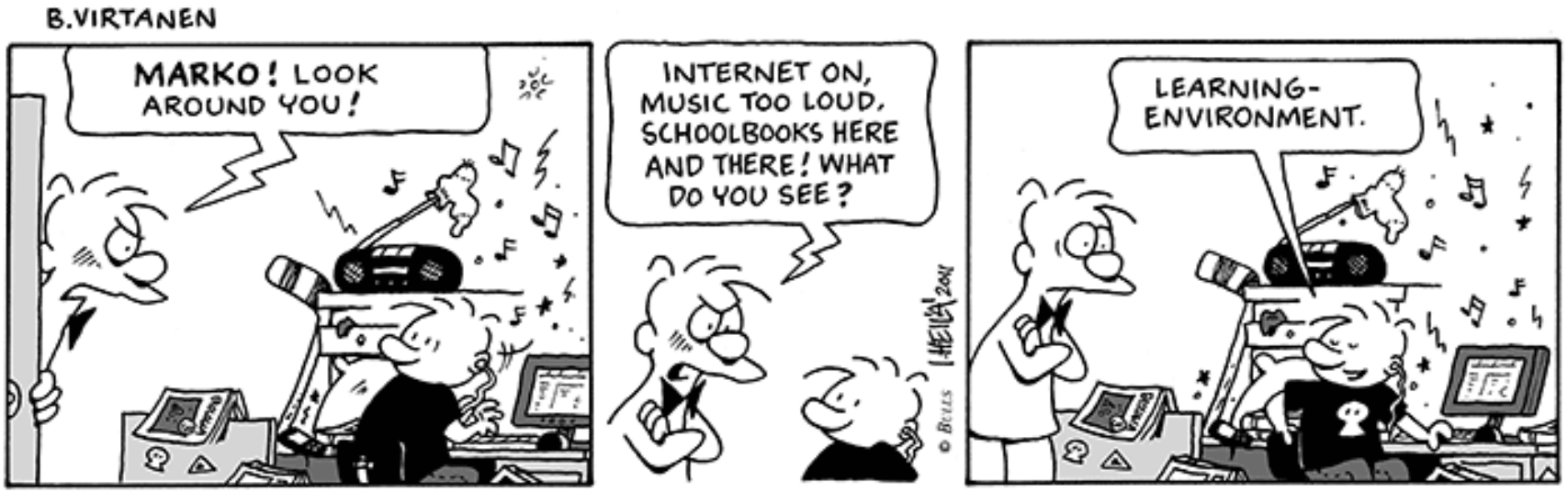
MOOCs: Higher Education’s Digital Moment? 2013: UUK

MOOCs and the role of a university

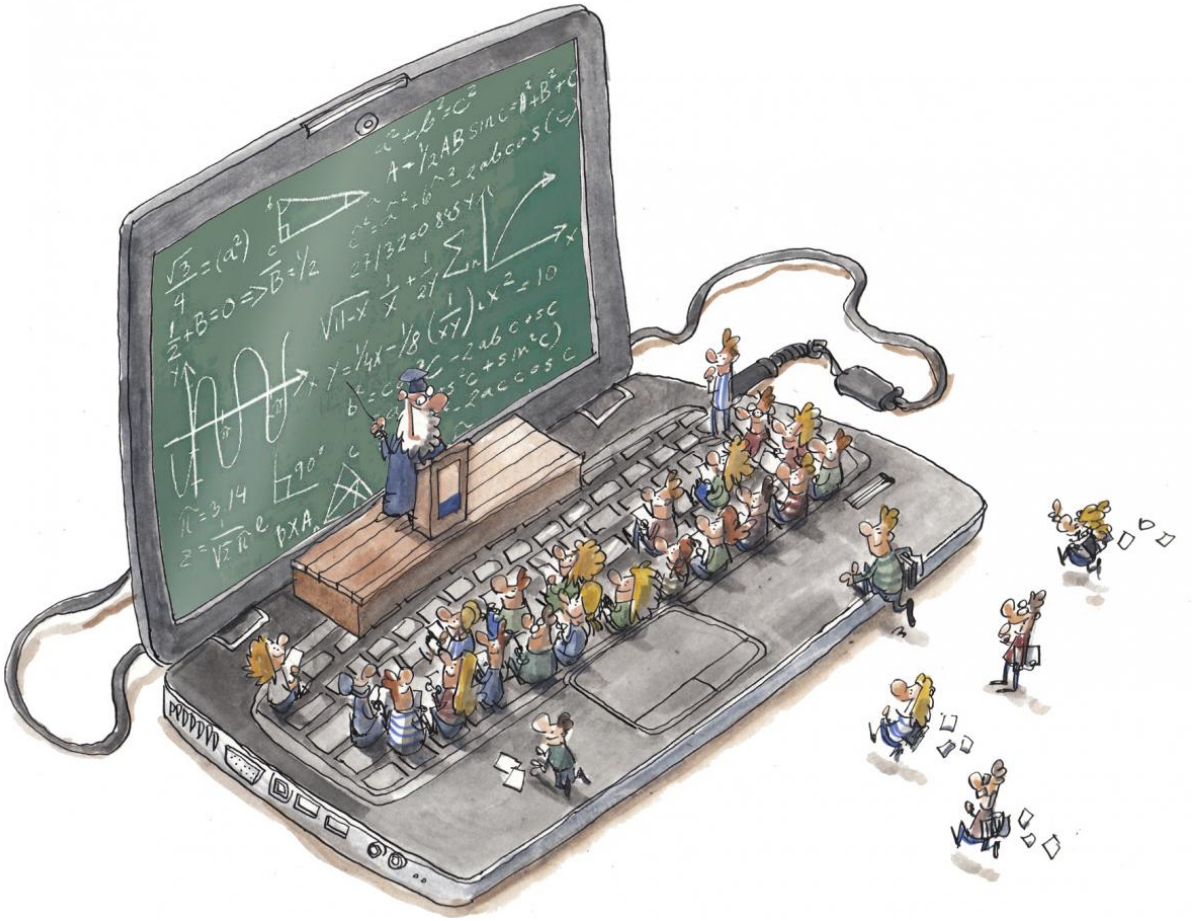
End of the universities?

