

New methods for engineering education

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KHANACADEMY

You only have to know one thing:

You can learn anything

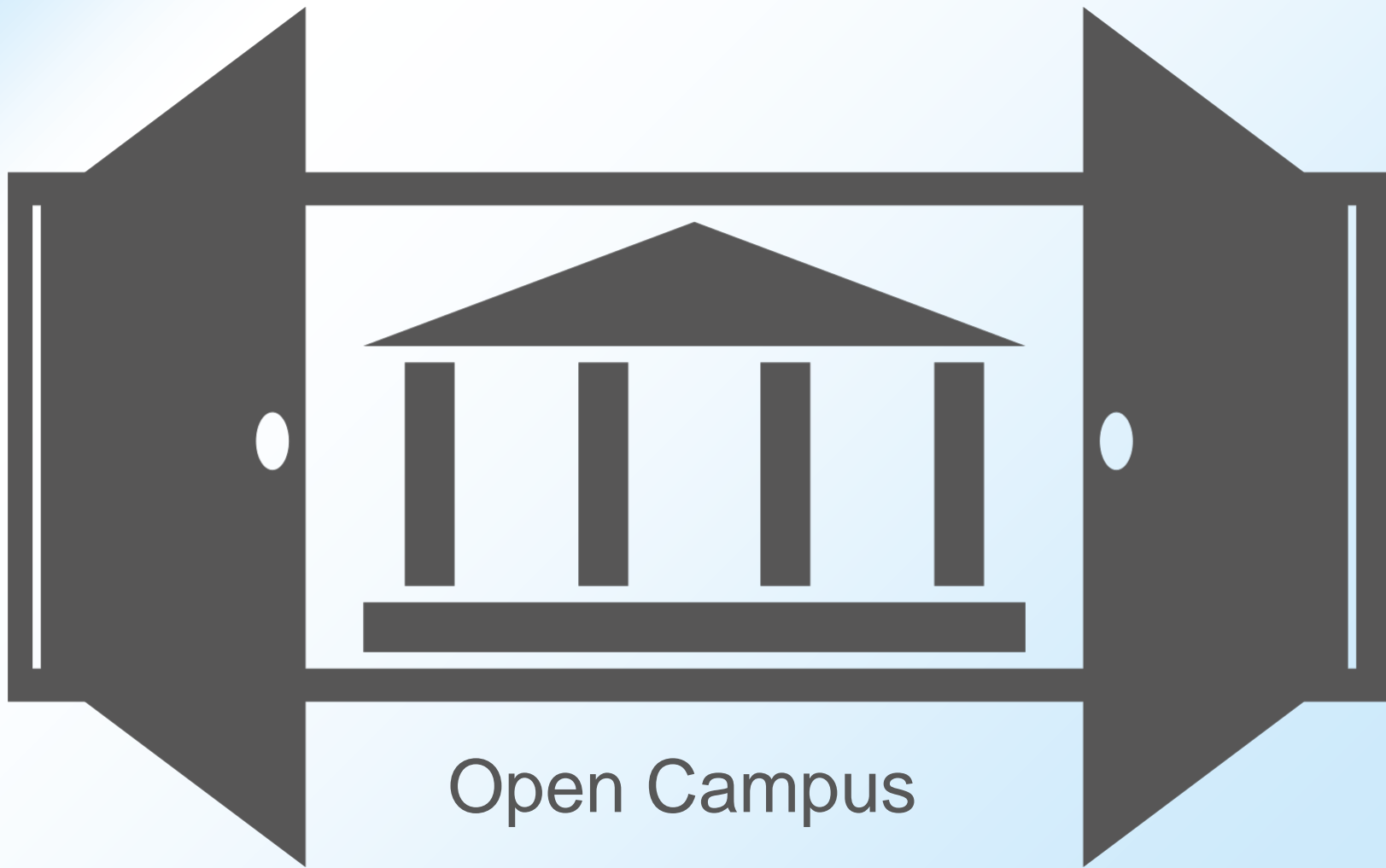
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ONLINE EDUCATION
POLICY INITIATIVE

