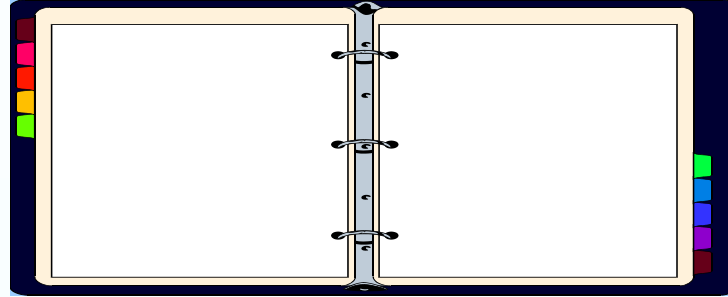




2017: the Year of Living Dangerously
The Evolving Tertiary Education Landscape
and its Impact on Quality Assurance

Jamil Salmi, CHEA – 1 February 2017

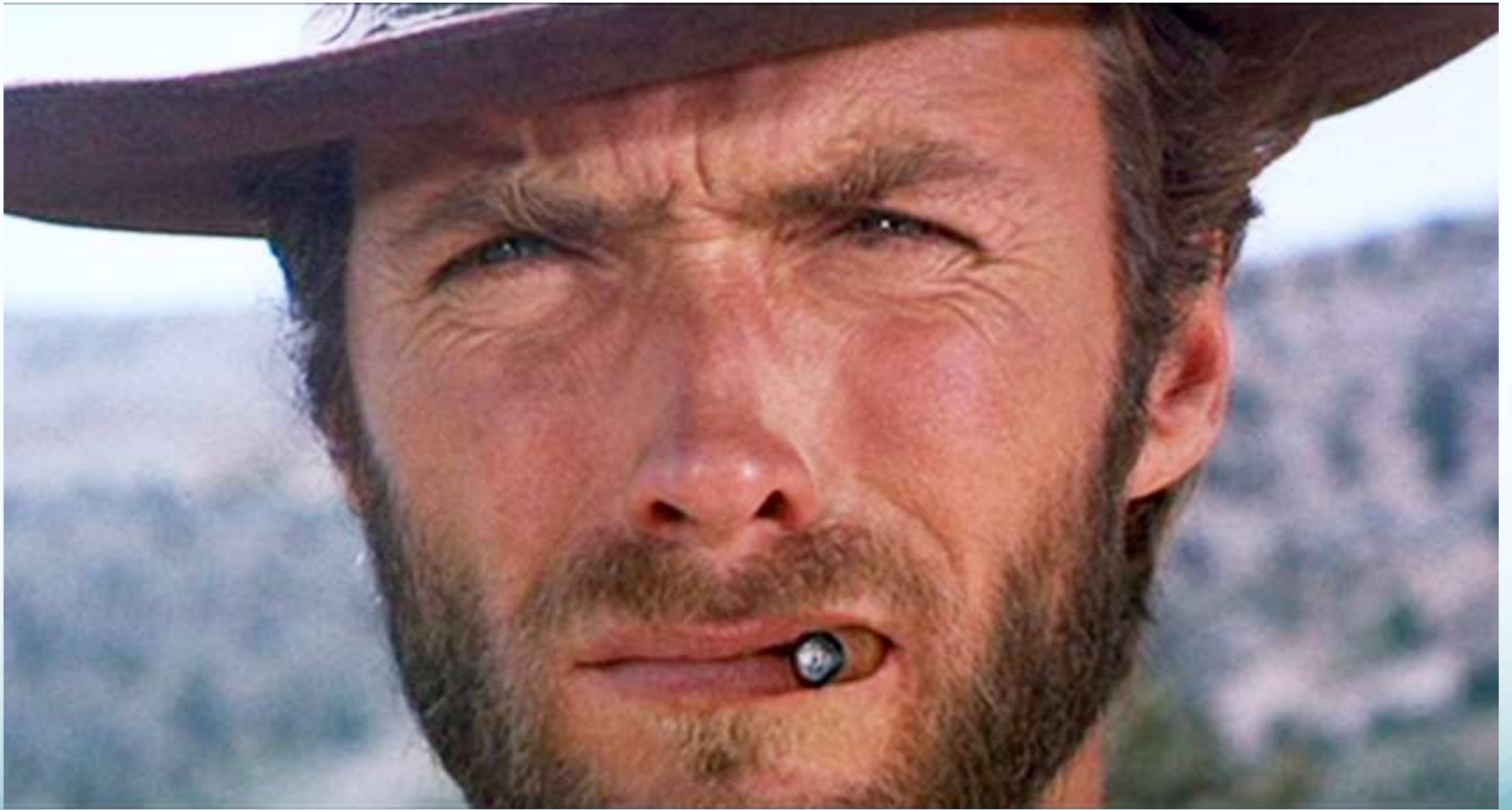
Outline of the presentation



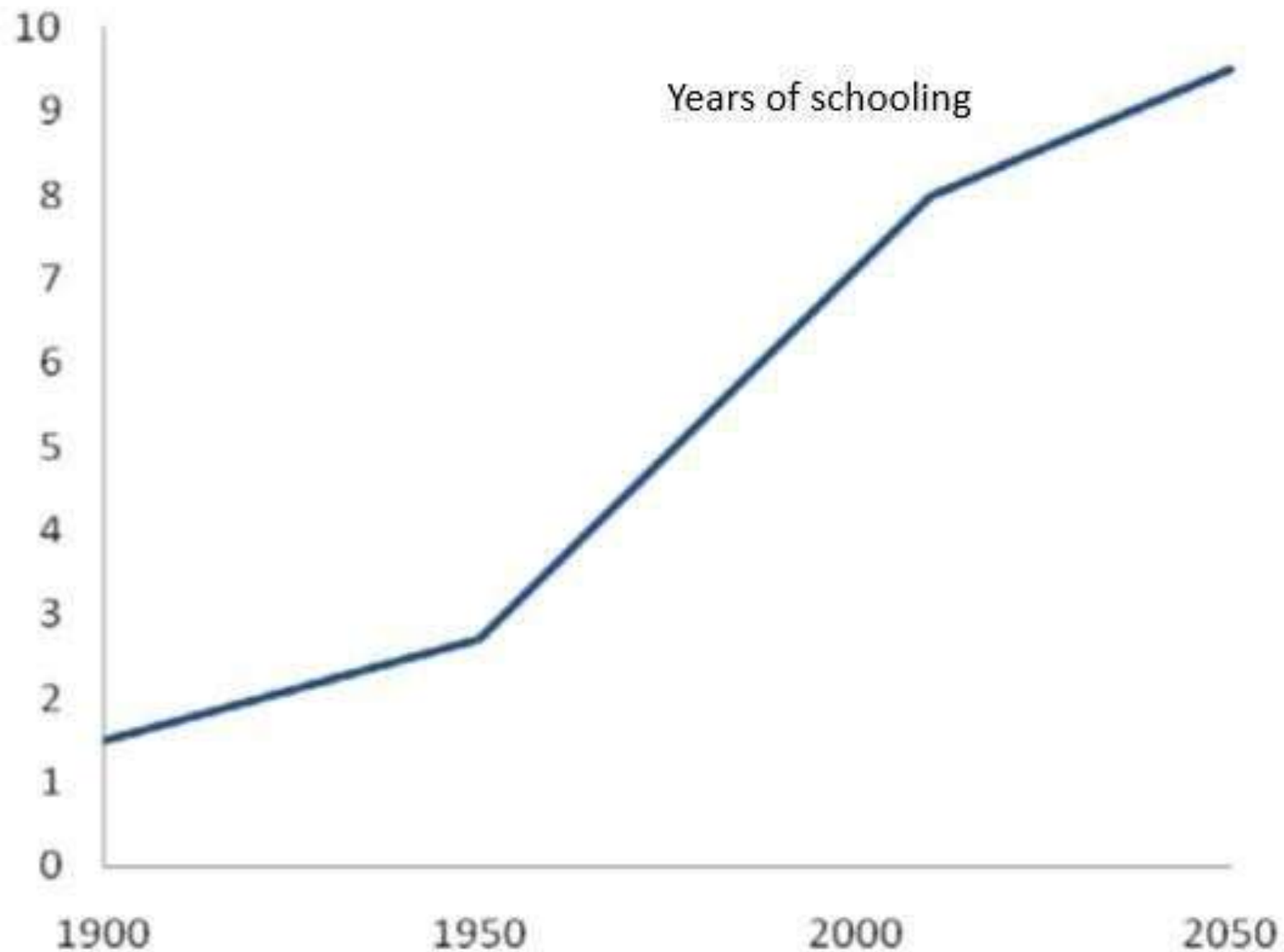
- The Changing Tertiary Education Landscape
- The Evolving Quality Assurance Scene

