GLOBAL
EDUCATION
FUTURES

Global Education Futures Agenda

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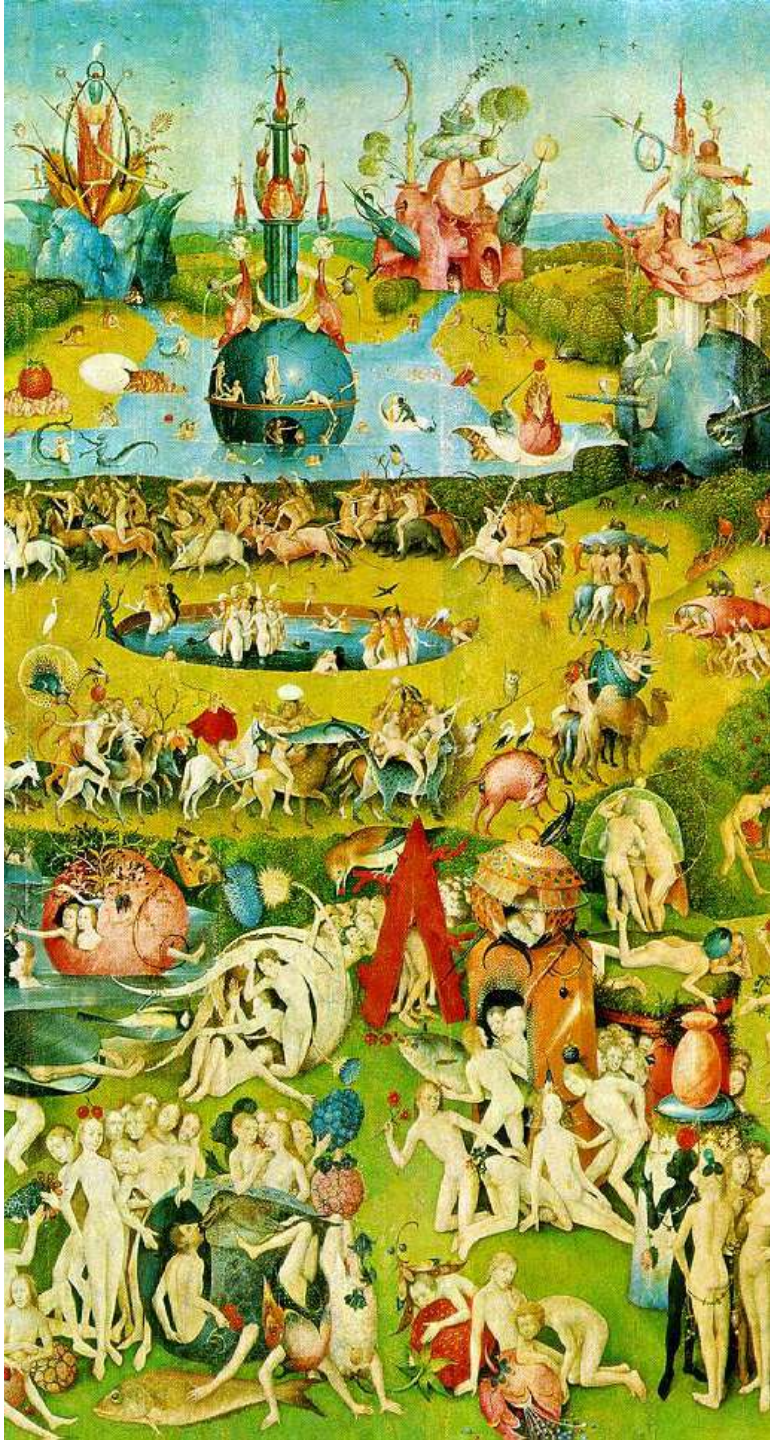
RF Group 2010-2015

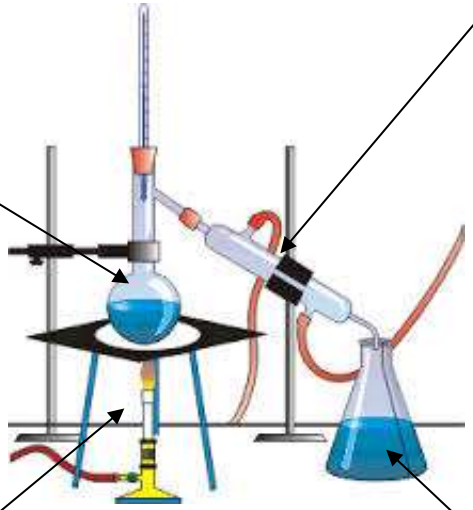


Global Education Futures Agenda is 'distilled' from 5 years of foresight work

Foresights of our group on Russian education & development:

