

Continuity or Disruption?

Aspects of the complex context of teacher education

ATEE Annual Conference 2023.
Budapest

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Agenda - Considerations on Teacher Education contexts



Lack of young teachers

Digital transformation

Higher education demands

AI

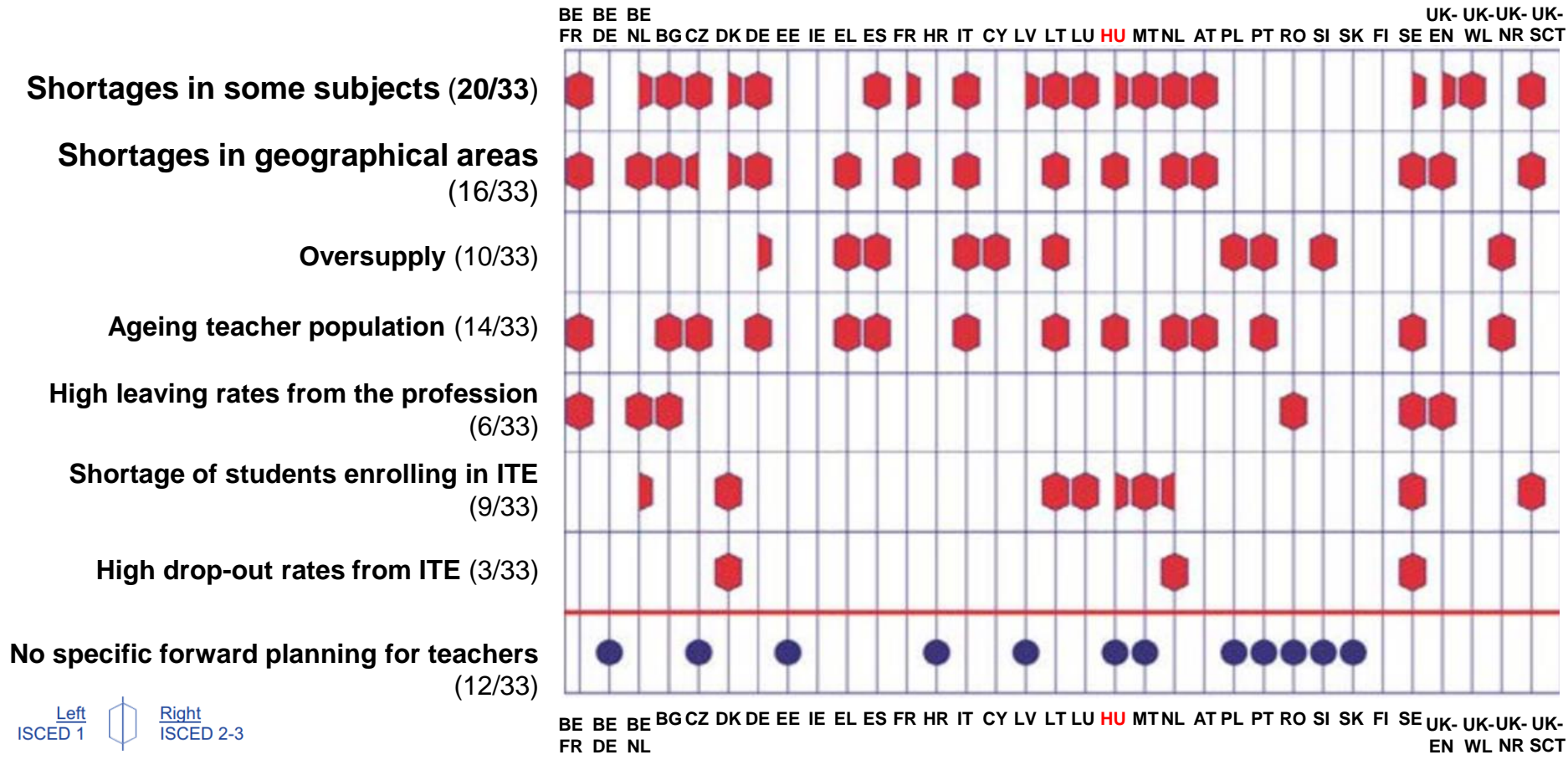
Workforce demands

Digital space divide

Future scenarios



There has been an upset balance of supply and demand of teachers in Europe for years (Eurydice - 2016/17, ISCED 1-3)



