



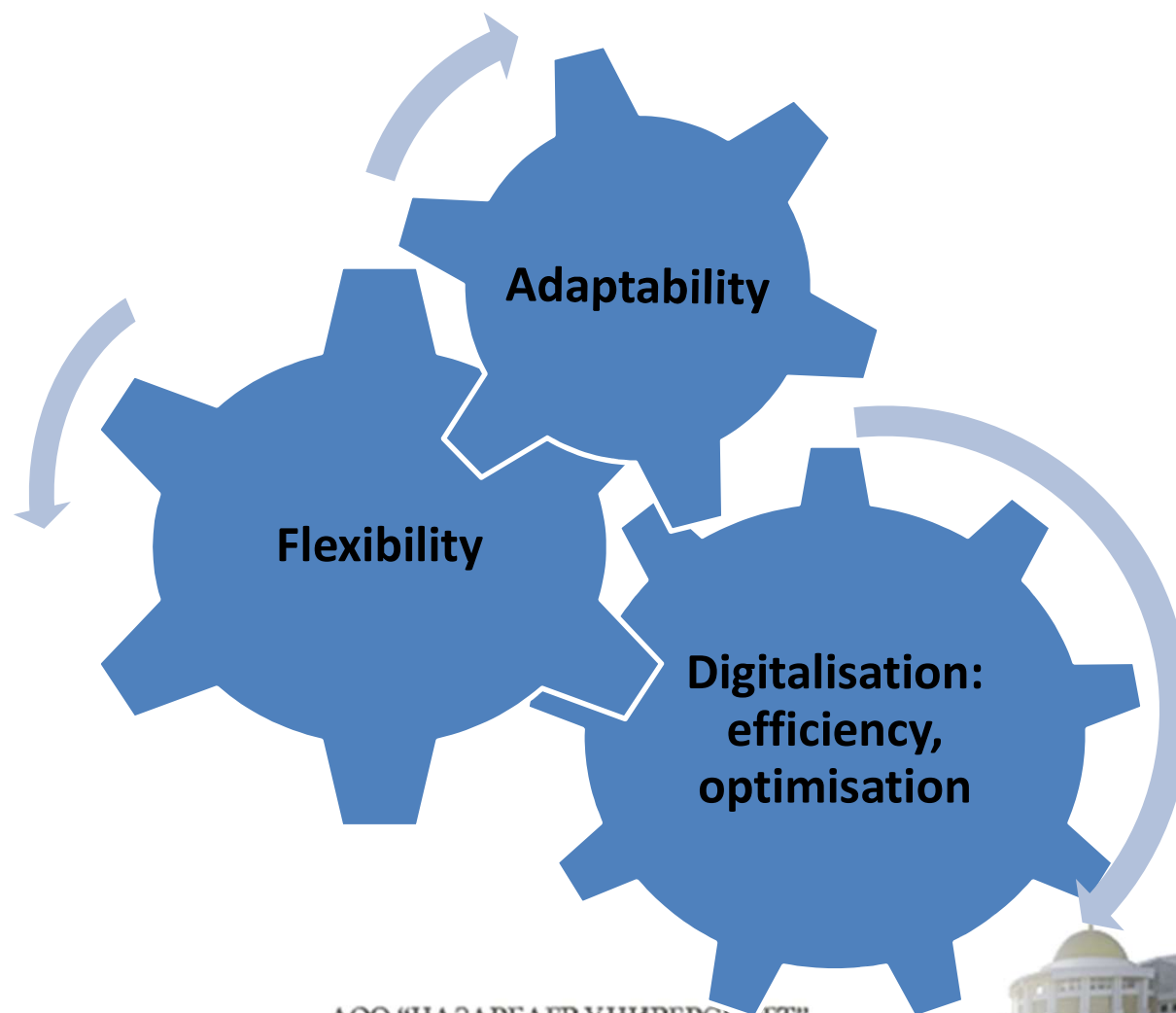
NAZARBAYEV
UNIVERSITY

EHEF 2018

Dr Loretta O'Donnell
Vice Provost Academic Affairs
June, 2018



NU Deans



Create, Innovate, Disrupt

“Whatever can be done, will be done.