- Foresight of Education 2010
- Foresight of Higher Education 2012
- Foresight of Children Educational Services 2013
- Skills Foresight 2012-14
- NeuroWeb Foresight 2013-14

etc



Group design of 'global education futures' map: trends / technologies / formats that exist or are anticipated in at least 3 different countries / regions

Analysis of over 50 international foresights / forecasts on future of education, learning, human enhancement, and skills development from the US, Europe, and Asia

Map of global education + **Report** on global education futures agenda

Key message of the Agenda report

Anticipated transition from ‘factory systems’ to learner-centered communities that support ‘lifelong learning everywhere all the time’ is the biggest challenge ever in the history of education.

Many progressive global players already invest into this transition, including major technology companies, governments of OECD countries, venture capitalists and international social movements

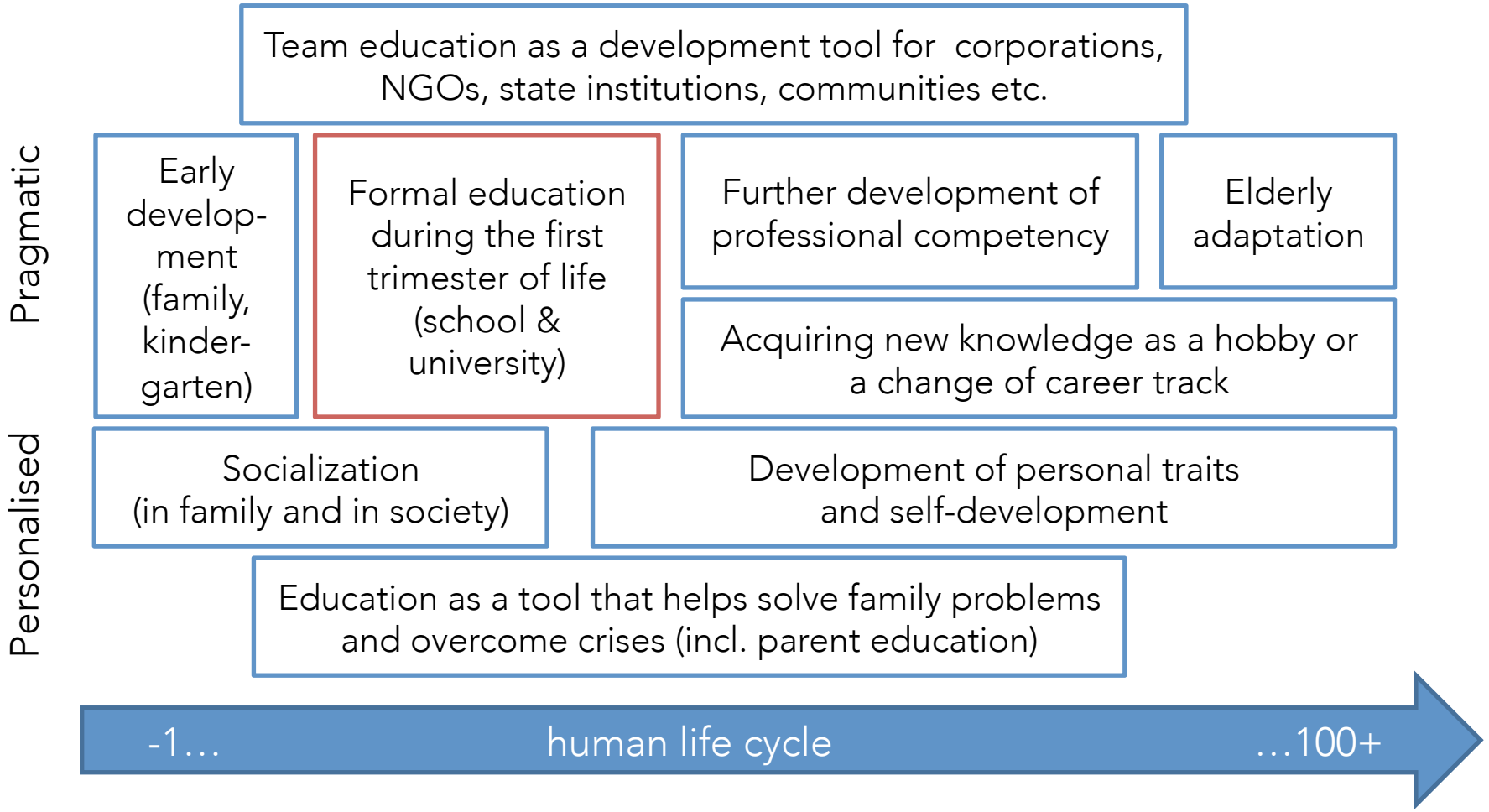
Our question is: what are the productive strategies of different players that support & enhance this scenario?

