



Digitaliseringens transformerande kraft



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- Vicerektor för Digitalisering
- Professor i Mänsk-datorinteraktion
- Medlem av Sveriges Digitaliseringsråd
- Digital champion of Sweden

Traditionella kontorsarbetsmiljöer 20 år av utveckling

– *Ser ni utvecklingen?*



Sveriges digitaliseringstrategi

Vision: Ett hållbart digitalt Sverige.

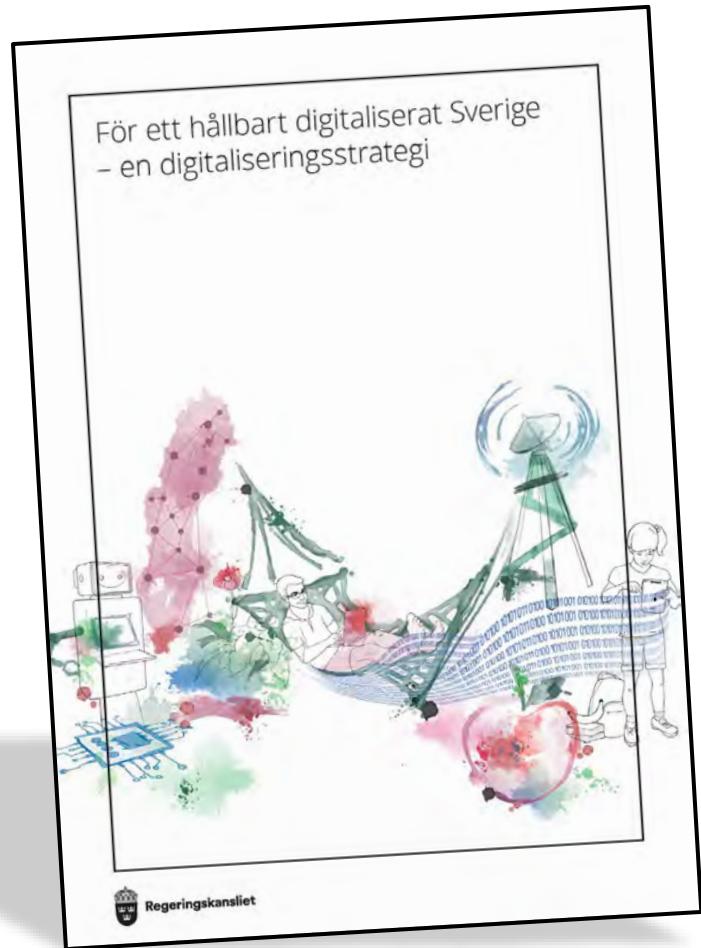
Övergripande mål: Sverige ska vara bäst i världen på att utnyttja digitaliseringens möjligheter

Delmål:

- digital kompetens,
- digital säkerhet,
- digital innovation,
- digitalt ledarskap och
- digital infrastruktur.

Regeringens övergripande mål:

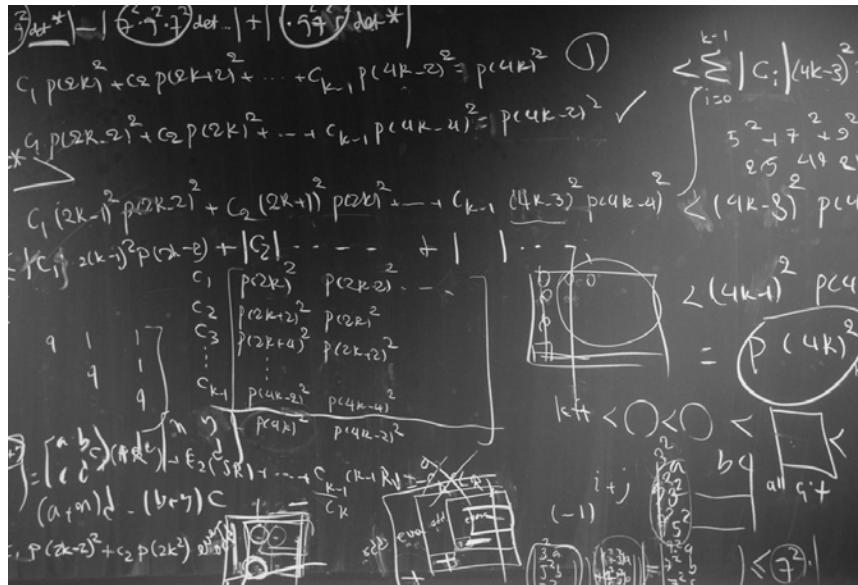
Sverige ska ha Europas lägsta arbetslöshet 2020