The only question is, “Will it be done by you or to you?” but it will be done...”

Tom Friedman, New York Times columnist



Jobs, Jobs, Jobs

STEM salaries are double non-STEM salaries

Shannon Schuyler, PWC, April 2018

In Australia, growth in STEM jobs (14%) is 1.5 times that of non-STEM (9%) since 2005.

Australian Bureau of Statistics

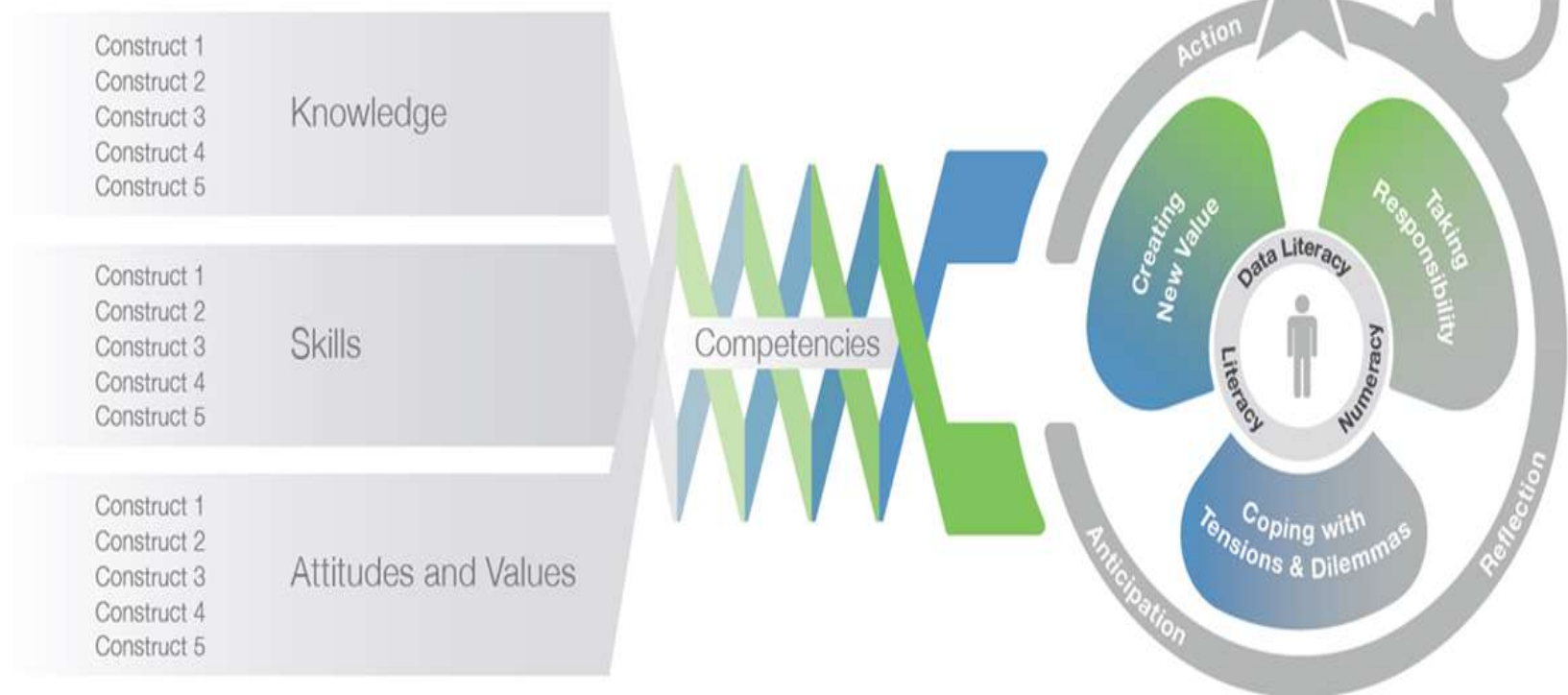


OECD 2030

- Learn, unlearn, relearn...