Left Right
ISCED 1 ISCED 2-3

BE BE BE BG CZ DK DE EE IE EL ES FR HR IT CY LV LT LU HU MT NL AT PL PT RO SI SK FI SE UK- UK- UK- UK-
FR DE NL EN WL NR SCT

The average age of teacher in the EU is higher than the OECD average



%	Teachers in ISCED 1			Teachers in ISCED 2			Teachers in ISCED 3			Teachers (SUM)		
	<30	31-49	50=<	<30	31-49	50=<	<30	31-49	50=<	<30	31-49	50=<
Age	<30	31-49	50=<	<30	31-49	50=<	<30	31-49	50=<	<30	31-49	50=<
OECD mean	12	55	33	11	53	36	8	52	40	11	54	35
EU22 mean	11	53	36	8	51	41	6	50	44	9	52	39

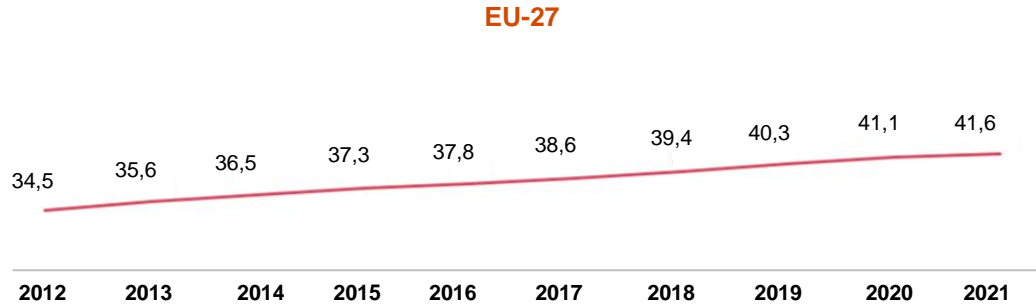
How to make teaching and schools more attractive? How to involve young professionals from other fields?

During COVID times most of schools went through a “quick digitisation”. That doesn’t equal digital transformation, that is happening all around us. In order to stay relevant and motivating schools will have to go through digital transformation also.



What is the role of Teacher Educators in the digital transformation of schools?

While there is strong trend of massification in higher education in the developed world



Source: <https://appsso.eurostat.ec.europa.eu/nui/setupDownloads.do>

On average in the EU-27, the proportion of people with **higher education degree** in the 30-35 age group is **over 40%**. In many countries, this is achieved at a rate of over 50%. (Eurostat)

Among the 30-35-year-olds, the **proportion of those with higher education degree is higher than that of those with secondary education** qualification. **Today, 60% of young people are expected to enter higher education.** (Source: OECD (2021): Education at a Glance 2021, OECD Publishing, Paris <https://www.oecd.org/education/education-at-a-glance/>)

Are teachers prepared to provide the basic competences needed for higher education studies for 60% of young people today? How do we support them?

Data shows that often, even higher education graduates don't possess the literacy and numeracy competences needed in the workforce



The literacy and numeracy skills of 30% of those with a higher education qualification do not reach the level necessary to solve tasks requiring slightly complex information processing. [OECD (2021)]



“According to experts, AI can answer around 80% of the PIAAC literacy questions”. And “AI can solve around two-thirds of the PIAAC numeracy test.” “ According to experts, AI will be able to solve the entire literacy and numeracy tests by 2026. AI can potentially outperform large shares of the population in literacy and numeracy.”

