

is The Teacher of the Future

Prof. dr. ir. <u>Alexandru Iosup</u>, representing a whole team*



* Education is teamwork. Many thanks, team. **TUDelft** Delft Delft

1994: How to spend 1 Billion? A: IT for education!

ADEVARUZ marți, 8 martie 1994

"România trebuie Să devină o putere" - consideră un câștigător (ne)obișnuit -

NVÄTÄMÂNT

Alexandru Iosup are 14 ani (născut în 12 iunie 1980) și este elev al Scolii nr. 19 din București. Mic la stat, dar mare la sfat, Alexandru este unul din cei patru câștigători ai concursului. "Ce să faci cu un miliard" inițiat de MTS. Cei 50 de mii de lei primiți ca premiu al revistei "Modelism" i-a cheltuit cu .cap", luându-și o minge de fotbal adevarată pentru că este microbist co ca idoli pe Maradona și Van Basten. În privința banilor, copilu are o mummerire: Am primit exact 42 de mii lei. De ce s-o-fi impozitand și premiul, nu înțeleg". Nici noi nu pricepem, dar asta e. Oricum, din ce i-a rămas, își va luat ceva pentru calculatorul pe care de curând (după premiere) l-a primit ca dar de la părinți. Jubesc calculatorul și am câstigat acest concurs tocmai propunând celor mari ca din miliard să cumpere 1.000 de calculatoare pentru a se realiza în școli o rețea națională". spune Alexandru.



vine de la faptul că s-ar simti sărac.



2004: How to improve education? A: Make games coursework!



TUDelft http://www.elizium.nu/scripts/lemmings/TUD Lectures on Education 3

2014: How to spend 1 Billion? A: ICT and Gamification for education!



Q: What is gamification?

A: The use of techniques designed for gaming in non-gaming settings, e.g., in education.







What Did I Learn? The Teacher Counts!

- Knowledge
 - Know the latest greatest developments in the field
 - Students trust knowledge
- Flexibility
 - Mix in things that students want and have to know
 - Students like variety
- Adaptability
 - Different student types
 - Different content types
- Passion and enthusiasm (preferably contagious)
 - Students appreciate enthusiasm (even if they don't share it)



The Current Situation: We're In This Together

- New generation of students, including international, but do we understand them?
- New ambition of universities, but cannot select students



https://quotablequoteunquote.files.wordpress.com/ 2008/08/walkingcomputergeek.jpg

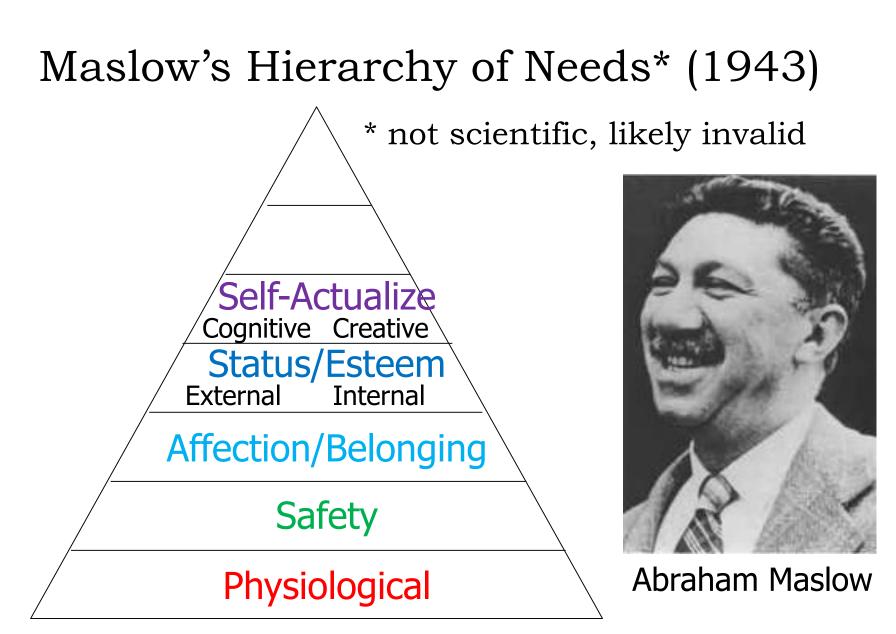
- More demands from industry, but personal skills (society+personal) also matter
- Old attitude about the task: The Teacher can just do it!