Learn, unlearn, relearn



7 Education Trends for 2018

Pozo-Olano in Observer, 27 Feb 2018

1. AI and VR – including history, theatre, literature
2. Students take charge of their learning
3. STEM will enjoy top honours – free coding courses for kindergarten students
4. Games and assessments will change the lesson plan – Kahoot and Socrative
5. Blended learning to engage younger students – Arizona State University offers free online courses to 200 countries
6. Online learning platforms will graduate to the next level – software as a service learning management systems such as Google Classroom – 30 million students use Google Docs and Gmail at school
 - Teachers make short videos discussing texts and students choose to read the text or watch the video – or both – increasing pass rates
7. Online platforms will make continuing education elementary – 40% of schools offer online coursework and microcredentials

N.B. VIPKID global teaching service earns \$60 million per month



Silos

- Andrea Schelicher, Director of Education and Skills at OECD

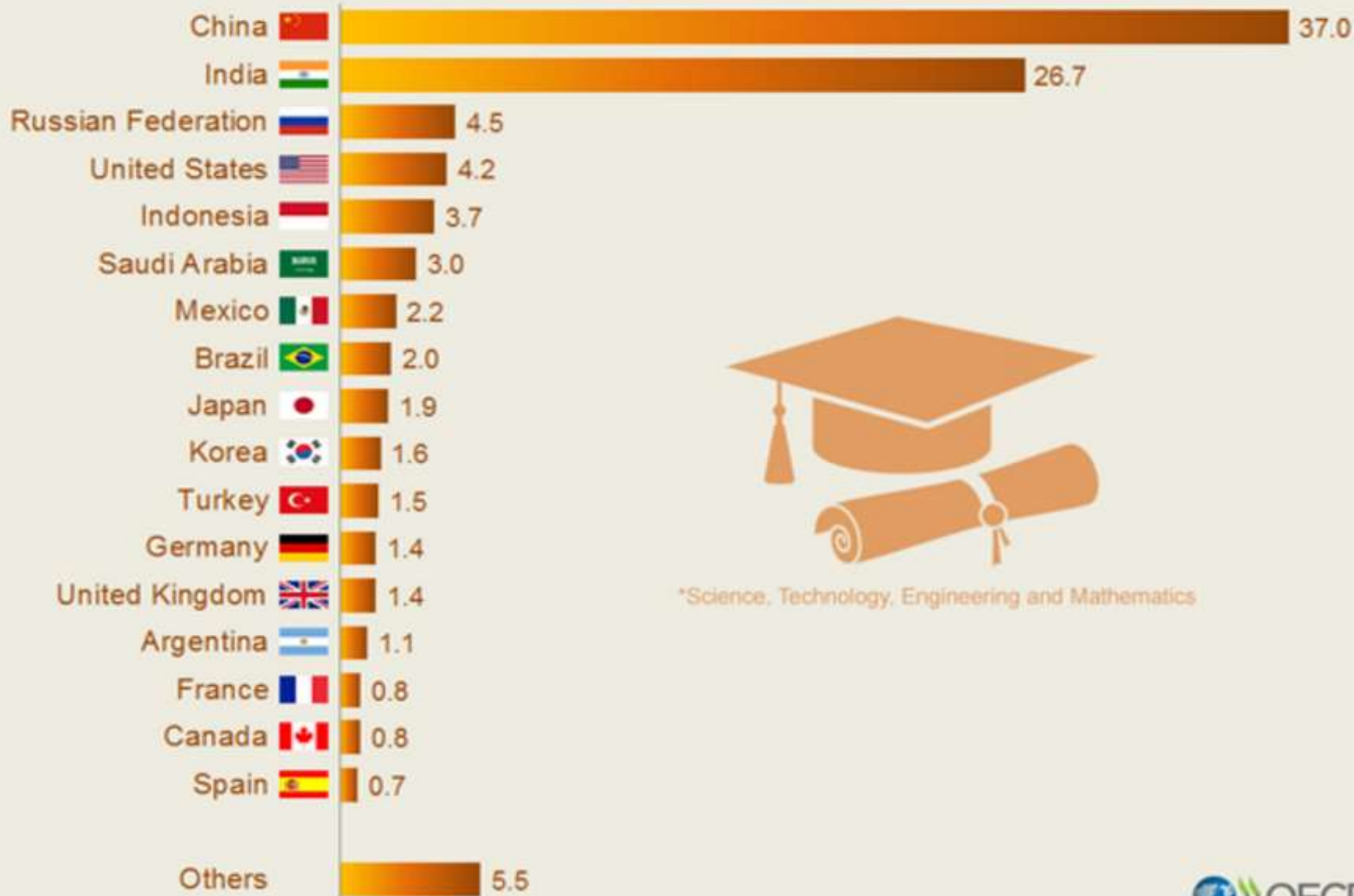
“Knowledge is no longer stacked in silos. What is required is the capacity to think across disciplines, connect ideas and “construct information”. These global competencies will shape our world and the way we work and live together...”