Digitalisering av undervisningen

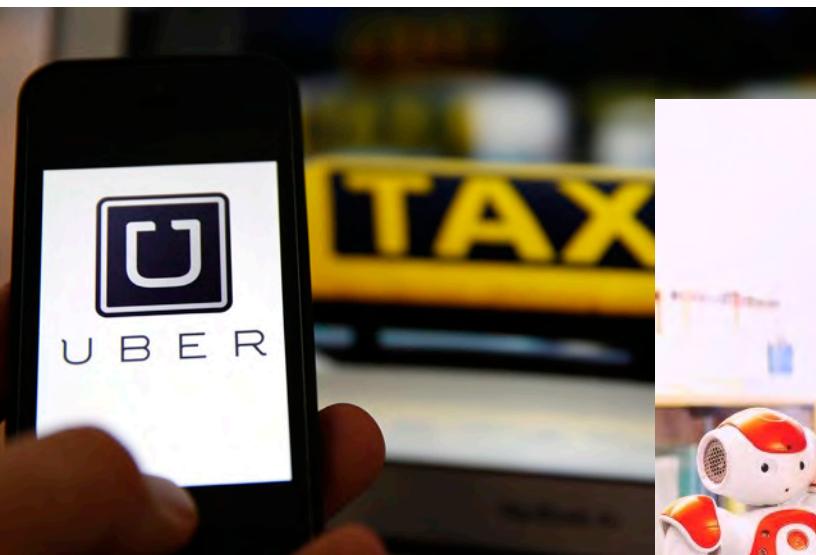
20 år av utveckling

– Ser ni utvecklingen?