The main stakeholder groups and questions they face

Innovators & investors	New education can be seen as the emerging multi-billion dollar market ('Internet in 1995'). How to use the emerging opportunities now?
Regulators	Support existing models or grow new ones. Is it reasonable to invest into obsolete formats that may last only for another couple of decades?
Administrators	The domain of education becomes more competitive, and the economic models of existing institutions become even less sustainable. What strategies will allow schools & universities to keep their competitive edge?

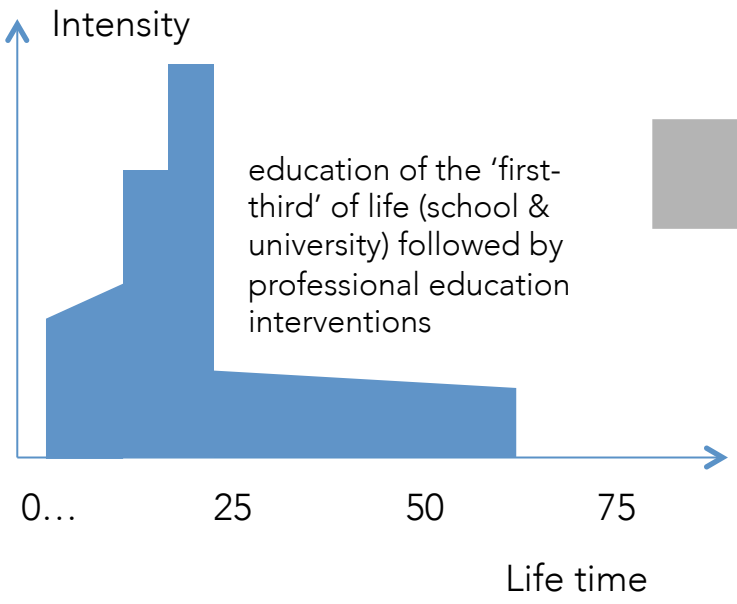
Defining Education

We see education as an institutionalized process of individual development support from birth to death. Formalized educational institutions are responsible for only a fraction of this process.