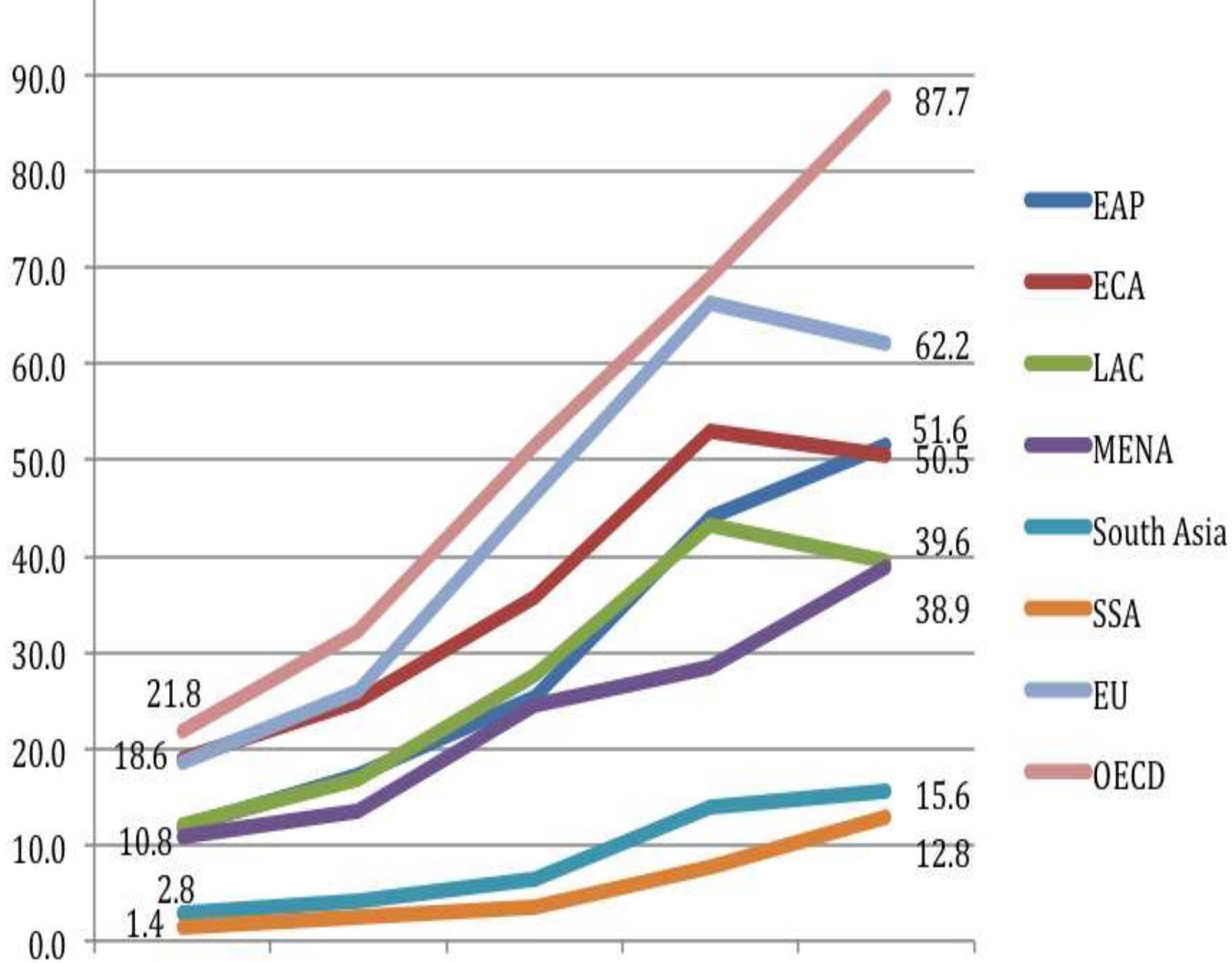


THE GOOD THE BAD AND THE UGLY



The Education Revolution









Tertiary Education at the heart of economic growth

- Nordic countries
- Lisbon agenda of the EU
- Asian tigers / dragons



Singapore in 2016



Contribution of NUS

- Institute of Solar Energy Institute
 - 3.5 billion dollar sector
- Asian Logistics Institute
 - 166 billion dollar sector

Tertiary Education at the heart of economic growth

- Nordic countries
- Lisbon agenda of the EU
- Asian tigers / dragons
- Excellence initiatives

The future of jobs (labor markets in the digital era)



International New York Times



DRC
Hubo

2

KRIST

CHRY

The future of jobs (labor markets in the digital era)