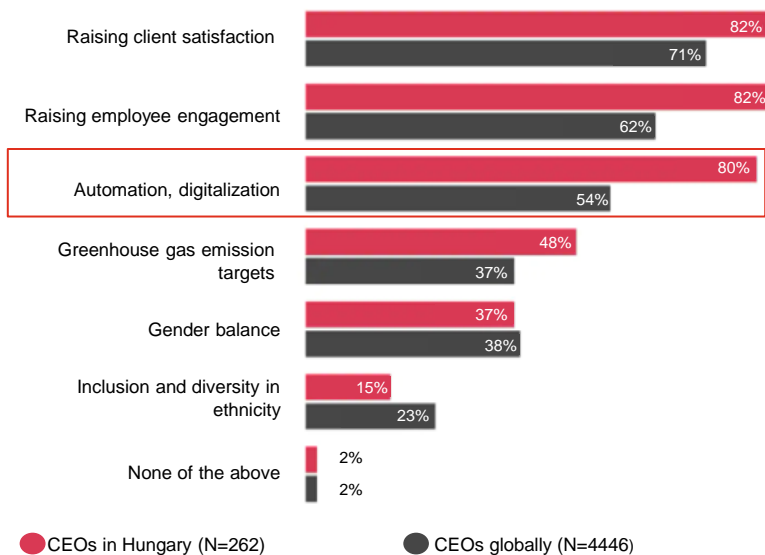
“Even the best-ranking countries to date cannot supply more than a quarter of their workforce with the literacy and numeracy skills needed to outperform AI. In this context, the focus of education may need to shift more towards **teaching students to use AI systems** to perform literacy and numeracy tasks more effectively.”

Source: OECD (2023), Is Education Losing the Race with Technology?: AI's Progress in Maths and Reading, Educational Research and Innovation, OECD Publishing, Paris, <https://doi.org/10.1787/73105f99-en>

Should we use AI in teaching literacy and numeracy?

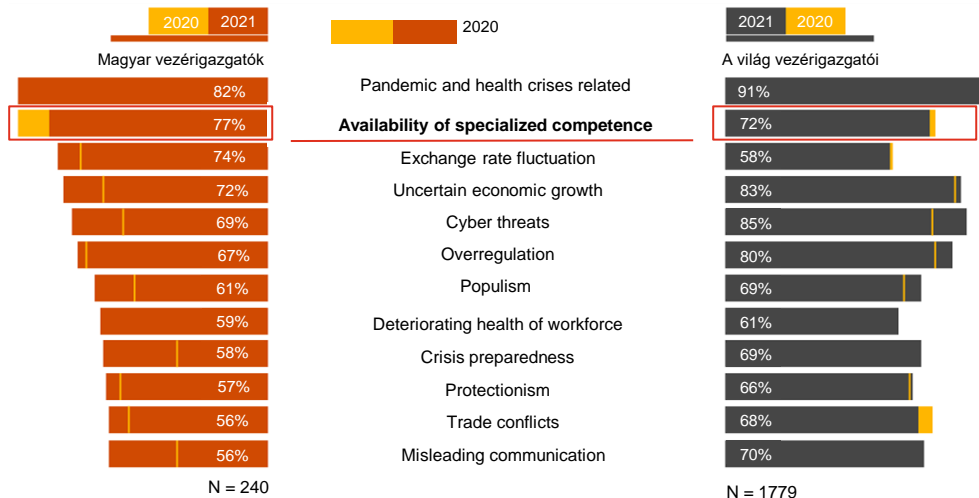
Labour market has two important signals for education (1) there is not enough competence; (2) digital transformation and automation stays a strategic direction

Long term strategies of companies contain:



Source: PwC CEO Survey (2022)

