

Katerina Bohle Carbonell - Maastricht University



Jobs by 2030

- Augmented reality architects
- Alternative currency banker
- seed capitalist

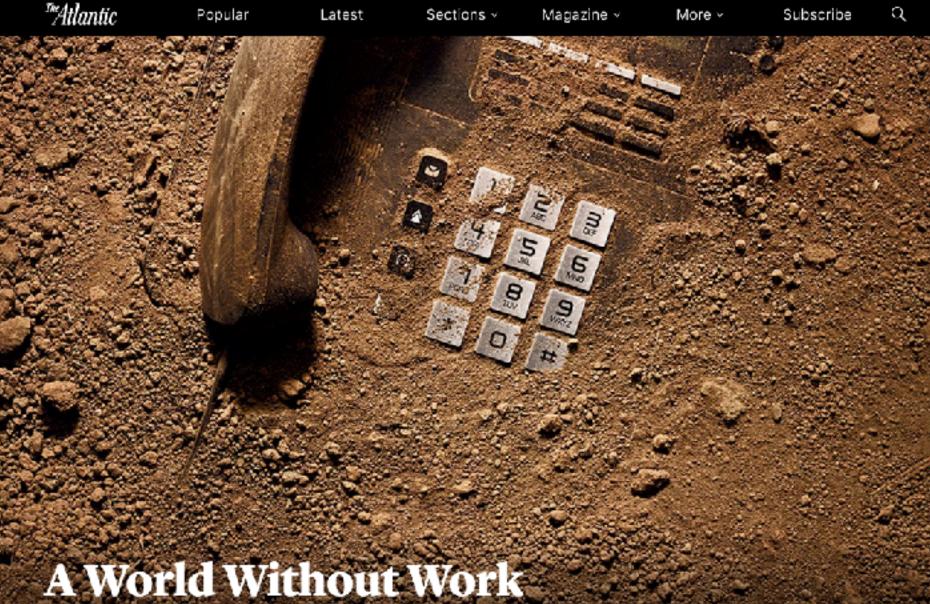
Jobs by

2020

- Global system architects
- Urban Agriculturalists

- Drone dispatcher
- Body part & limb maker
- Geoengineers
- Amnesia surgeons

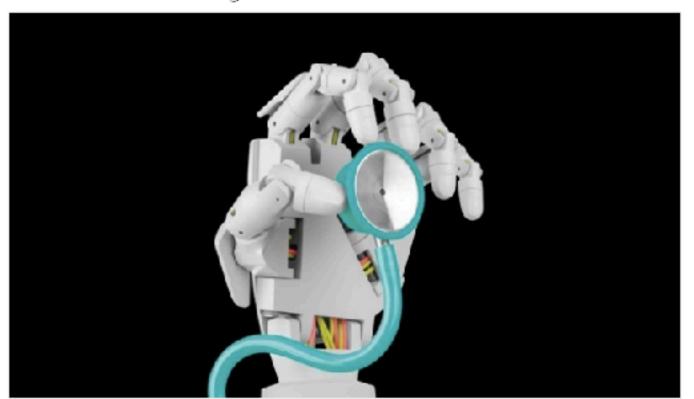
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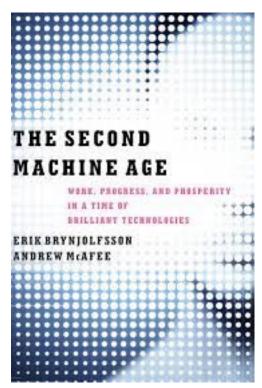


For centuries, experts have predicted that machines would make workers obsolete. That moment may finally be arriving. Could that be a good thing?

The Robot Will See You Now

IBM's Watson—the same machine that beat Ken Jennings at Jeopardy—is now churning through case histories at Memorial Sloan-Kettering, learning to make diagnoses and treatment recommendations. This is one in a series of developments suggesting that technology may be about to disrupt health care in the same way it has disrupted so many other industries. Are doctors necessary? Just how far might the automation of medicine go?