NO!

The real, physical learning environment
is merging together with
the virtual, digital learning environment



University of the future?
Two worlds in one

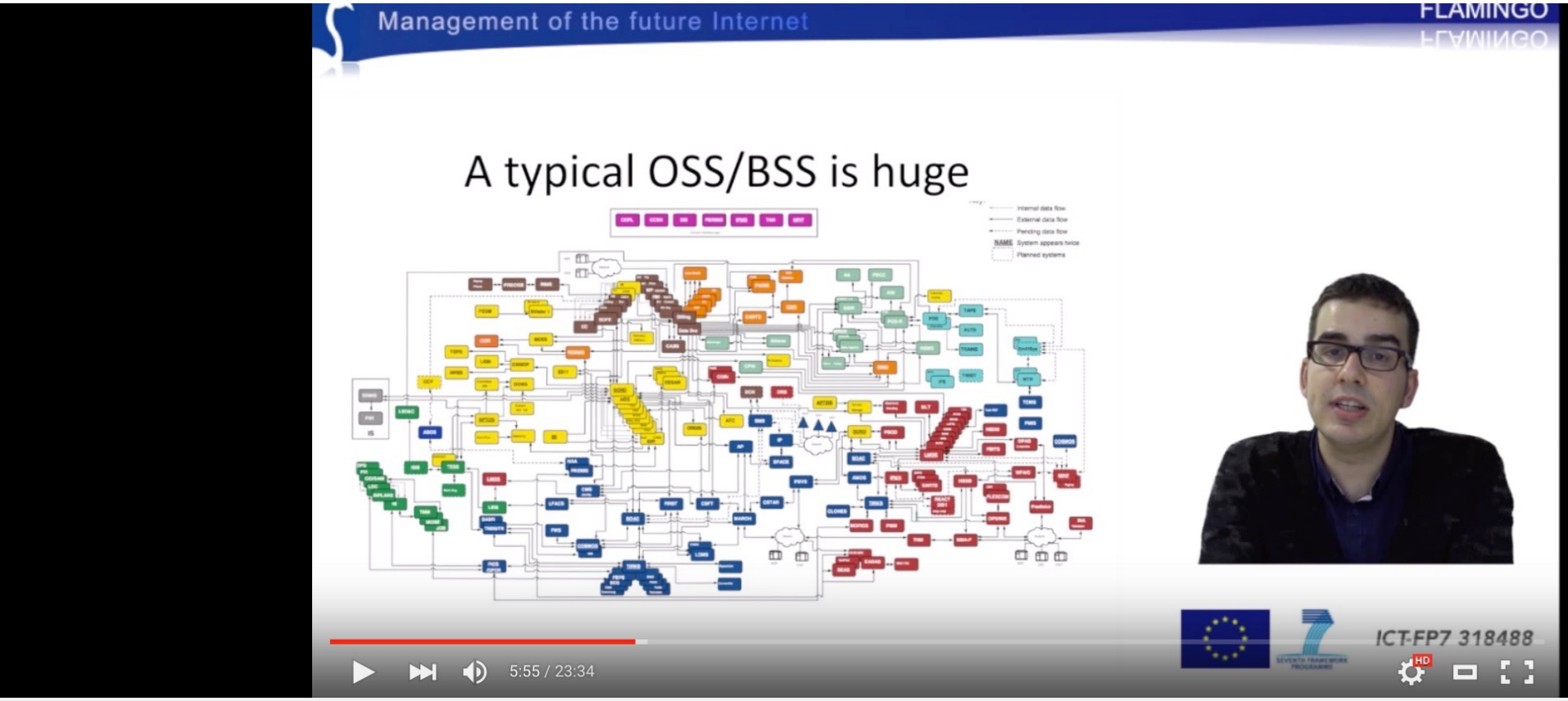


© Joris Snaet, KU Leuven

Ready for a MOOC?

Be prepared for a lot of work
Hire a professional!

MOOC ≠ instant impact
Team up with a MOOC provider



Tutorial on Autonomic Communications: Control loops (Part 1 of 3)

FLAMINGO Project

Subscribe 473

134 views

Up next

Tutorial on A
Control loop
FLAMINGO Pr
131 views

Ready for a MOOC?

Be prepared for a lot of work

Hire a professional!

MOOC ≠ instant impact

Team up with a MOOC provider

MOOC ≠ a video lecture

Think about interactivity

Think about “blend” to activate students

MOOC ≠ the holy grail

Do you need a MOOC?

MOOC @ iMinds (EIT Labs)


SOS PNEU

New technologies are here for the taking

MOOCs might seem a threat
but they **can be** an opportunity

To blend or not to blend…

…that’s **NOT** the question!