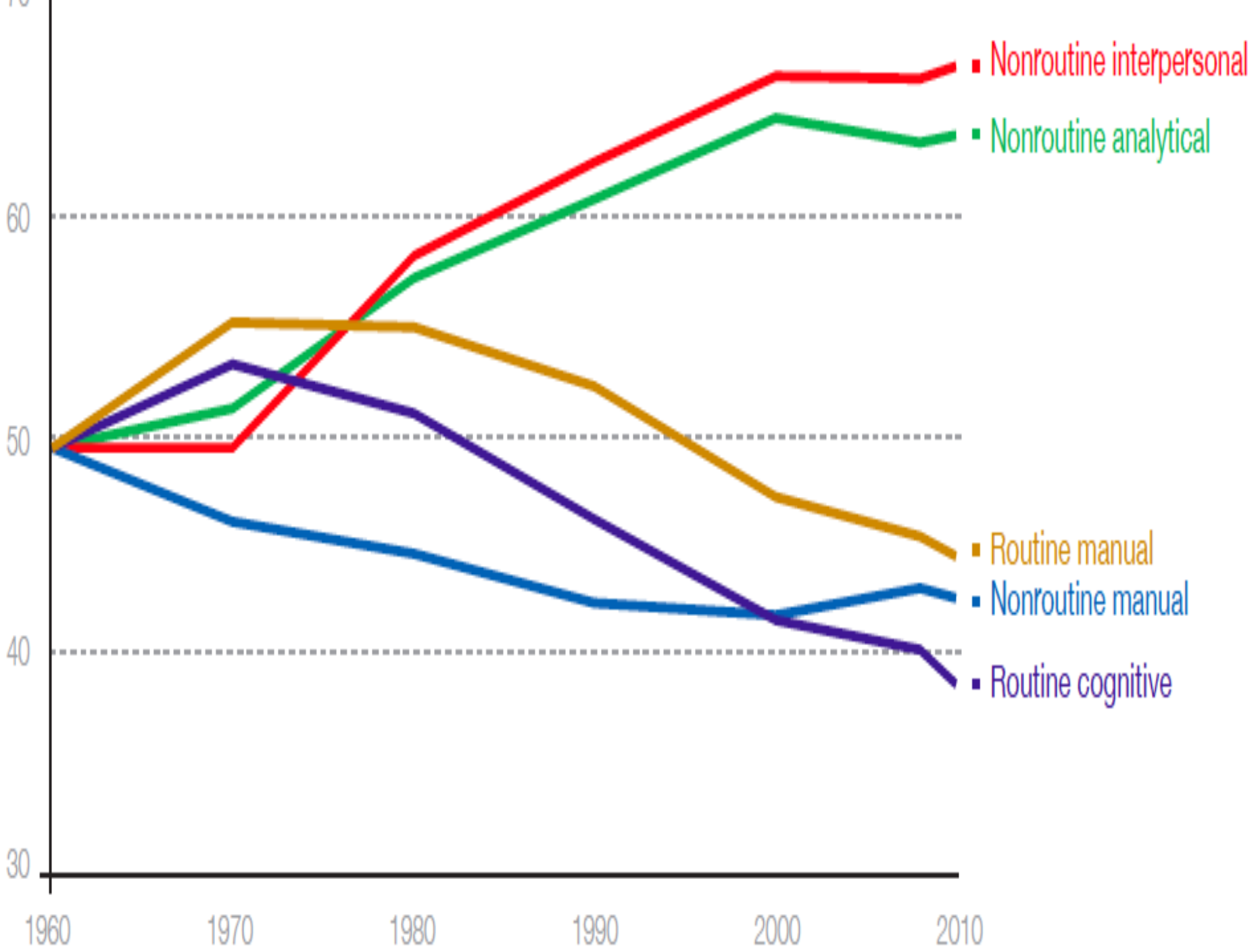
- Jobs that disappear (700 professions)
- New jobs

Jobs that did not exist 10 years ago

- App developer
- Social media manager / YouTube content creator
- Digital risk manager
- Smart city / smart building architect
- Driver-less car engineer
- Cloud computing specialist
- Big data analyst
- Sustainability manager
- Drone operator

The future of jobs (labor markets in the digital era)

- Jobs that disappear (700 professions)
- New jobs
- Jobs that are undergoing transformation (47%)



21st-Century Skills

Foundational Literacies

How students apply core skills to everyday tasks



1. Literacy



2. Numeracy



3. Scientific literacy



4. ICT literacy



5. Financial literacy



6. Cultural and civic literacy

Competencies

How students approach complex challenges



7. Critical thinking/
problem-solving



8. Creativity



9. Communication



10. Collaboration

Character Qualities

How students approach their changing environment



11. Curiosity



12. Initiative



13. Persistence/
grit



14. Adaptability



15. Leadership



16. Social and cultural awareness

Lifelong Learning

Sustainable Development Goals (SDGs)



Tertiary Education & the SDGs

- Preparation of skilled professionals
- Knowledge generation, adaptation & diffusion
- Institutional development & capacity building
- Values & citizenship skills