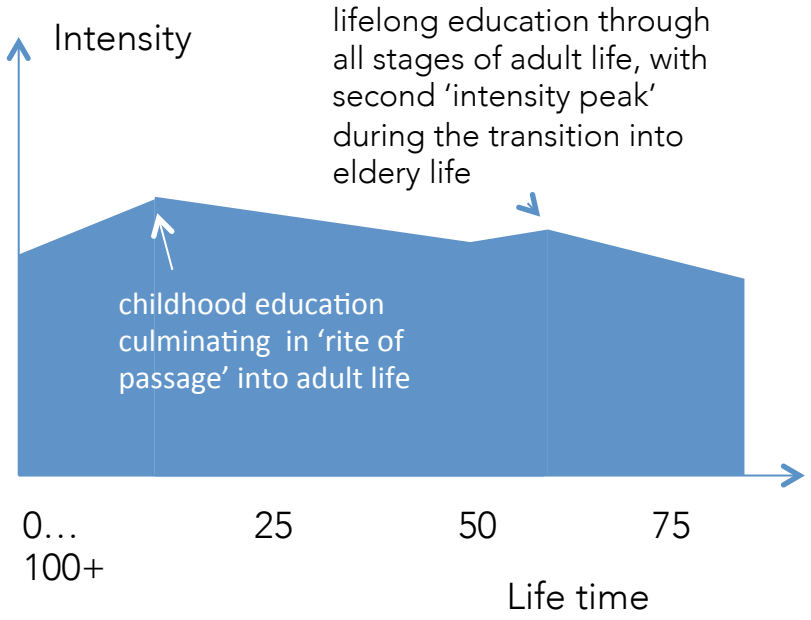


Education in human life cycle: from sprinting to marathons

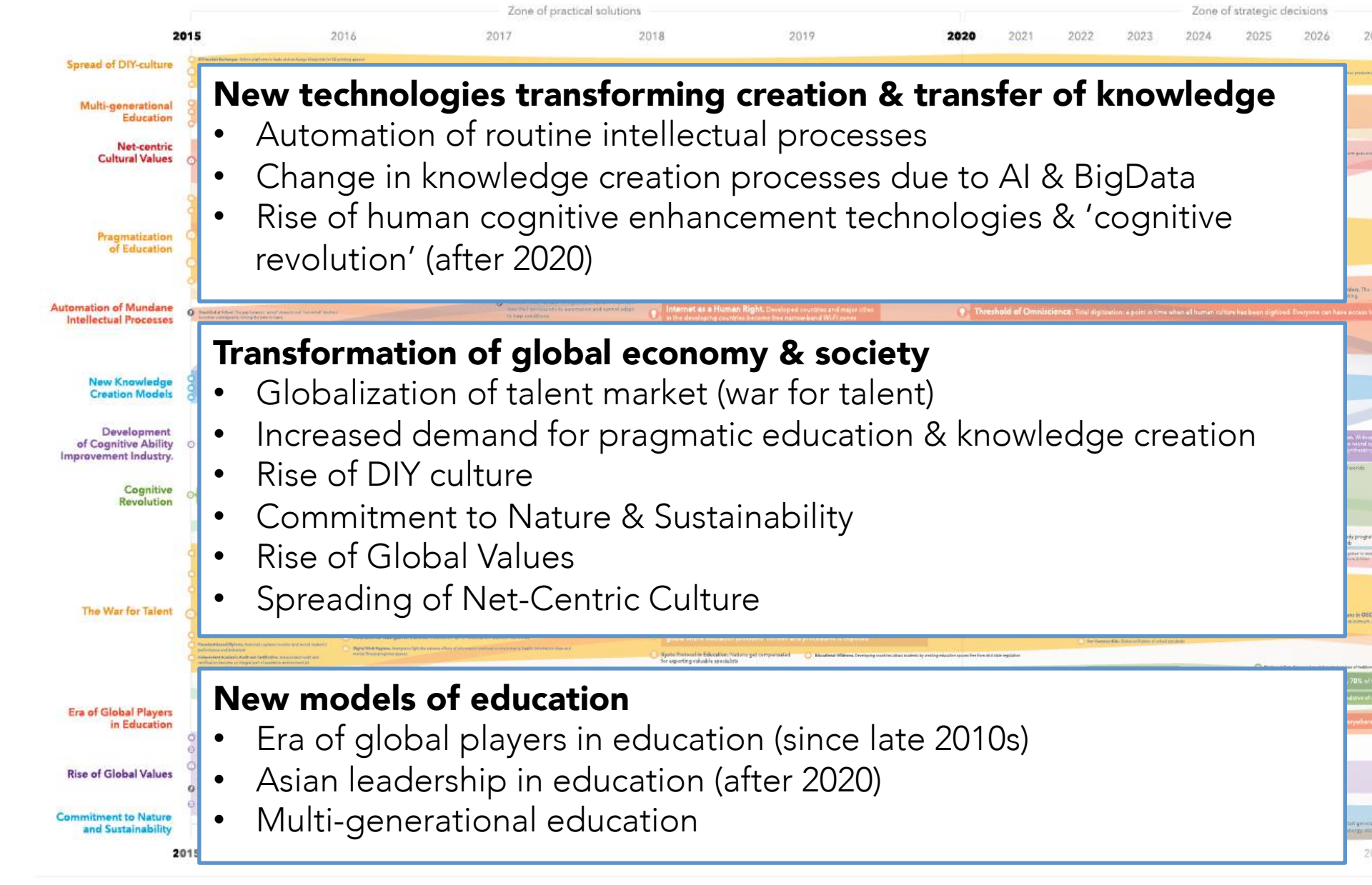
Education 2015



Education 2035



Key groups of trends shaping future of education



New technologies transforming creation & transfer of knowledge

- Automation of routine intellectual processes
- Change in knowledge creation processes due to AI & BigData
- Rise of human cognitive enhancement technologies & 'cognitive revolution' (after 2020)

Transformation of global economy & society

- Globalization of talent market (war for talent)
- Increased demand for pragmatic education & knowledge creation
- Rise of DIY culture
- Commitment to Nature & Sustainability
- Rise of Global Values
- Spreading of Net-Centric Culture

New models of education

- Era of global players in education (since late 2010s)
- Asian leadership in education (after 2020)
- Multi-generational education