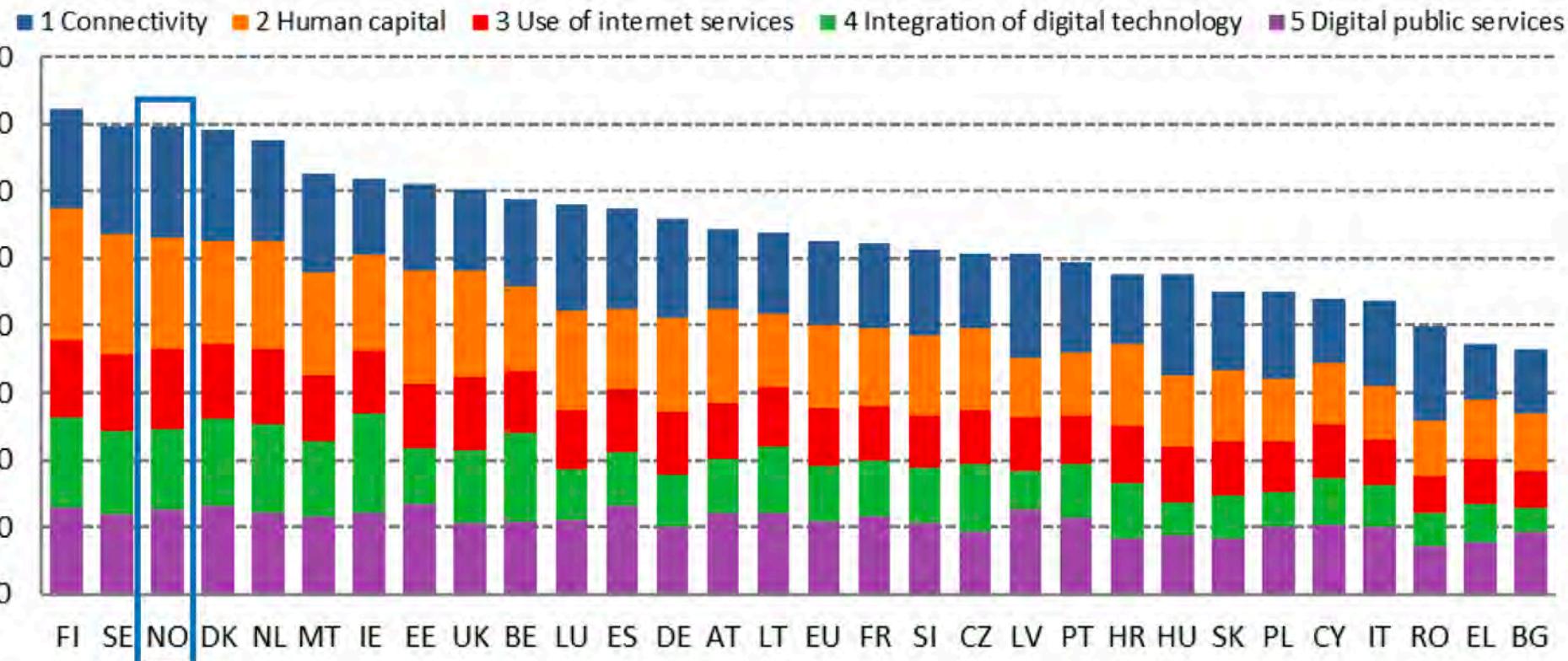


Digitalisering – digital transformation



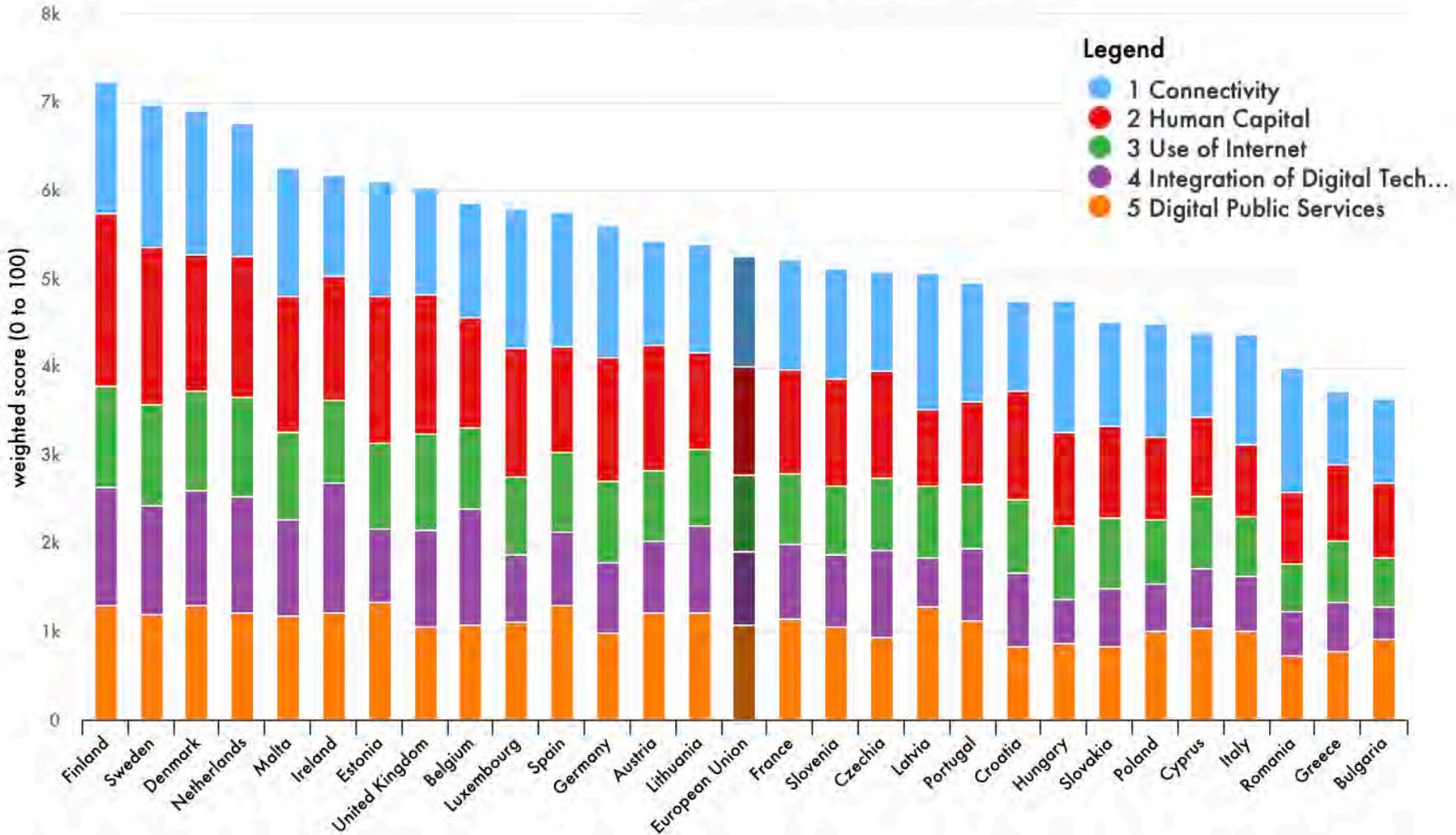
The Digital Economy and Society Index 2020