Tomorrow's scientists

Projected share of graduates with STEM* degrees across OECD and G20 countries in 2030



Source: OECD (2015), Education Indicators in Focus N°31 | Illustration: Shutterstock

Future Work Skills 2020

While all six drivers are important in shaping the landscape in which each skill emerges, the color-coding and placement here indicate which drivers have particular relevance to the development of each of the skills.

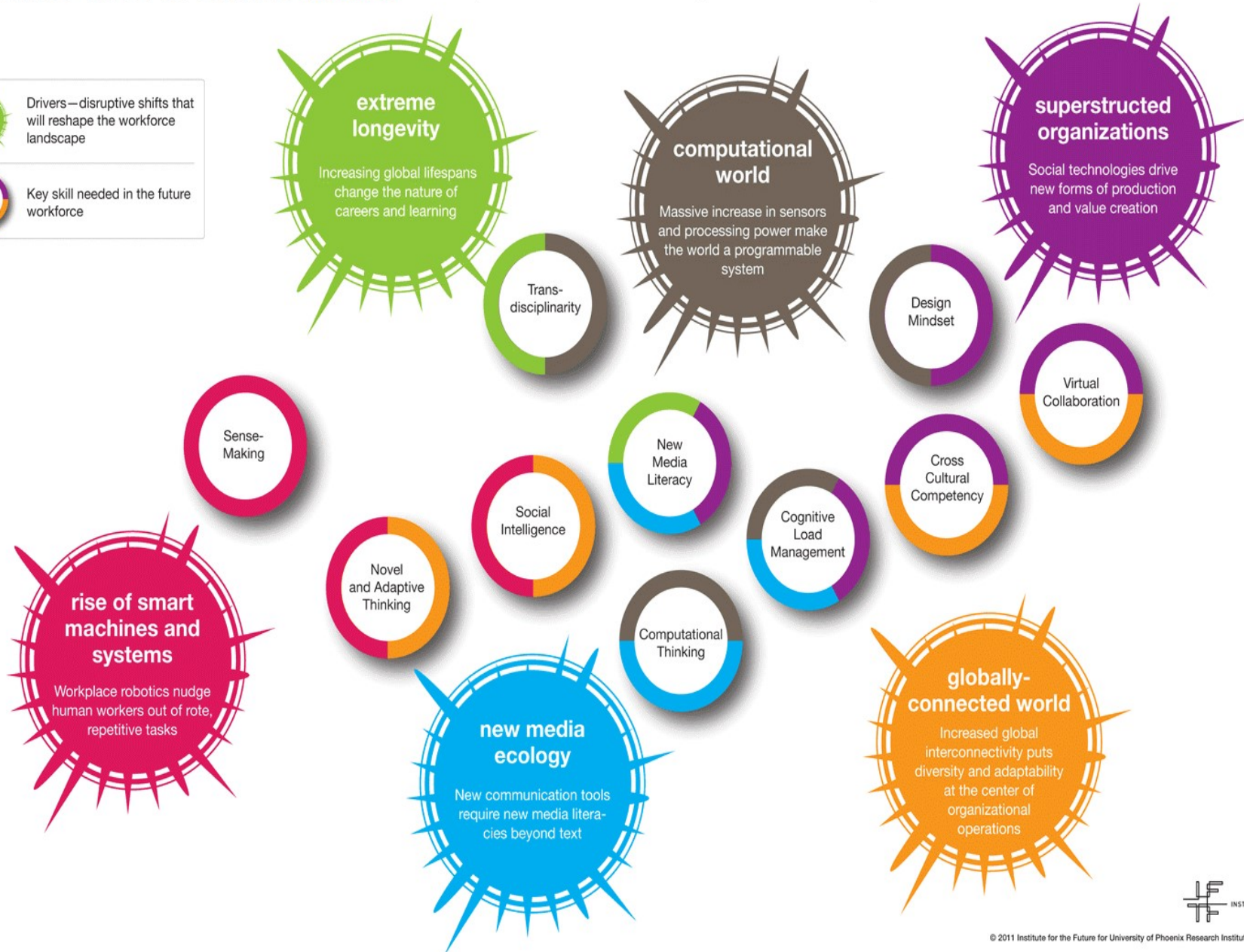
KEY



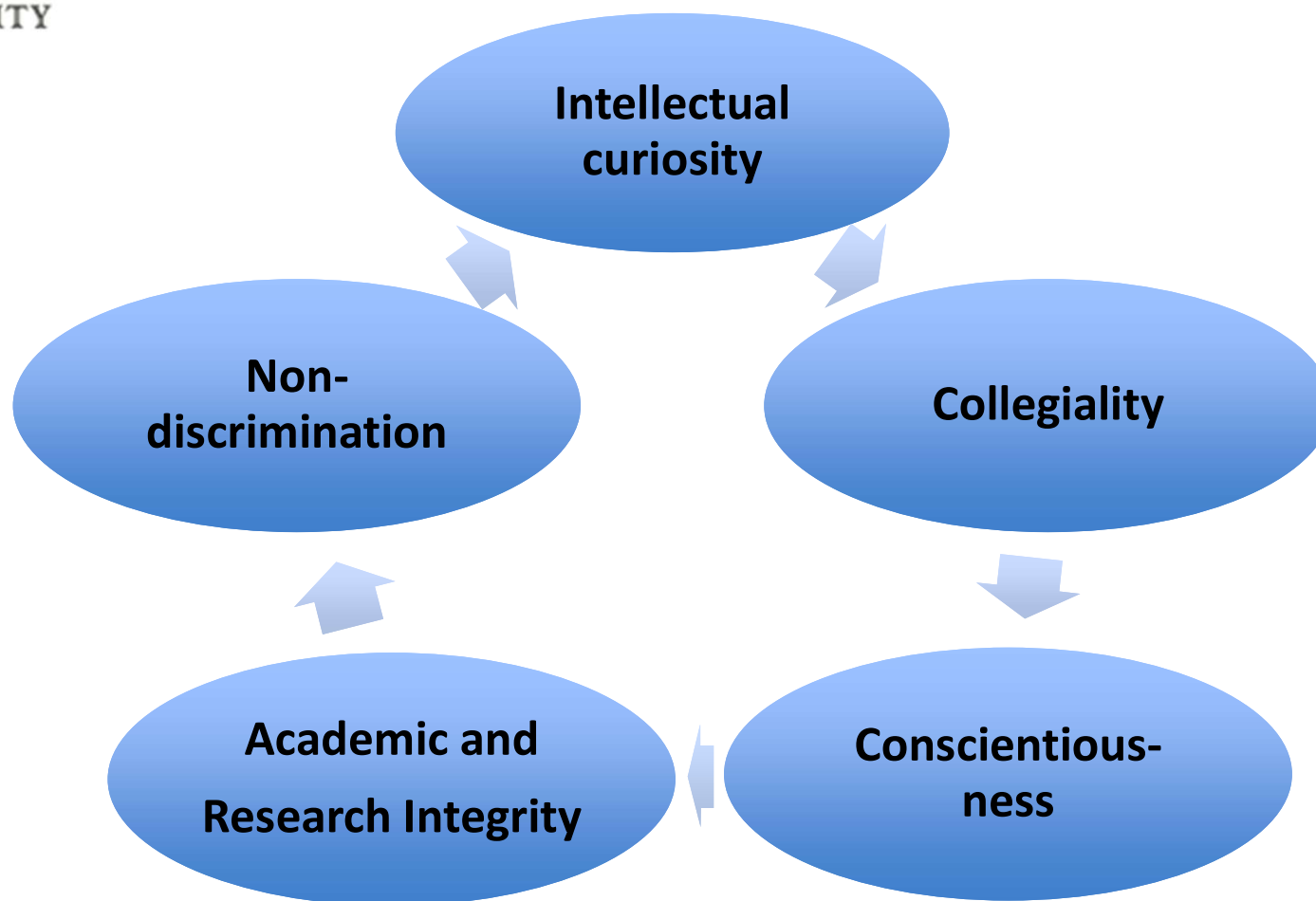
Drivers—disruptive shifts that will reshape the workforce landscape