But Teachers Are Human... What Do Teachers Need?

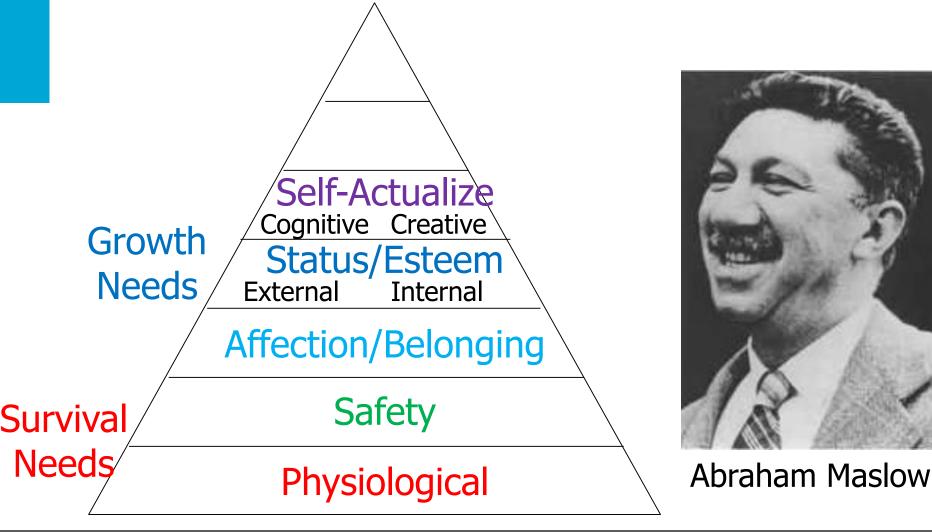
- An intuitive approach
- I do not have proof, data, or even a basic scientific method



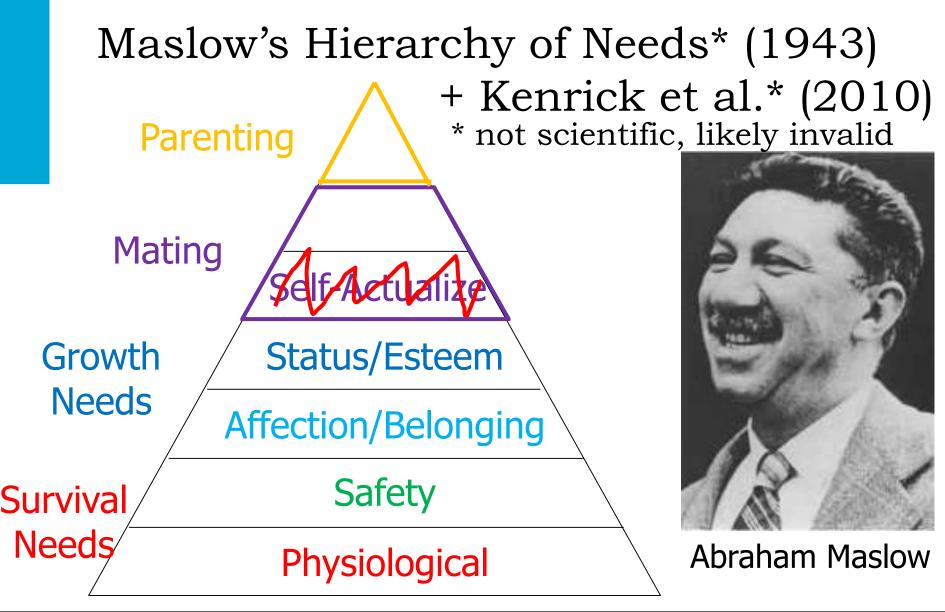




Maslow's Hierarchy of Needs (1943)