Digital Economy and Society Index (DESI) 2020 ranking



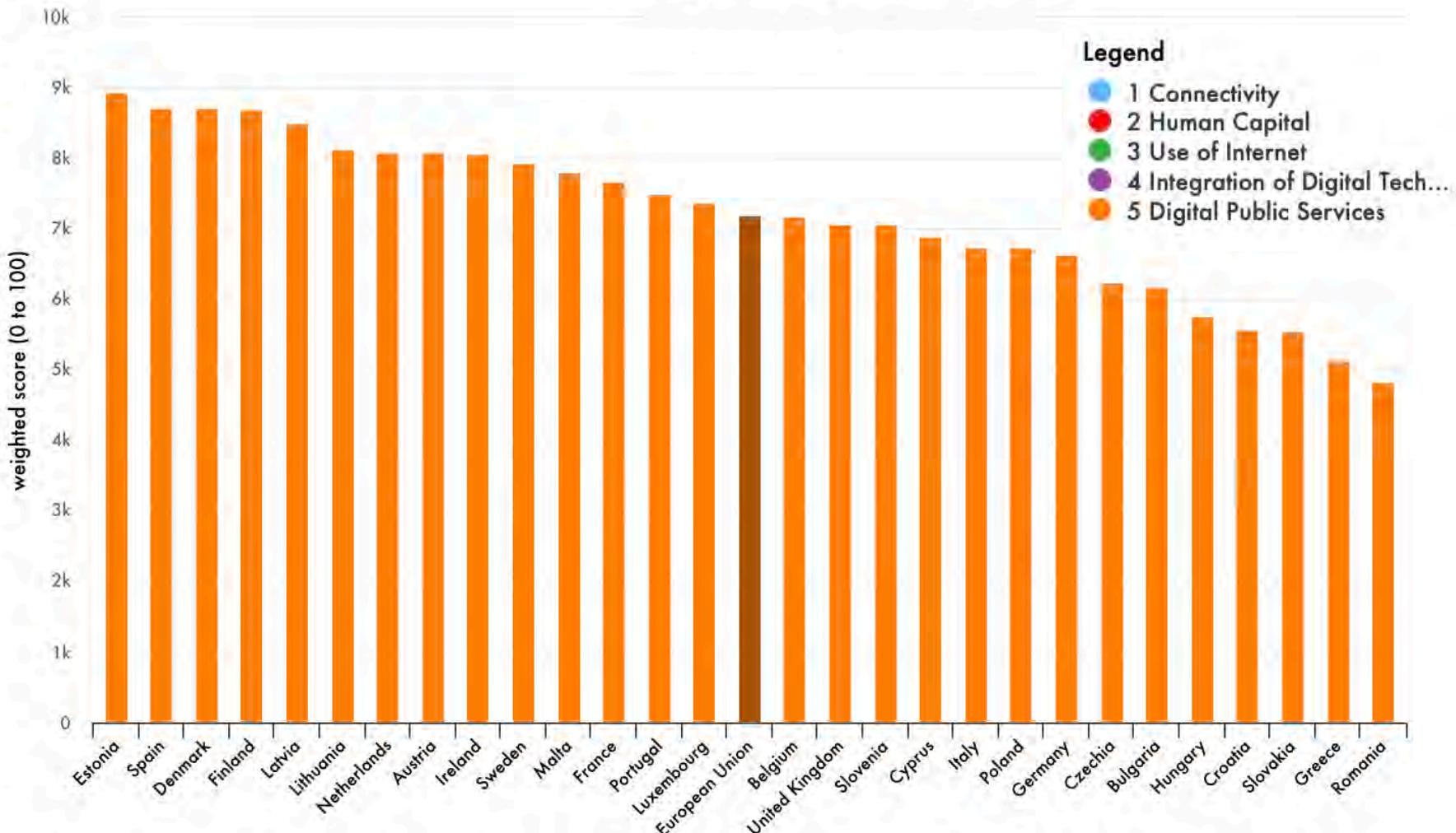
The Digital Economy and Society Index ranks countries based on 5 parameters; Connectivity, Human Capital, Internet Usage, Integration of Digital Technology and Digital Public Services. (Retrieved from the Digital Agenda Scoreboard 2020-06-11) <https://ec.europa.eu/digital-single-market/en/desi>