The toplist of economic, political, social threats to growth of companies



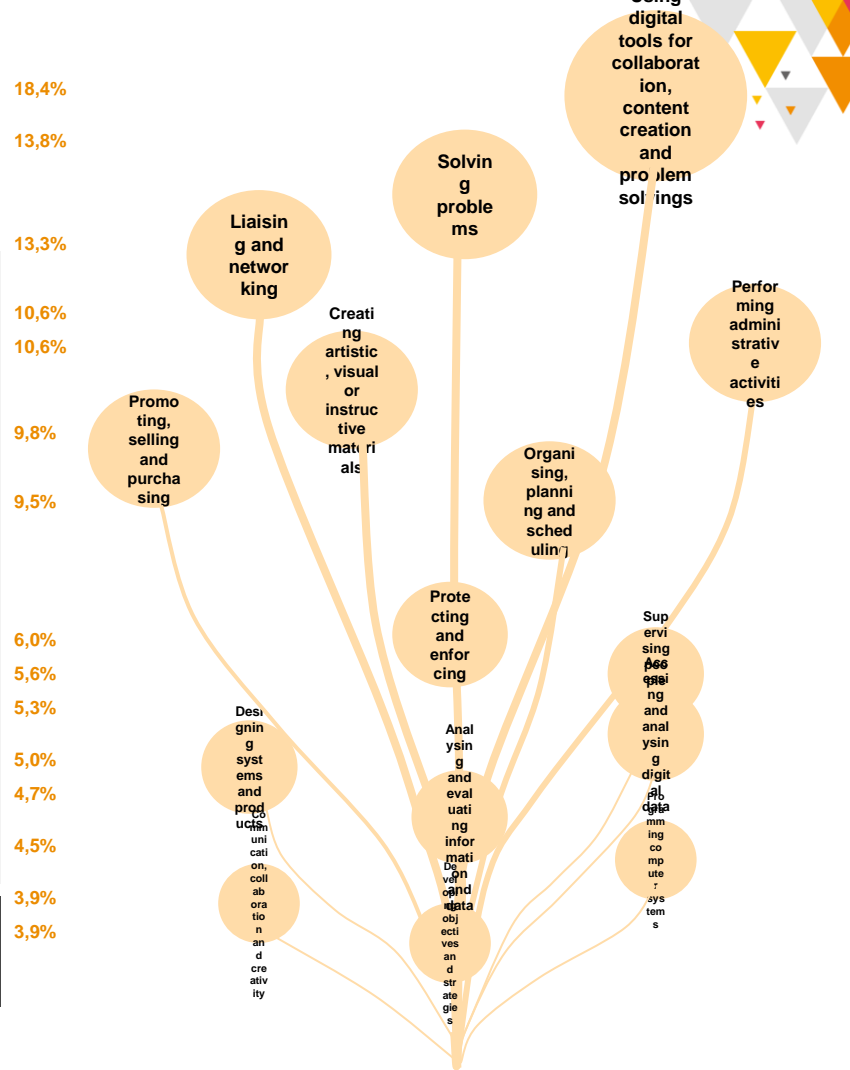
Source: PwC CEO Survey (2021a)

***According to 43% of CEO-s, if their company stays on current tracks, they are only viable for max. 10 years. [PwC (2023)] - Shouldn't we consider it relevant for schools?**

The most sought after “skills” in 2022 according to the EU27 job ads in SkillsOvate

1. Using digital tools for collaboration, content creation and problem solvings - 18,4%
2. Solving problems - 13,8%
3. Liaising, networking - 13,3%
4. Performing administrative activities - 10,6%
5. Creating artistic, visual or instructive materials - 10,6%
6. Promoting, selling and purchasing - 9,8%
7. Organising, planning and scheduling - 9,5%
8. Protecting and enforcing - 6,0%
9. Supervising people - 5,6%
10. Accessing and analysing digital data - 5,3%