FINAL REPORT

Online Education:
A **Catalyst** for
Higher Education Reforms



Open Campus



Global Campus

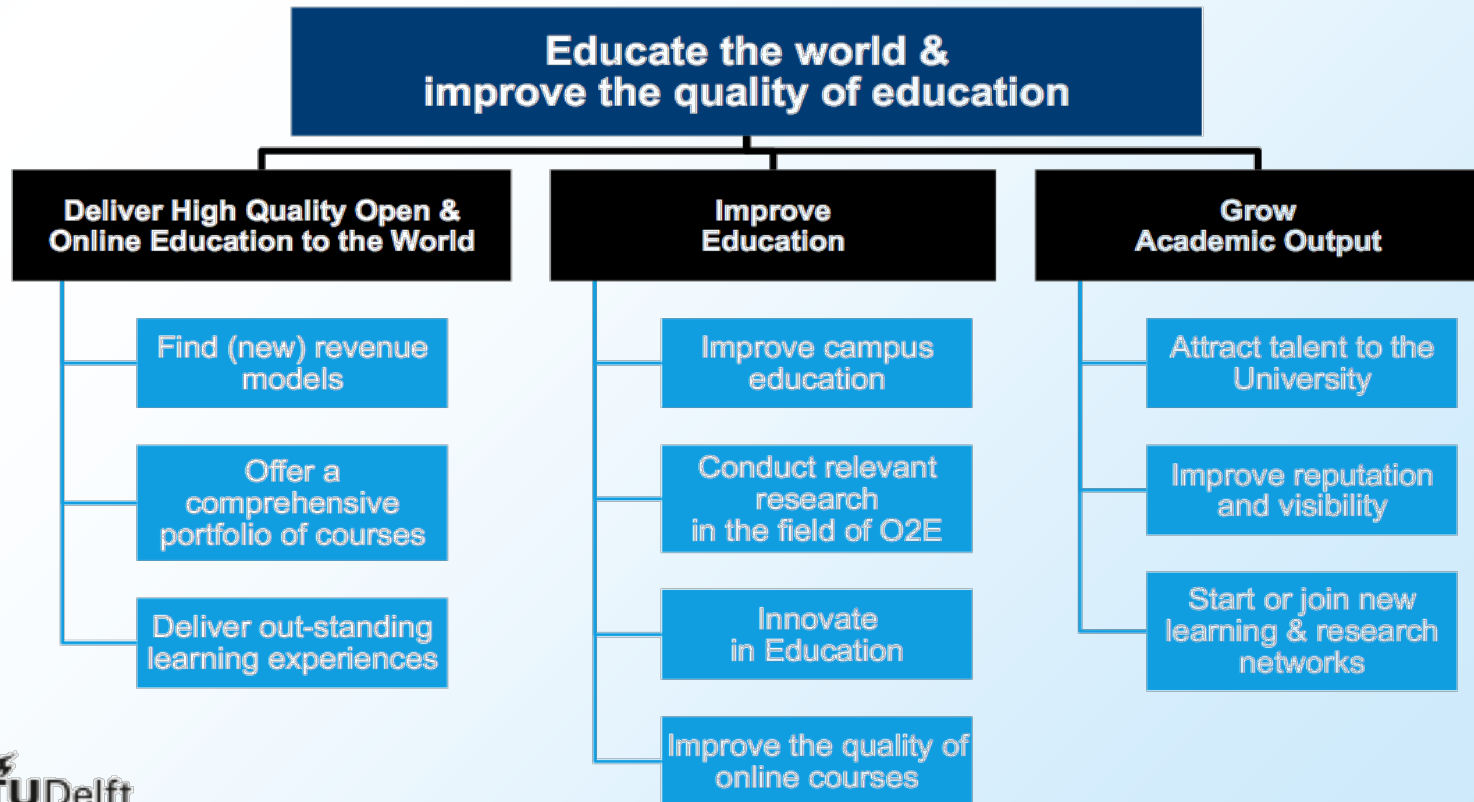
Campus Student Online Student Business Life Long Learner