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Networked Readiness Index

The Networked Readiness Index measures how successful 148 economies are at applying Information and Communication Technologies (ICT) to boost competitiveness and wellbeing.



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Global Information Technology Report 2016

Report Highlights

Networked Readiness Index

Country / Economy Profiles: Select an Economy

Networked Readiness Dataset (xls)

Infographics and Shareables

Blogs and Opinions

Press Releases

Preface

Acknowledgments

Foreword

Executive Summary

Part 1 Innovating in the Digital Economy

How to Read the Country/Economy Profiles

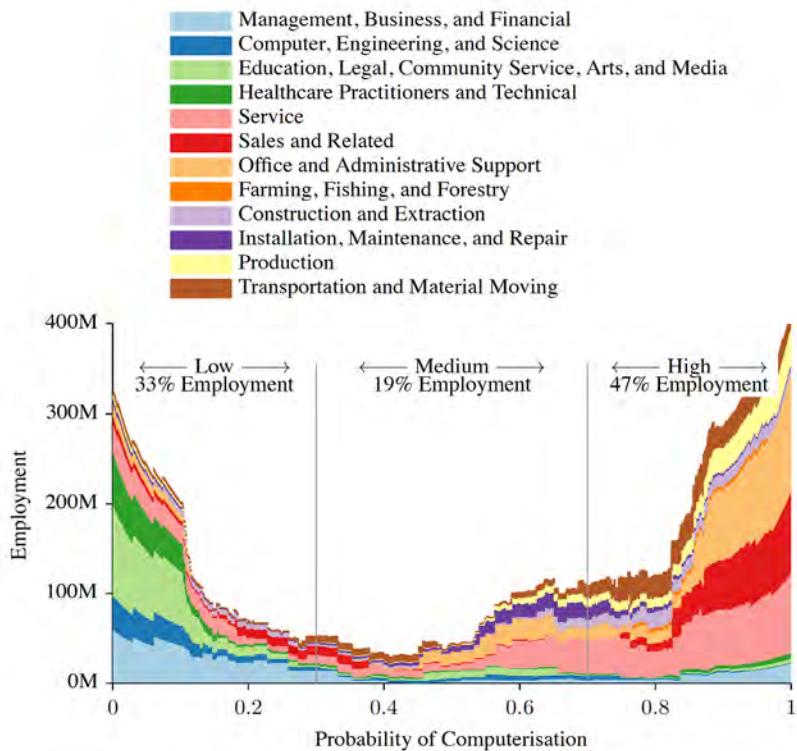
Select Index Component: 5.02 Quality of math and science education