SDGs	Preparation of Skilled Professionals	Knowledge Generation, Adaptation & Diffusion	Institutional Development & Capacity Building	Values & Citizenship Skills
1. Poverty Ended	X	X	X	X
2. Sustainable Agriculture to End Hunger	X	X	X	
3. Healthy Lives	X	X	X	X
4. Inclusive & Equitable Quality Education	X	X	X	X
5. Achieve Gender Equality	X		X	X
6. Water & Sanitation for All	X	X	X	X
7. Sustainable Energy	X	X	X	
8. Inclusive & Sustainable Economic Growth	X	X	X	
9. Resilient Infrastructure	X	X	X	
10. Reduced Inequality	X			X
11. Sustainable Cities	X	X	X	X
12. Sustainable Consumption & Production		X		X
13. Managed Climate Change		X	X	X
14. Sustainable Marine Resources	X	X	X	X
15. Sustainable Use of Terrestrial Systems	X	X	X	X
16. Peaceful & Inclusive Societies		X	X	X
17. Global Partnership for Sustainable Development			X	X

Penang University of Science's Typhidot



Typhidot

- Diagnosis of typhus
- Instead of 5 days with electricity and cold chain, 55 minutes
- New equation for universities:
number of lives saved instead of
dollars earned

Innovative practices

- Curriculum
- Pedagogy
- New university models

Curricular innovations

- Experiential learning
- Multi-disciplinary programs
 - Amsterdam University College
 - U of Queensland School of Chemistry
- Competency-based learning
 - Western Governors' University
- Internationalization

Innovative pedagogical approaches

- Peer learning
 - Clickers / Flipped classroom
- Project and design based learning
 - Olin, Roskilde, Maastricht
 - Simulations
 - Serious games
- Self-learning using AI-based software



Learning Café, NUS



Learning Studio





IE window





Olin College of Engineering

- Designed-based learning (as teams)
- No academic departments / no tenure
- Integration of engineering, entrepreneurships and humanities

The “new” university

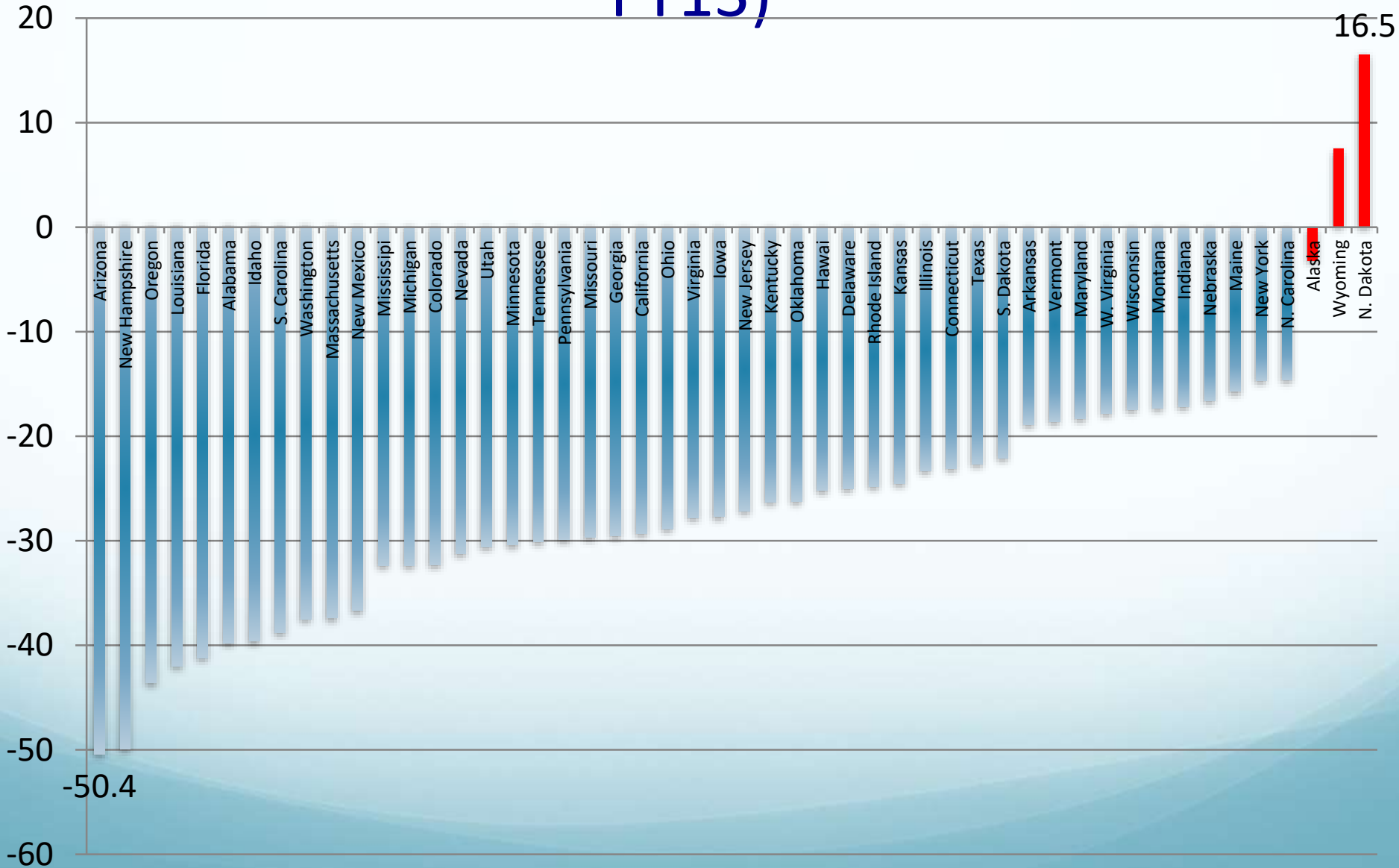
- Moocs
- Boot camps
- Minerva (online face-to-face elite U)
- Ecole 42 (free computing school with no teachers, no degrees and no high school requirements)