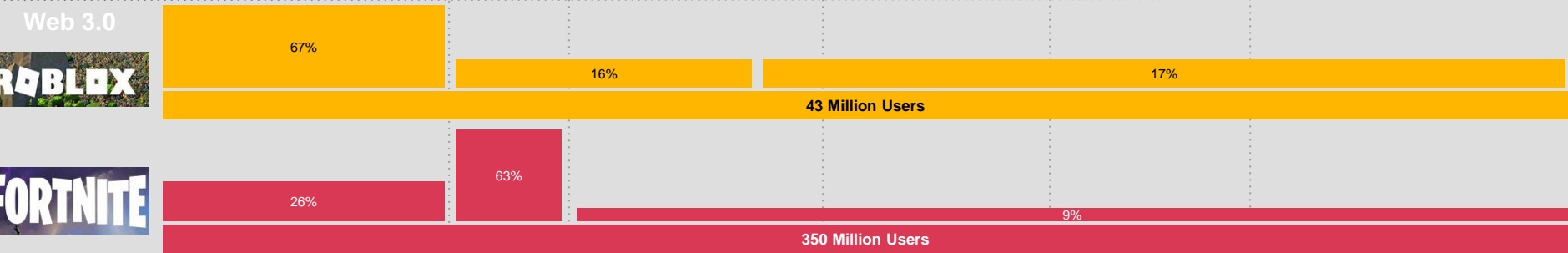
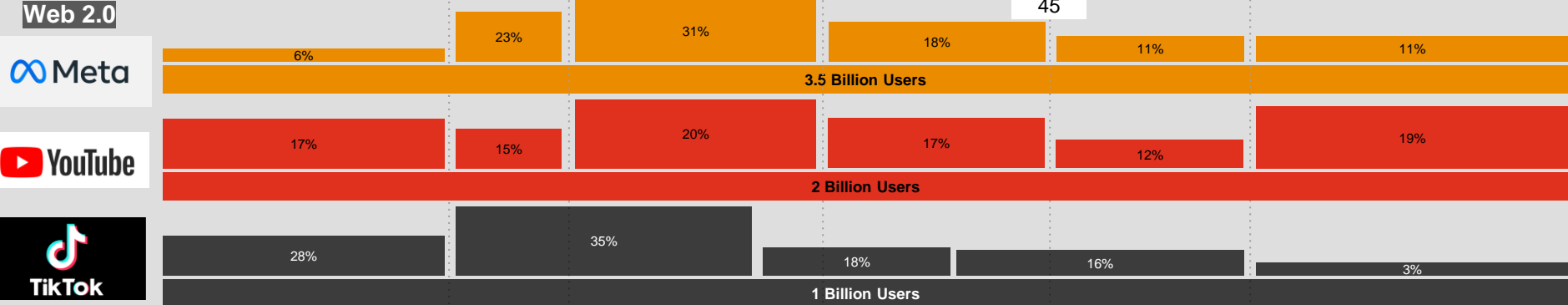
**Do teachers possess these competences?
Does TE develop them?**



Teachers and students “live” in completely different digital spaces



	Generation Z Aged 10 - 25	Millennials Aged 26 - 38	Generation X Aged 39 - 54	Boomers Aged 55+
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Metaverse Uptake

Most users of Web 2.0 are Millennials (Representing billions of people) = **Early adopters** of Metaverses

Most users of Web 3.0 are GenZ (Representing hundreds of millions of people) = **Legacy users** of Metaverses

Likely
Participation in the form of funding children's activities in Web 3.0

Improbable
Participation in the form of funding children's activities in Web 3.0

Source: PwC South Africa

According to the OECD complex competence development should serve creating new value, taking responsibility and reconciling tensions and dilemmas - **Are our teachers prepared?**