In your country, how do you assess the quality of math and science education? [1 = extremely poor—among the worst in the world; 7 = excellent—among the best in the world]

Rank	Economy	Info	Value	Distance from best
1	Singapore	(1)	6.4	██████████
2	Finland	(1)	6.1	██████████
3	Belgium	(1)	6.0	██████████
4	Switzerland	(1)	5.9	██████████
5	Qatar	(1)	5.7	██████████
6	Lebanon	(1)	5.6	██████████
7	Netherlands	(1)	5.5	██████████
8	Hong Kong SAR	(1)	5.5	██████████
...				
41	Italy	(1)	4.6	██████
42	Bahrain	(1)	4.6	██████
43	Sweden	(1)	4.5	██████
44	United States	(1)	4.5	██████
45	Portugal	(1)	4.5	██████
46	United Kingdom	(1)	4.4	██████
47	Armenia	(1)	4.4	██████

Digitaliseringen tar jobben från oss...

- Digitalisering, automatisering, robotisering



Frey, C. B., Osborne M. A. (2013). *The Future Of Employment: How Susceptible Are Jobs To Computerisation?*



Fölster, S. (2014). *Vartannat jobb automatiseras inom 20 år – utmaningar för Sverige.*

The job context of the "hour-glass economy"

- For every 10 middle-skilled jobs that disappeared between 1996-2008 the replacement jobs in:

UK: 4.5 high-skilled and 5.5 low-skilled

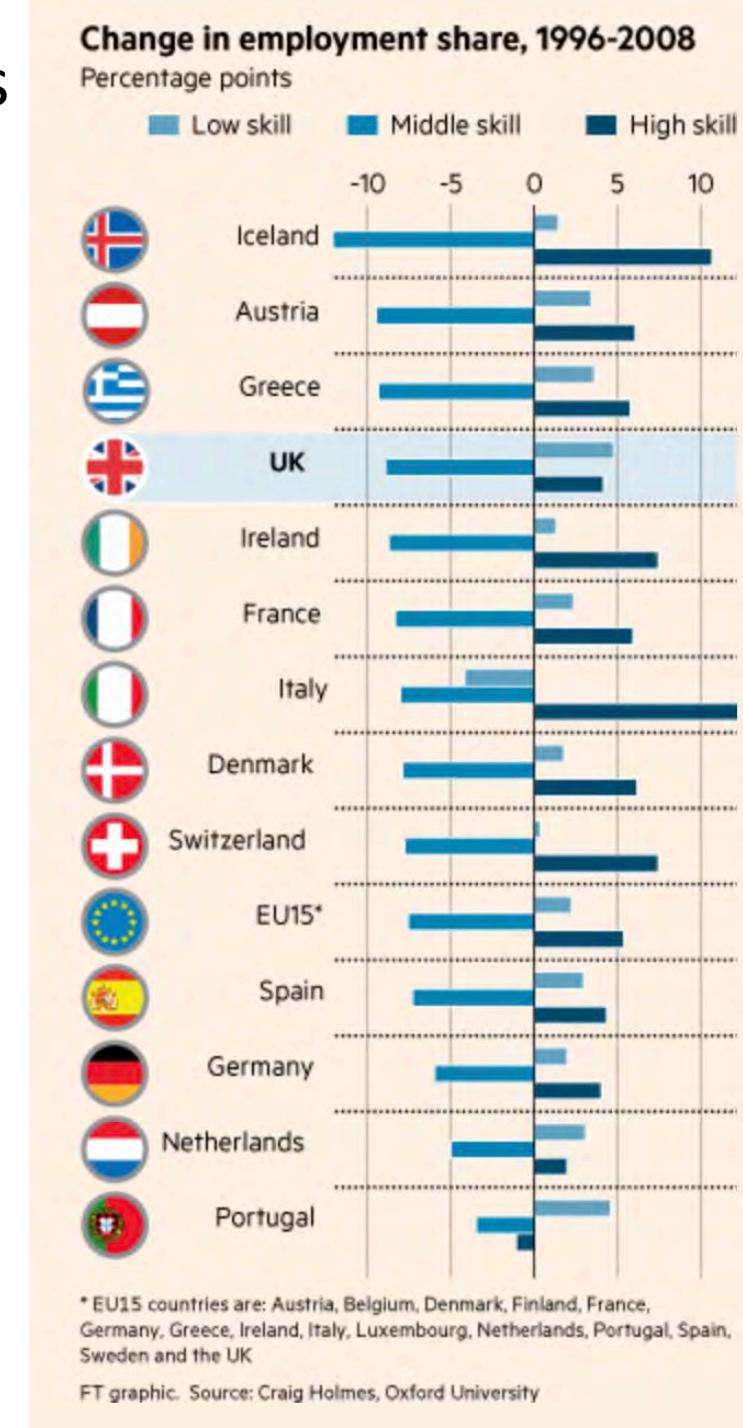
Ireland: 8 high-skilled and 2 low-skilled