Reduced public funding

- The facts

% change in per student funding (FY08 – FY13)



Reduced public funding

- The facts
- Many universities are now public only in name

Growing inequality

- Financial barrier (1 trillion student debt)
- Dropouts (55%)
- Access to lifelong learning to reskill



Violence on campus

- Mexico, Nigeria, Pakistan, etc.
- Gun violence on US campuses
 - Massacres and attacks
 - “Right to carry arms” in Texas

Repression

- Turkey etc.
- Threats to free movement of academics and students
 - Trump's travel ban
 - Visa restrictions
- Threats to academic freedom
- Threats to scientific progress
- Threats to innovation

Corruption

- Degree mills (esp. online)
- Accreditation mills
- Fake academic journals and conferences
- Plagiarism
- Fraud at exams
 - Cambodia, etc.
 - Online
 - Cultural rejection (Chile, India, Mexico)



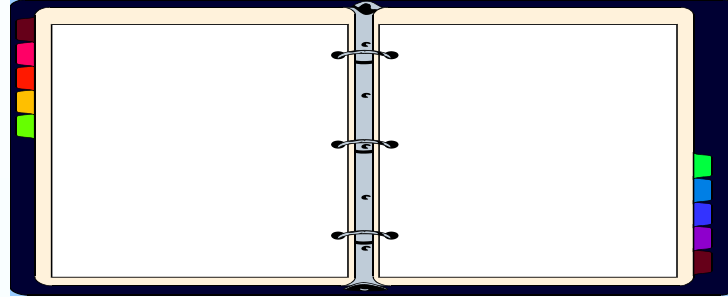
Brexit(s): the end of rationality

- Leaving the EU will save the UK millions of pounds
- President Bush: “I don’t care what the facts say”
- Trump administration (Mr. Spicer):
 - “We would like to present alternative facts”
 - “Sometimes we can disagree with the facts.”
- Untruths and post-truth

Brexit(s)

- Rejection of scientific evidence
 - Evolution
 - Climate change
 - Vaccines
 - Historical events and facts
- Academia has lost credibility, convincing power and respect

Outline of the presentation



- The Changing Tertiary Education Landscape
- **The Evolving Quality Assurance Scene**

The quiet revolution

- Not controversial
- Almost universal
- Perhaps slow to evolve and adapt?
- Politicization and loss of independence

New forms of accountability

- Student engagement surveys
- Assessment of student learning outcomes
- Labor market observatories
- Rankings
- Benchmarking
- Alternative credentials

Student engagement surveys

- Started in the US (NSSE, SERU)
- Australia, Canada, Germany, Ireland, Netherlands and United Kingdom
- China, South Africa
- Universities in Sub-Saharan Africa (WB)

Assessment of student learning outcomes

- Rich tradition in US
 - ACT Collegiate Assessment of Academic Proficiency (CAAP)
 - ETS Proficiency Profile (EPP)
 - Collegiate Learning Assessment (CLA)
 - Measure of Academic Proficiency and Progress (MAPP)
 - California Critical Thinking Skills Test (CCST)
 - Watson-Glaser Critical Thinking Appraisal
 - Cornell Critical Thinking Tests

Assessment of student learning outcomes (II)

- Australia: Graduate Skills Assessment
- Colombia, Brazil, Mexico, Jordan
- AHELO: 17 countries, generic skills, engineering and economics

Labor market observatories

- Most OECD countries
 - Government agencies
 - Italy: AlmaLaurea
- Latin America
 - Chile “Futuro Laboral”
 - Colombia “Egresados Colombia”