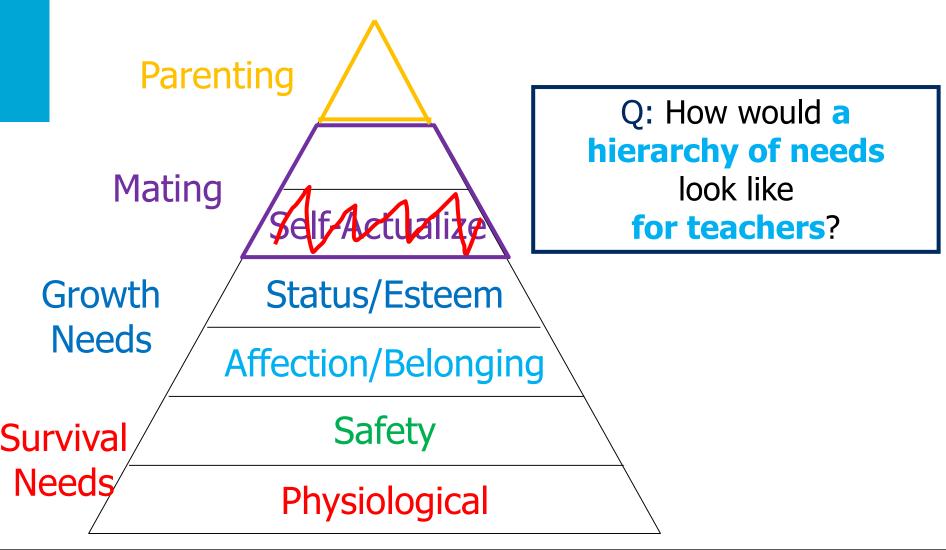






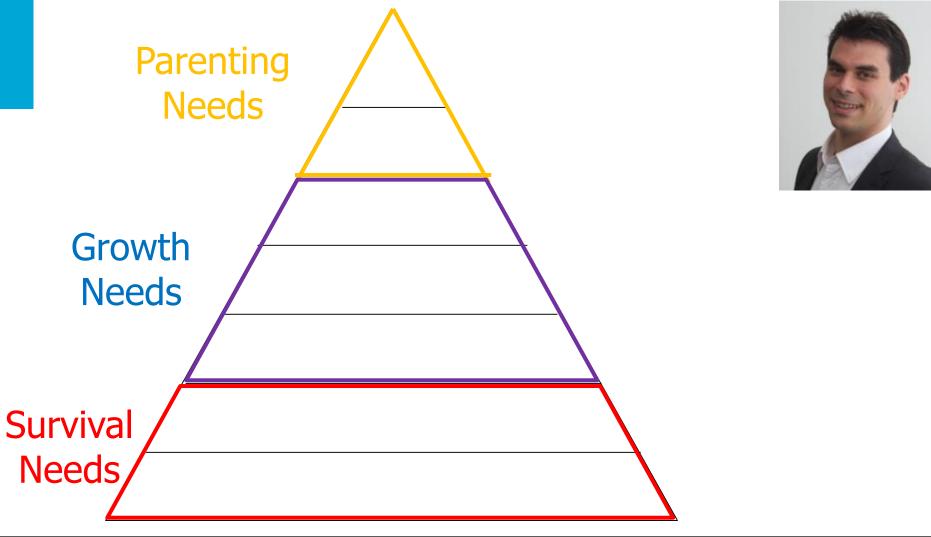
Maslow photo: http://desarrollopersonalefectivo.com/wpcontent/uploads/2012/10/abraham-maslow-3.jpg