Key transformations that will unfold in next 20 years

Globalization: development of Global Learning Platforms

Personalization: transition to mass-scale personalized life-long learning

Collective learning: rise of communities as a dominant education form

Ludic learning: game as a dominant form of education & work

New model of knowledge creation and new players defining 'worldview'

NeuroWeb as a totality of communication with smart ambience: from wearable gadgets to connected brains

New Education Landscape

in 3-5 yrs	in 7-10 yrs	in 15-20 yrs
• MOOCs integrated by educational trajectories • Academic grades give way to achievement recognition & competency passports • New models of direct talent investment and other financial / insurance tools in education (for learners & investors)	• The first 'Billion-Student University' • Mentor networks and artificial tutors • Mass market solutions for full-scale education without ever entering school or university • Major role of gaming environments and augmented reality • Objectivation of education process via biometry / neurointerfaces	• Game and teamwork are predominate forms of education and social interactions • Artificial intelligence as a mentor ("Diamond Age Primer") and a partner in research • 'Live knowledge' models and the death of Gutenberg Galaxy • Education in NeuroWeb-linked groups and new pedagogy

Obsolesce of Formats

Following existing educational formats will be largely recognized in developed countries as ineffective or obsolete given the availability of feasible alternatives

by 2017

- 'Human phonograph' industrial teaching based on standard textbooks & tests (replaced by ICT based solutions)
- Standardized tests (complemented & replaced by tests more focused on unique & creative abilities)
- Semester grades (replaced by continuous result recording)