QS TOP UNIVERSITIES

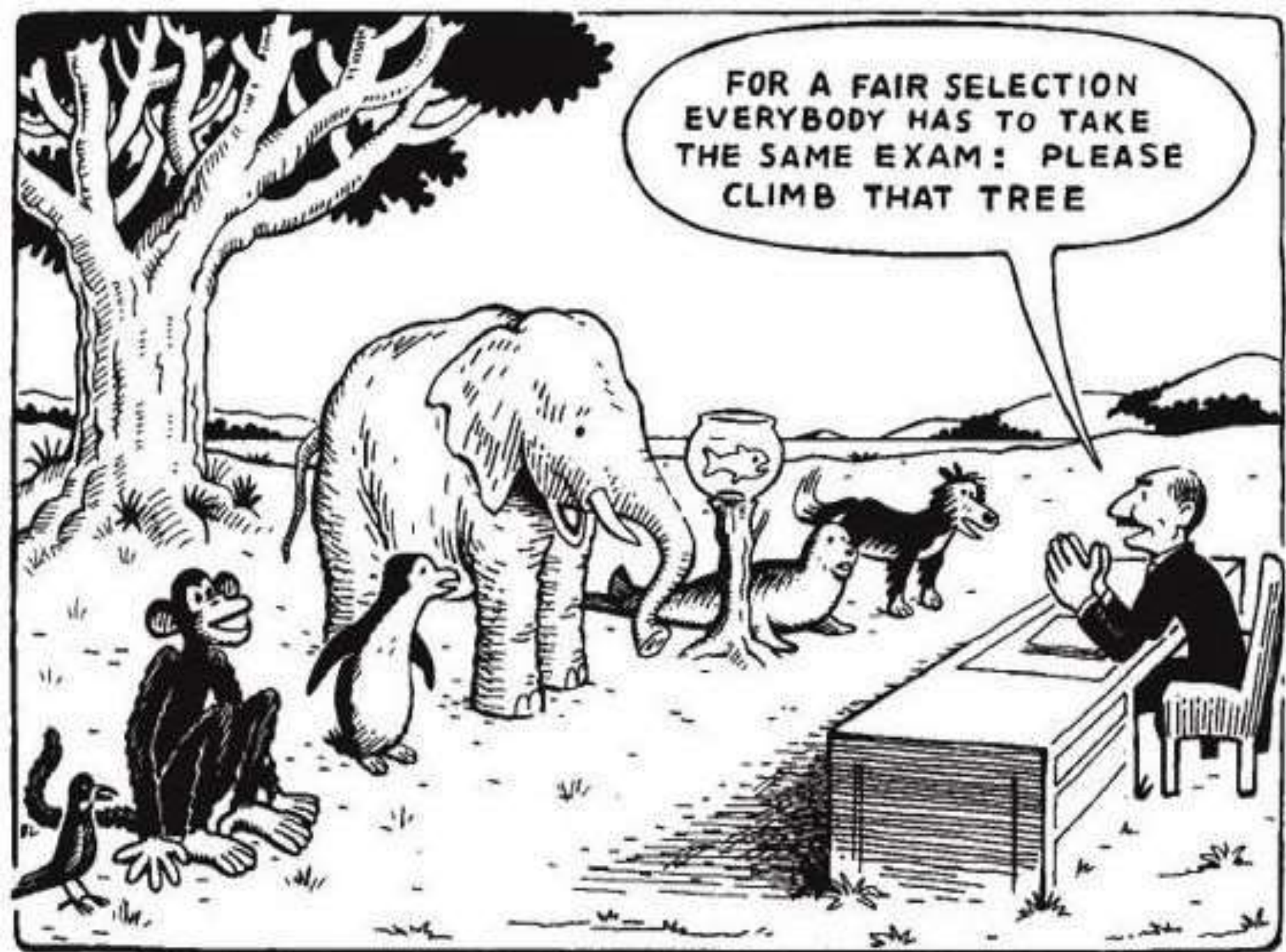
Ranking Web of World Universities

January 10

THE
WORLD
UNIVERSITY
RANKINGS



FOR A FAIR SELECTION
EVERYBODY HAS TO TAKE
THE SAME EXAM: PLEASE
CLIMB THAT TREE



Benchmarking

- Australia: MyUniversity
- Germany: CHE website
- USA
 - College Portrait
 - President Obama's rating system
 - College Abacus

Alternative credentials

- Nanocourses
- Micromasters
- Badges
- Non-college credentials
 - Occupational licenses
 - Industry certifications
 - Vocational certificates

Aspiring Minds

- Indian company administering the AMCAT competency test
- 1.5 million people in 2015
- Now active in China, the Philippines and the Middle East