France: 7 high-skilled and 3 low-skilled

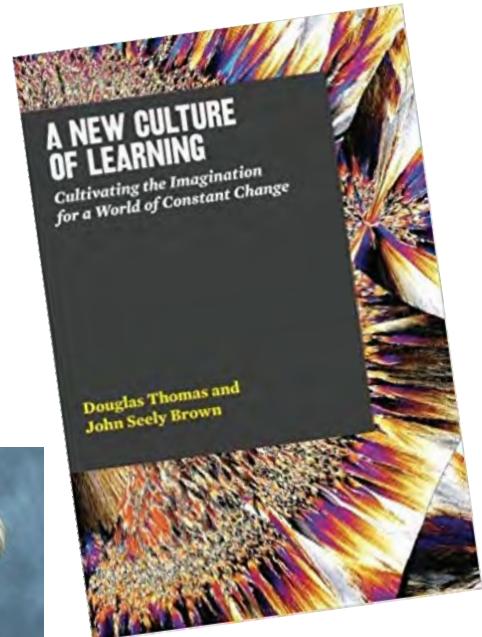
Germany: 7 high-skilled and 3 low-skilled

Portugal: 0 high-skilled and 10 low-skilled

Reference: Holmes C. & Mayhew K. (2012) *The changing shape of the UK job market and its implications for the bottom half earners*. Resolution foundation commission on living standards and S. O'Connor: *UK economy shows shift to low skilled jobs, research finds*, Financial Times 19 January 2015



- “The half-life of a learned skill is 5-years” – this means that much of what you learned 10 years ago is obsolete and half of what you learned 5 years ago is irrelevant.”



Douglas Thomas and John Seely Brown, A
New Culture of Learning: Cultivating the
Imagination for a World of Constant Change,
2011



COMMONWEALTH CLUB OF NORTHERN CALIFORNIA

June 16, 2011

A NEW CULTURE of LEARNING

READING

- Harry Potter
- Kids Crafting a whole new world

CREATIVITY

- John Seely Brown
- Douglas Thomas
- Scott Stratten

Change is Escalating... How do you constantly create new ideas?

WHAT IF?

How can we help people unfreeze + be imaginative?

How CAN WE HELP MAKE A DIFFERENCE?

Context is changing fast...

- YouTube
- Video into creative material
- Complex class
- PBL

Years!

- 555

WE NEED TO UNDERSTAND THE TOOLS TO RESHAPE CONTEXTS

CONTENT IS MEANINGLESS OUTSIDE OF CONTEXT

- Who do you trust? No one.
- It's just one more context.
- Wikipedia
- Students

Model of Inquiry is more important than a right answer.

- Alternatives @ MIT
- In a changing world, we need the power of the question, not the answer.
- Design is similar in the focus on questions, making, testing, failure, critique.