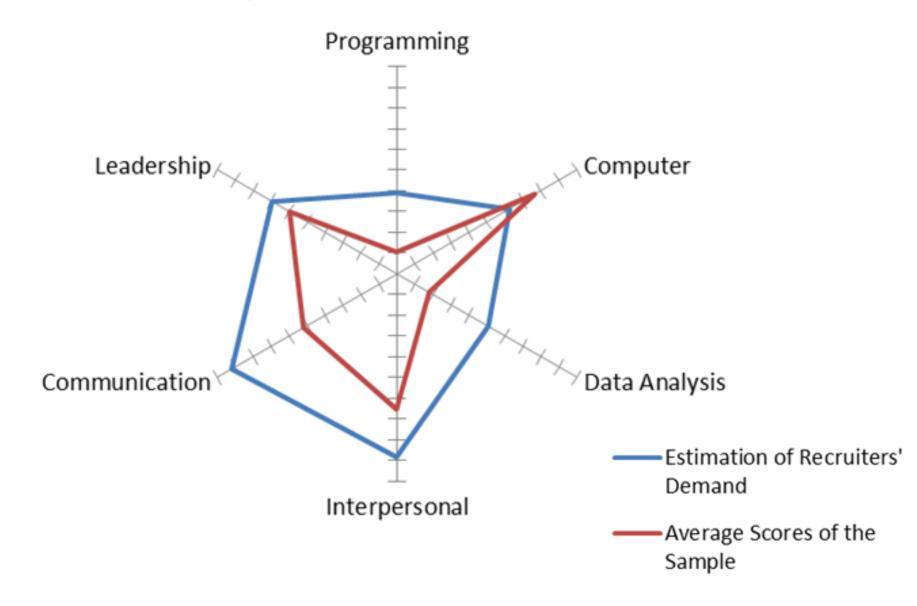


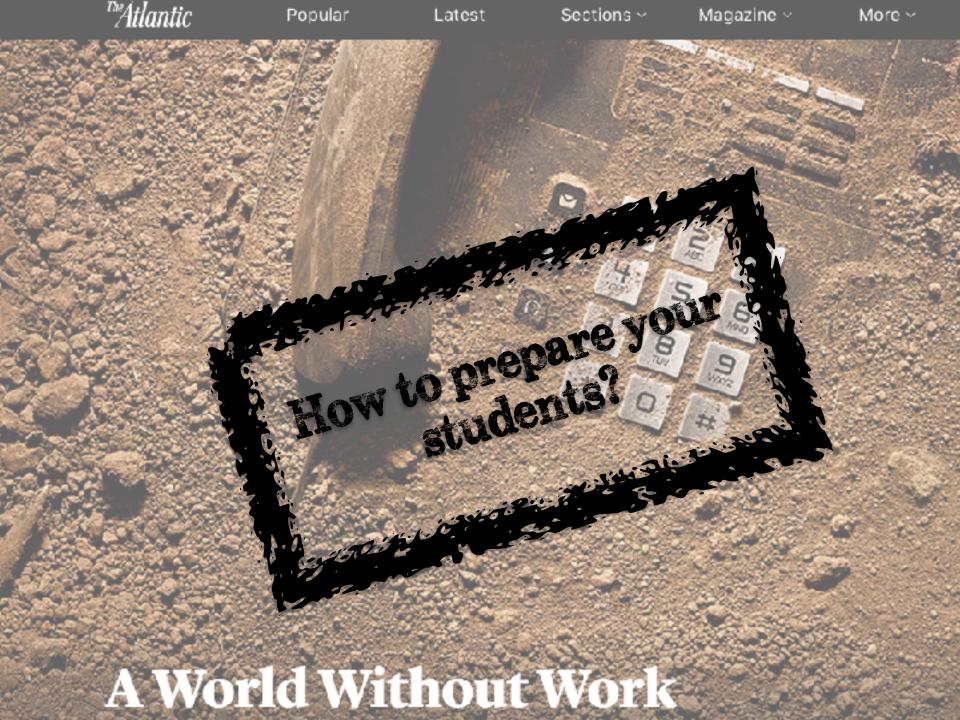
Future of Business Schools



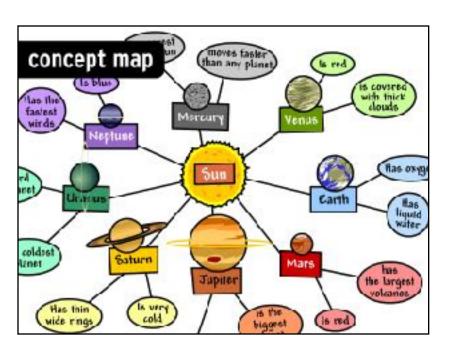
Using Data Scraping to Evaluate Business School Graduates' Skills and their Relevance for the Future

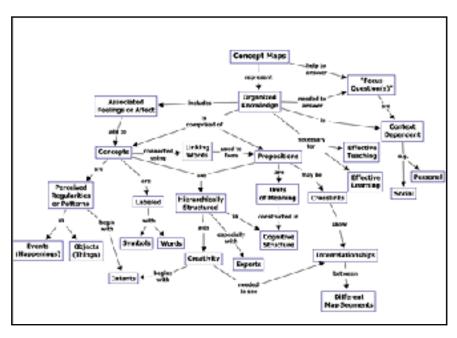
Skills Mismatch





Learning to Learn: Exploration and connection





hierarchical structure

supports: efficiency & quick decision

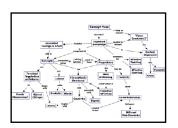
messy structure

supports: adaption & innovation

Learning to Learn: Exploration and connection



How to?