The Credit Bank of Korea

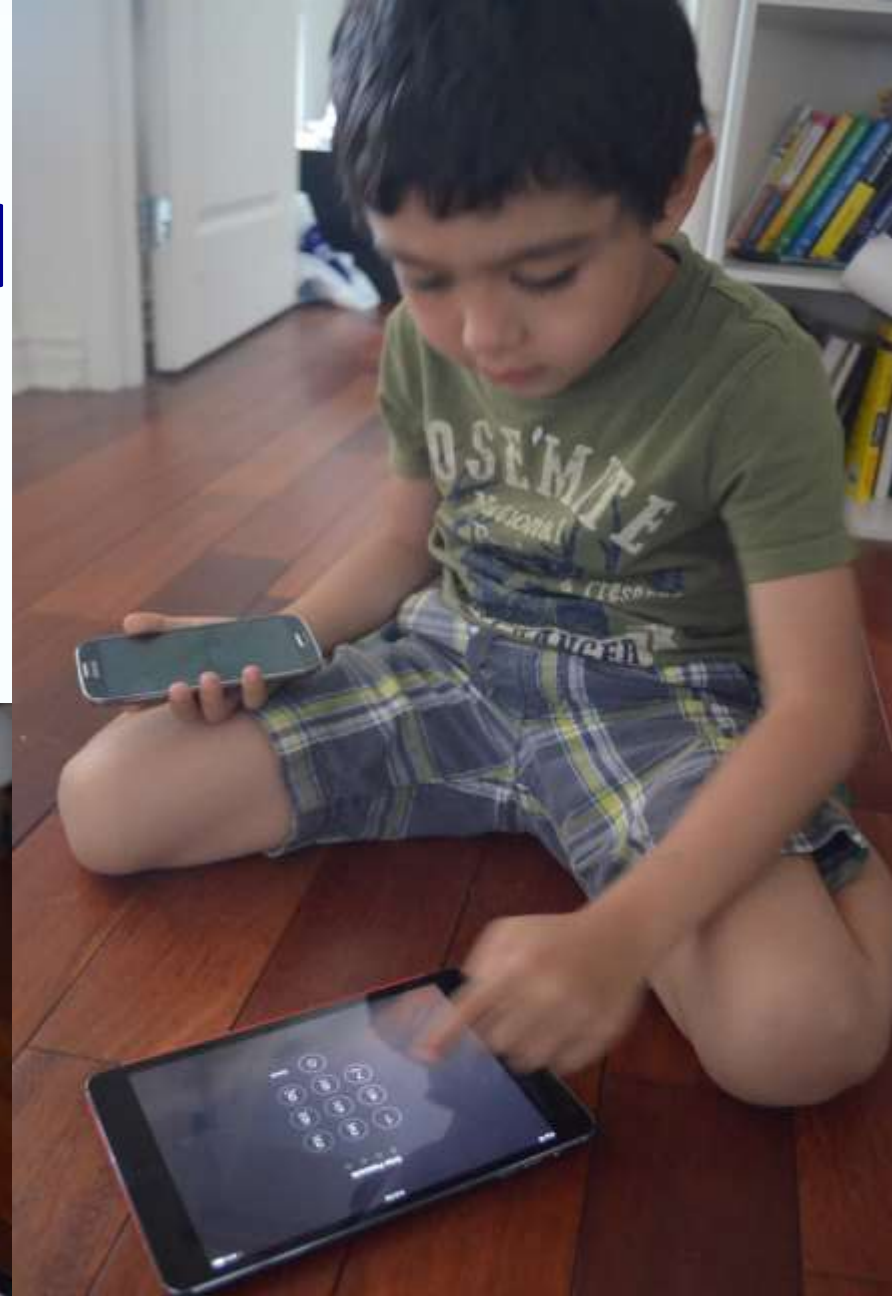
- Open educational system
- Recognition of learning acquired in-school and out-of-school
- Degree granting
- Fully recognized degrees

Graduation ceremony at the Korean Credit Bank



conclusion

Meet my grand



E-Generation



WIKIPEDIA
The Free Encyclopedia







©Edward Galagan

Thriving under disruption

- Innovative dimensions in accreditation criteria
- Inclusion of valid elements of new accountability measures
- Cultivate core values of QA

Innovative features

- Embrace curricular and pedagogical innovations
 - Online education and e-learning
- Focus on outcomes and added value
 - Learning achievement
 - New competencies acquired

Integrate valid elements of new accountability instruments

- Student engagement
- Labor market outcomes
- New credentials
- Can big data help?

Cultivate and strengthen what makes accreditation unique

- Intellectual and institutional independence
- By and for the members
- Flexibility

BETA

Beta mode

- Continuous change and adaptation
- Open mind to accept innovation

Quality and quality assurance: back to the basics

- Understanding and using information
- Critical thinking
- Ethical thinking

McGill University

The 2016 Lorne Trottier public science symposium series

Science and the Media: The challenge of reporting science responsibly

Food for thought

The plural of anecdote is not data

Marc Bekoff

Integrity without knowledge is weak and useless, and knowledge without integrity is dangerous and dreadful.

Samuel Johnson (1759)