Exercise: The Imitation Game



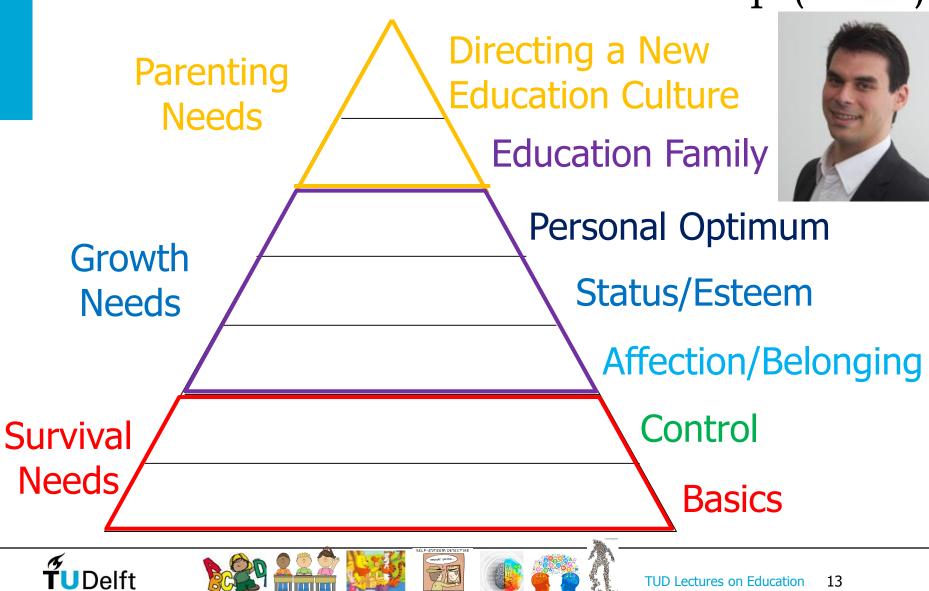


The Hierarchy of Needs for Teachers Alexandru Iosup (2015)





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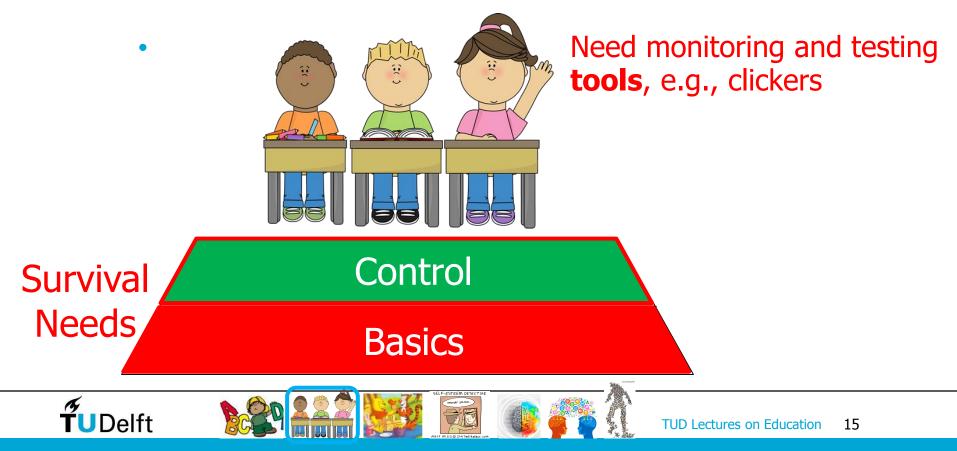
- We all know about the basics of teaching
- But:
 - Need to improve the BKO, especially for new conditions



- Need a "diurnal" cycle (sleep=research/valorization/*)
- Need much better content-authoring tools, especially for new conditions (MOOCs, blended, ...)

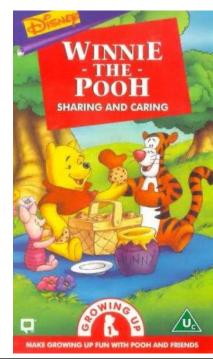


- Address threats, better chances of success
- But
 - Need **tools** for simple, online learning analytics (Excel?!)



- Social needs—success is obtained as a team
- But
 - Need a culture of "sharing is caring"
 - Need a culture of professional education
 - Need tools for management of course teams (Blackboard can be too slow, Facebook could break privacy laws)





- Internal feeling of mastering education
- External status, recognition, glory

SELF-ESTEEM DETECTIVE



But

Need tools for detailed learning analytics

MIKEY HELLER @ 2014 TIMETRABBLE. COM

I WANNA BE SPECIAL!

Need governance to recognize value of education



- Learn and Create new education techniques
- But
 - Need to formulate personal vision
 - Need environment to create
 - Need tools to validate progress

Personal Optimum

Growth Needs

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Status/Esteem

Affection/Belonging



- Teach the teachers!
- But

Parenting

Needs

TUDelft

- The Education Genealogy Project
- Need tools to advise and collaborate with friendly teams
- Need tools for detailed analytics

Education Family

Need governance support



- Establish a new education culture:
 - In research, 1,000 citations is the golden standard
- But

Parenting

- Need tools to create at large scale
- Need governance support and involvement



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A New Education Culture

The Hierarchy of Needs for Teachers Alexandru Iosup (2015)