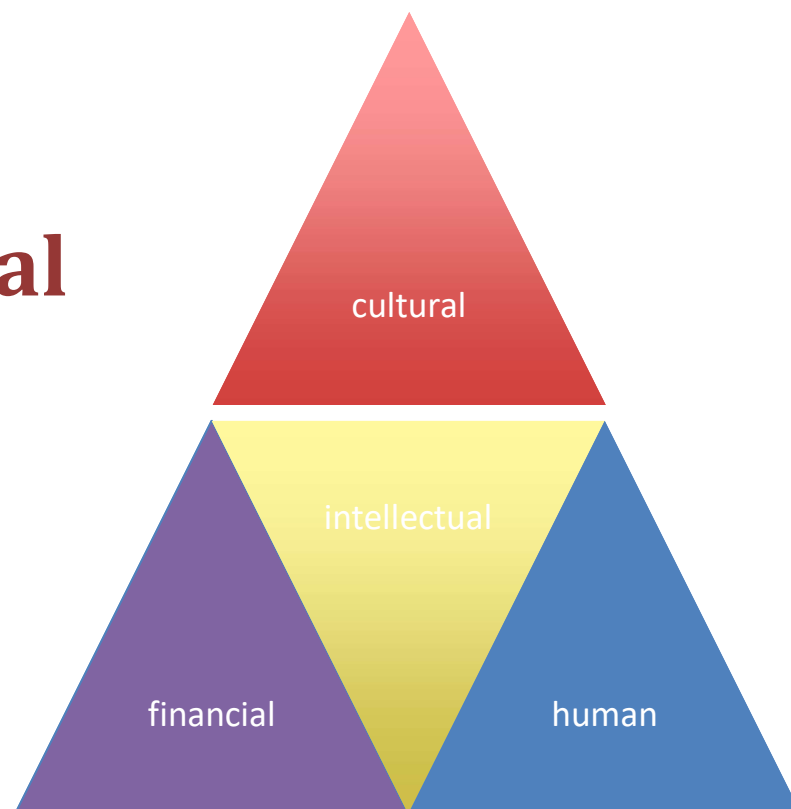
Key skill needed in the future workforce



Universal Values?



Resources: Forms of capital



“Messy, rich networks”

Libraries are a platform for the “messy, rich networks of people and ideas...”