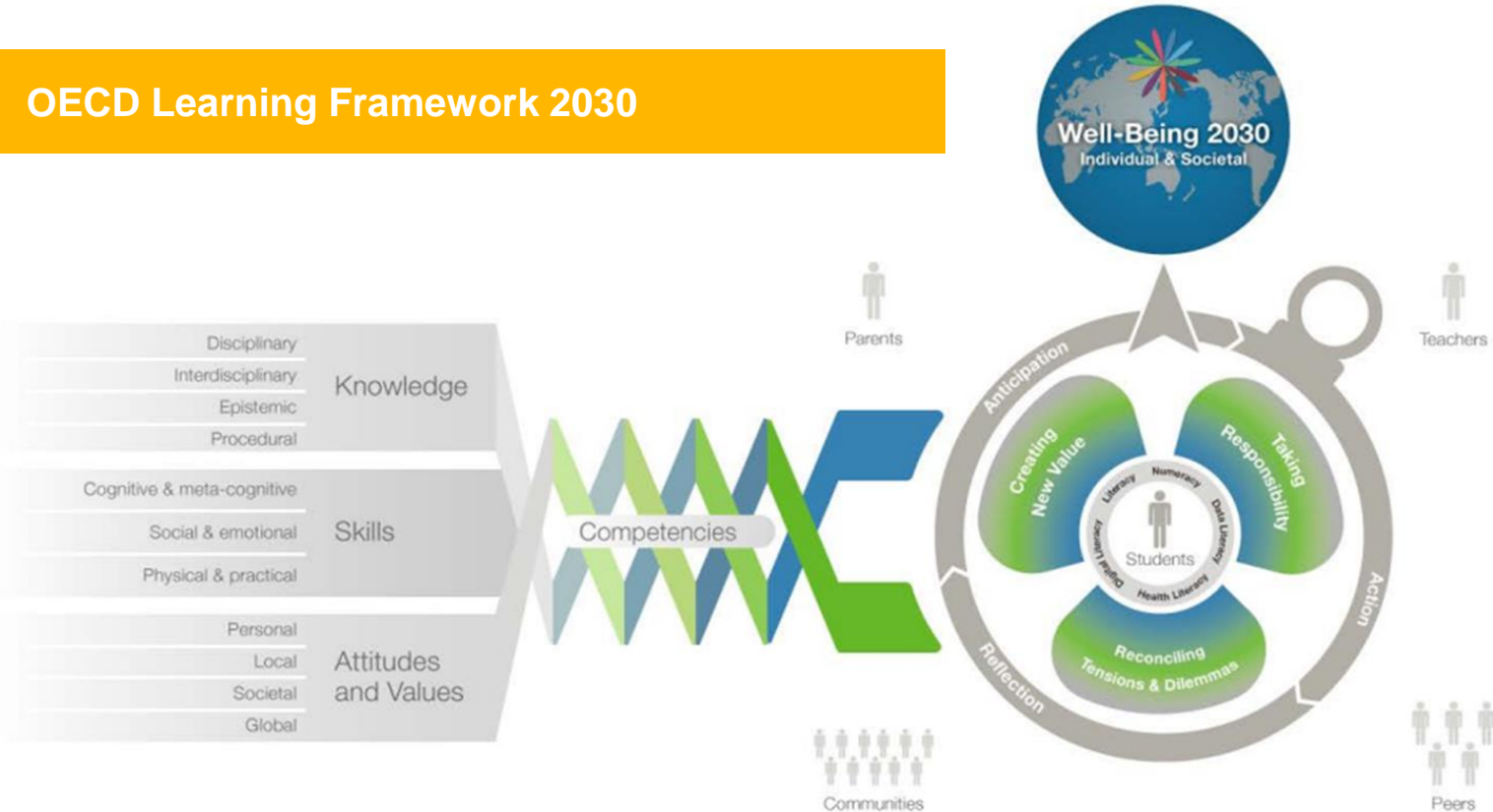
OECD Learning Framework 2030

In cycles of:

- anticipation
- action
- reflection

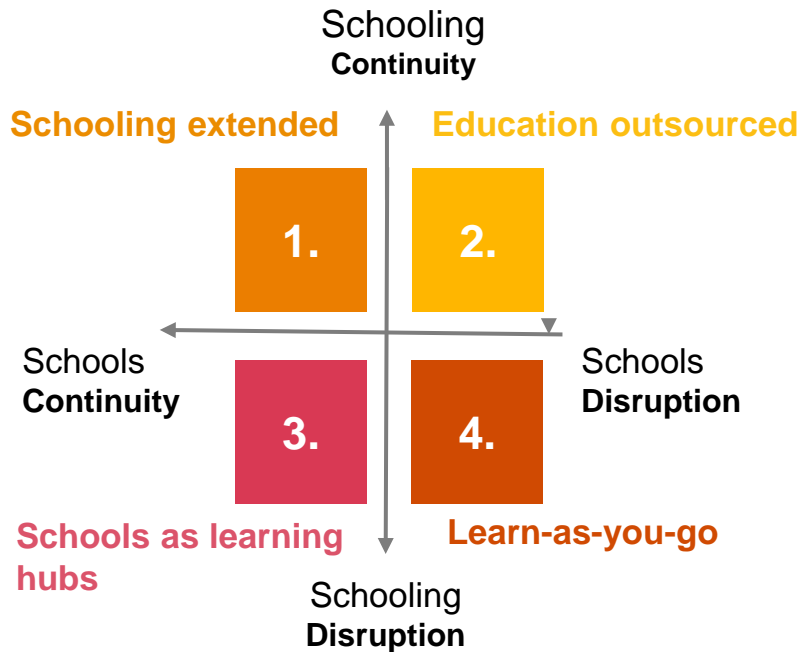
Core competences:

- literacy
- numeracy
- data literacy
- digital literacy
- health literacy



What is the role of a teacher in the non-traditional education scenarios? Only 1 out of the 4 is a scenario that Teacher Education prepares for...

The 4 OECD scenarios on the future of education



Thank you for your attention!

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