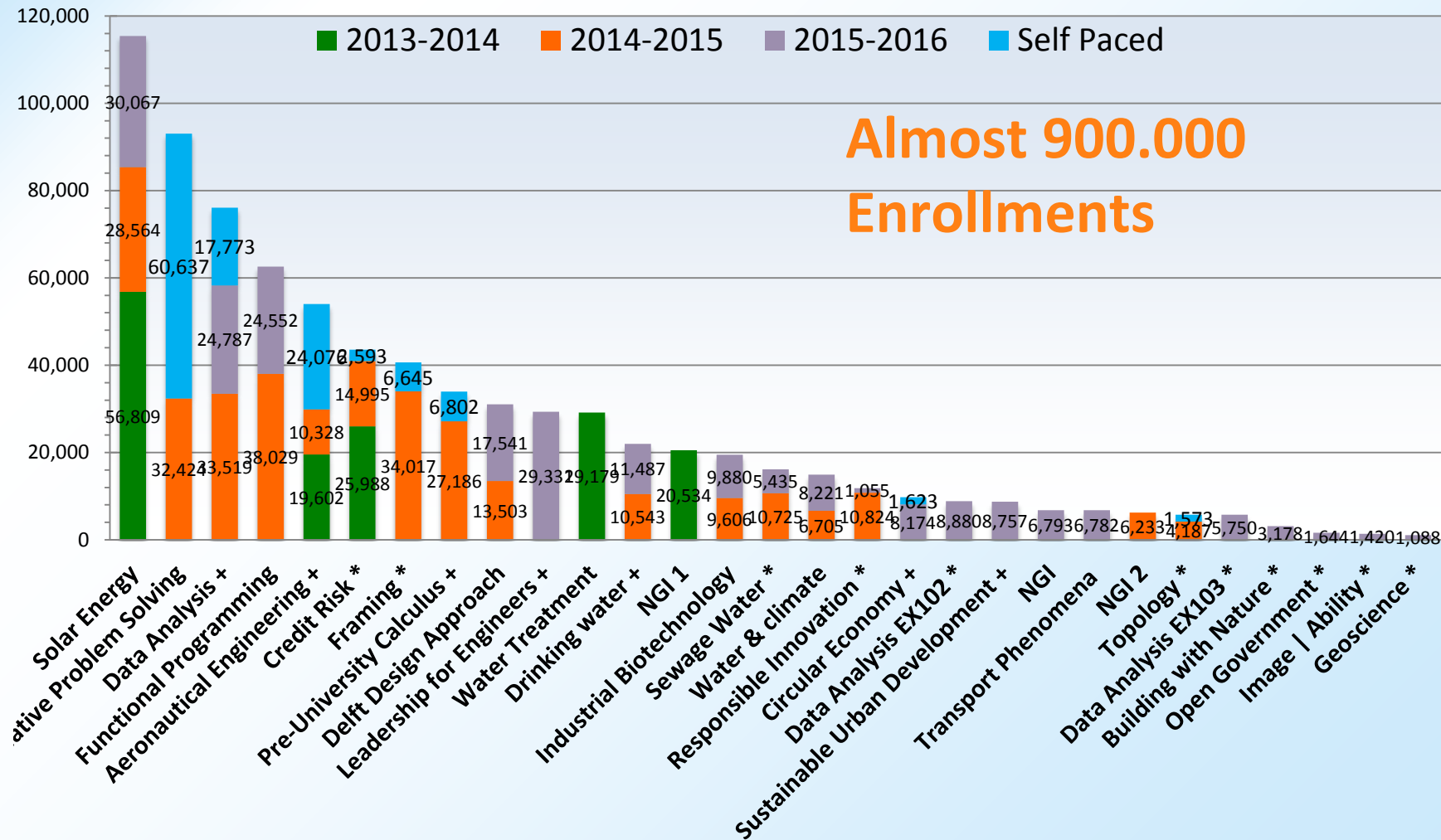
Carrousel choose 3 out of 4 presentations (3x 15 mins)

- The presentations:
 - **Integrating international guest students into lectures with flipping the classroom** at Hamburg University of Applied Sciences, by Jutta Abulawi
 - **Eliminate lecturing by flipped learning** at Korea Advanced Institute of Science and Technology by Tae-Eog Lee
 - **Adapting MOOC content to fit students' need in face-to-face classes** at Georgia Institute of Technology by Robert Kadel
 - **TU Delft Online Education & Virtual Exchange** by Timo Kos

Switch presentations after music plays

Objectives Extension School





Extension School impact on..

Educating the world

More than 800.000 learners • Design, science, engineering over the globe • TU Delft courses embedded in education worldwide

Increasing TU Delft's **international Reputation**

Collaboration A-brand universities • Media exposure • Conference invites • attract international students

Improving campus education

Renewed attention for education • Lecturer motivation • 'never be the same teacher again' • improved student results

New relations between **education and research**

Large amounts of data in MOOCs • attracts PhD-ers big data, learning analytics • increases international expert network

Flourished collaboration with **industry and valorization** of education

Serving Lifelong Learner • joint education designs with industry • increased third money stream

The whole **TU Delft organization**

Accelerated innovation pace • online payment • online marketing • online learning website



IMPROVE QUALITY OF EDUCATION

Arno Smets – Solar Energy Course

- 30% more material than in the classical classroom
- Pass rates up from 71% to 89%
- Grades up from 6.51 to 7.09 (on a scale from 1 to 10)
- 69% of students preferred flipped classroom

More info: <http://www.e-learn.nl/2015/01/11/mooc-has-positive-effect-on-campus-education>



Why make a MOOC? Felienne Hermans explains...

26 januari 2016 door [Webredactie-OS](#)



If you have a demanding job, why on earth would you want to make an online course? Assistant-professor Felienne Hermans explains why it was worthwhile. For her, it all started with 'Data Analysis'. She used this course's content in her campus course and noticed three important advantages:

Impact

When Felienne started the development of the MOOC, it was the first MOOC on data analysis with Excel. That means lot of people learned how to be more efficient in their daily lives. People from all over the world participated; an amazing feeling and impact.

Research

People in the MOOC were asked to click labels in an online game. 'We got 160.000 answers to test with it', Felienne explains. No one in the world has a dataset like that. So having many MOOC students means collecting lots and lots of data.

Improvement of Teaching

When you are developing your own education online for the world to see it, it will automatically lead to even better educational materials. It is an incentive to get it completely right considering thousands of people looking at you. Also, watching videos of yourself makes you more aware and a better teacher.