FUNDAMENTAL MISTAKE IN EDUCATION

- Directing what's interesting to them from the classroom
- School - sports activities
- Play + Open-ended exploration = GONE
- Working for ALL THE RIGHT CHECKMARKS
- Alternatives @ MIT
- Students
- Open study, peer-based learning, open communities, experience, adventure
- They all got something different out of the class
- The teacher
- Glass boundary
- Educator makes the environment

GOING CLASS@ USC

- From Lecture to self-driven experiences
- 20% vs 80%
- To self-driven experiences
- Educators feel like we HAVE to lecture/explain to do our jobs.
- It's hard work, not to teach them and let them learn.
- Mentors, Peers, Coaches
- Export, Technologies, Experiments, Generar
- Failure, Critique, Helpfulness, Mars it bleed
- What if?
- That this balance over time is the key to success
- Required people to put themselves out there
- You will?
- The brave teachers
- Powerful tools + resources that can help us work together
- No criticism, Mars it bleed
- In a world of rapid change, judgement comes into desire play

Design a Freeing Nation

- Does it work?
- Don't assume... and again... and again...
- How do we know what's valid? Real?
- How can I/we help people unfreeze + be imaginative?
- What if?
- That this balance over time is the key to success
- Required people to put themselves out there
- You will?
- The brave teachers
- Powerful tools + resources that can help us work together
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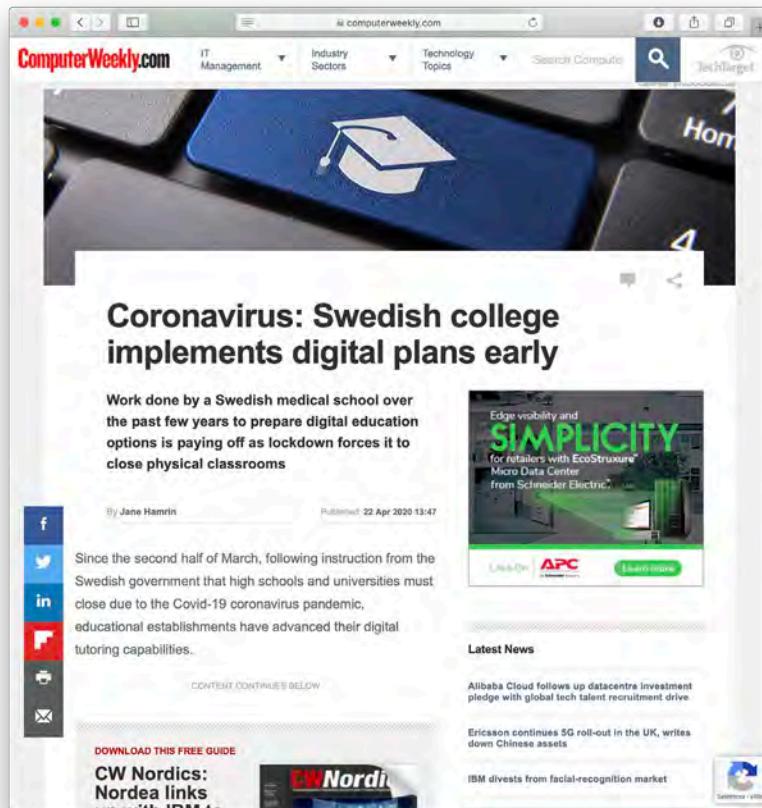
Project-based Learning

- Kid entrepreneurship
- The voice, the math stuff
- We learn ABOUT BEING not how to BE

How CAN WE HELP MAKE A DIFFERENCE?

- How do we engage our culture in changing how teachers think about kids.
- Pressure on schools to show the desire for the change
- Change the discourse + shift away from blame
- Shift from "prep for job" to "prep for life"
- Not our schools as broken, but our theory of learning
- Use both sides of the brain

Corona snabbar upp digitaliseringen



- Ökad effektivitet och produktivitet
- Digital utbildning och examination
- Framtidens lokalbehov
- Hållbar utveckling
- Problem:
 - Hemarbetsmiljö
 - Missbruksproblem
 - Maskning
 - Det "nya normala"

Tack!

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