Create Foundations

- Self-study
- Lectures

Stimulate exploration

- Case studies
- Problem-based learning
- Project-based learning

Schedule time to handle errors

finding the source of error

Bohle Carbonell et al. (2014). How experts deal with novel situations

Learning to Learn: Reflection



Investigating the sources of performance

Learning to Learn: Reflection



How to?

Judgment-of-Learning

- Fill out/create diagrams
- Create new content from just-learned content

Can be

- used as checklist
- done immediately or delayed

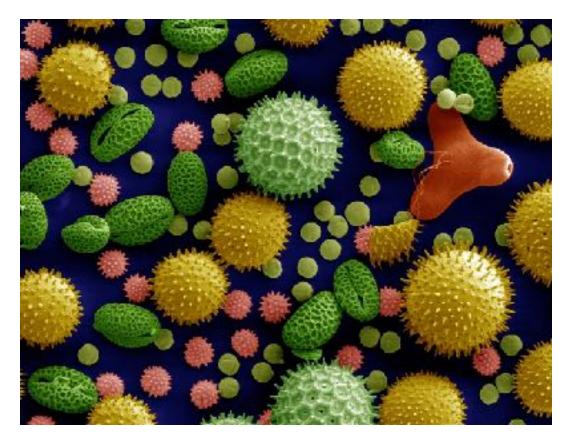
Feedback + Checklist + Reflection

- Performance feedback (e.g., grade)
- To-do's to check understanding
- To-do's with hints about solution

Grohnert, T., Meuwissen, R. H. G., & Gijselaers, W. H. (2017). Minimizing Professional's overconfidence by Maximizing Regulation of Learning. PhD Dissertation, Maastricht Learning: Feedback, Checklists, and Reflection

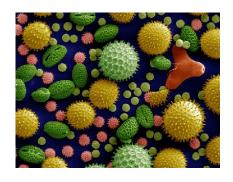
van Loon, M. (2014). Fostering Monitoring and University

Learning to Learn: Task Variety



Learning to adapt

Learning to Learn: Task Variety



How to?

Requirements

- Foundation available to students
- Scaffolding

Introduce Novelty

- Change the context
- Change the available resources

van Merrienboer (2013). Perspectives on problem solving and instruction

Barnett & Koslowski (2002). Adaptive expertise: Effects of type of experience and the level of theoretical understanding it generates



Measuring progress

Standard Measures

- Exams
- Projects
- Survey
 - Adaptive Expertise Inventory

New Methods

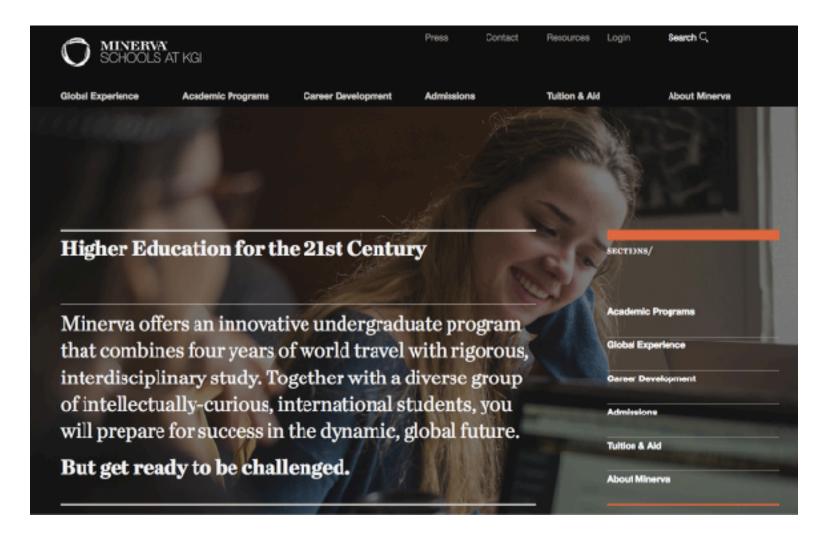
- knack.it Scores
- LinkedIn skill recommendation by peers & teachers
- Cognitive maps (mind maps)







- Reflection: students 'own' their learning process
- Exploration: Projects with external partners
- Task variety: alternate between acquisition & application of knowledge



- Reflection: Meetings with instructors
- Exploration: Discussion based classes, quick feedback
- Task variety: interdisciplinary study & diverse and small student body



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