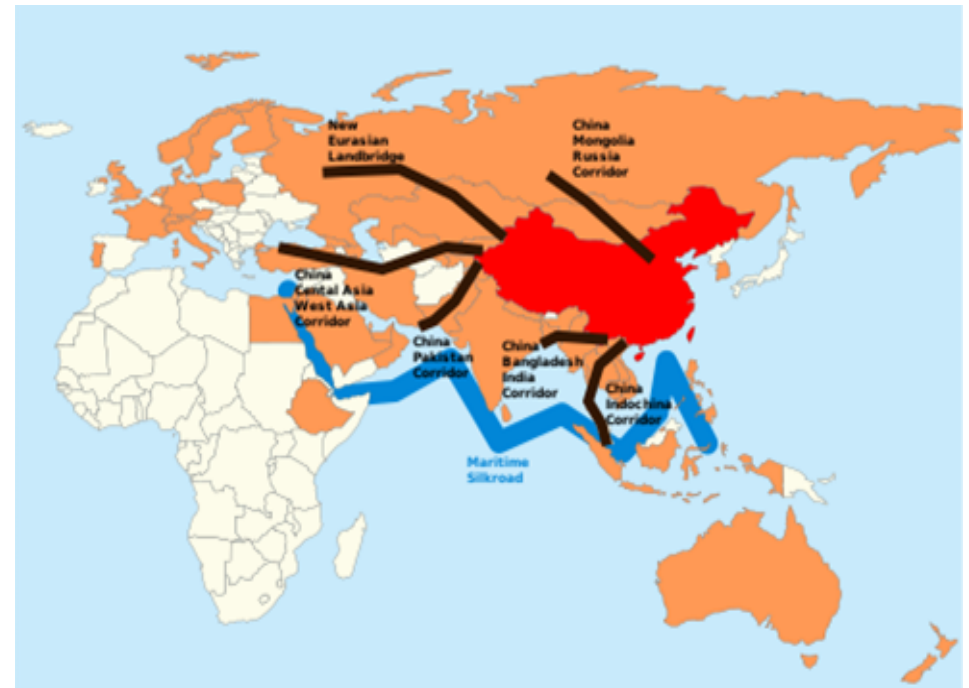
*Weinberger (2012) Library Journal
Cited in Mattern (2014)*



OBOR

Geographically OBOR structured with 7 routes:
6 land corridors and 1 maritime silk road

1. New Eurasian Land Bridge, running from Western China to Western Russia **through Kazakhstan**
2. China–Mongolia–Russia Corridor, running from Northern China to Eastern Russia
3. China– **Central Asia** –West Asia Corridor, running from Western China to Turkey
4. China–Indochina Peninsula Corridor, running from Southern China to Singapore
5. China–Myanmar–Bangladesh–India Corridor, running from Southern China to Myanmar
6. China–Pakistan Corridor, running from South-Western China to Pakistan
7. Maritime Silk Road, running from the Chinese Coast through Singapore to the Mediterranean



Good teachers

Masters students were found to get better grades when they were taught by teachers with higher quality publications.

Times Higher Education

5 June 2018



Selected Resources

21st Century Skills: Learning for the Digital Age [The Forum Network, hosted by the OECD](#)

<https://www.oecd-forum.org/users/50593-oecd/posts/20442-21st-century-skills-learning-for-the-digital-age>

[Andriopoulos, C., & Lewis, M. W. \(2009\) Exploitation-Exploration tensions and organizational ambidexterity: Managing paradoxes of innovation. Organization Science, 20\(4\), 696–717. doi:10.1287/orsc.1080.0406](#)

[Raisch, S., & Birkinshaw, J. \(2008\). Organizational ambidexterity: Antecedents, outcomes, and moderators. Journal of Management, 34\(3\), 375-409. doi:10.1177/0149206308316058](#)

Turner, D. and Crawford, M. Change Power: Capabilities That Drive Corporate Renewal, Allen & Unwin, 1998.