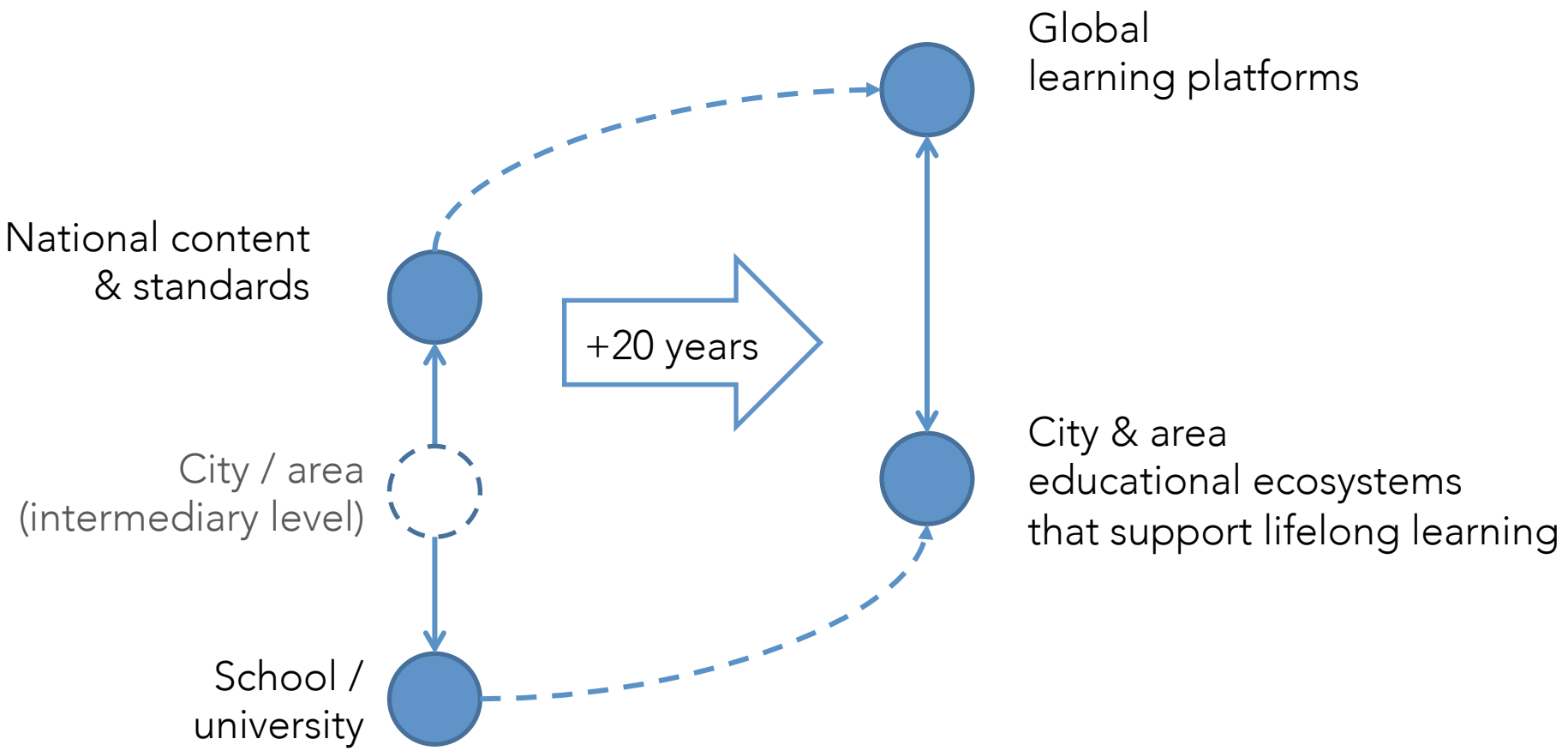
by 2025

- Graduation diplomas (replaced by life-long competency diploma)
- Academic journals (replaced by researcher communication networks), citation indexing standards & IPR management system (replaced by comprehensive digital KM ontologies)
- Single-author textbooks
- Altered states of consciousness as a social deviation

by 2035

- Comprehensive schools
- Research universities
- Texts (books & articles) as a predominant medium of knowledge-based communication

Transition towards global educational ecosystem



Architecture of global educational ecosystem

Global learning platforms (GLPs)

- Many niche players integrated by major providers (kind of Google / Facebook / Apple in education) that support (standard) individual learning (& career) trajectories
- Content combines more standard 'lectures' & 'tasks' with simulators and game universes (like World of Warcraft)
- 'Digital pedagogy' era (supported by shared learners' data)
- Meta-platform built on the principles defined by 'Declaration of Learners Rights'

'Meta-city'

- Global corporations with shared practices
- International movements (e.g. Slow Food or Rotary)
- Educational franchises, incl. social change platforms (e.g. Impact Hub, Techstars, …)
- International art projects

City / area educational ecosystem

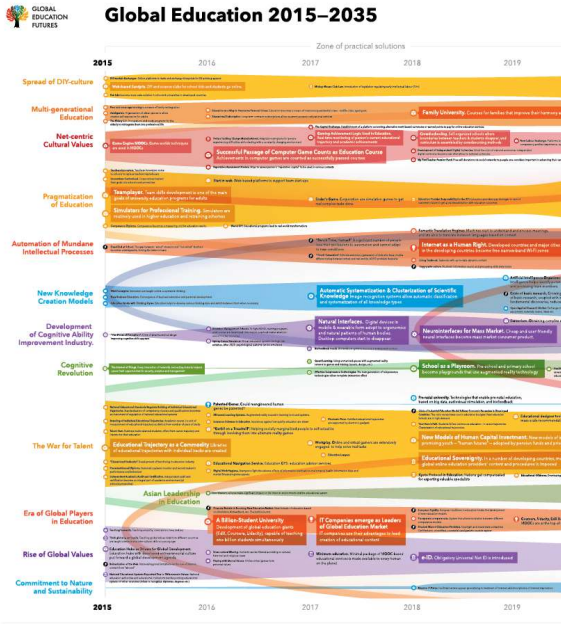
- Local educational providers are integrated into personalized learning 'pathways' (that may also be physical pathways)
- Any urban public space can become educational: e.g. Starbucks Agoras
- Points of connection with GLPs

Important recurring themes of CA session

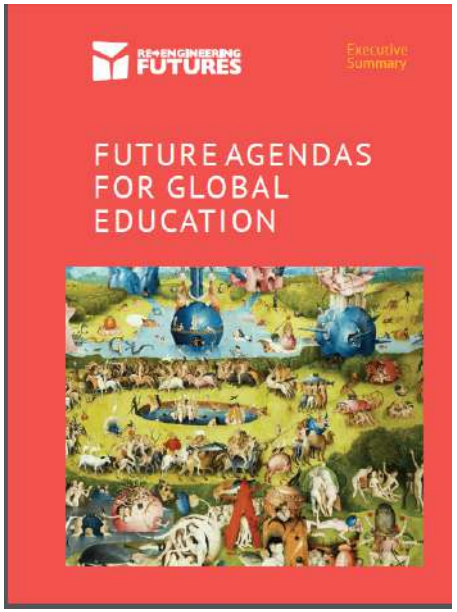
1. 'Technologies for people – not people for technologies': future educational systems cannot be built with new technological architecture alone (as it happened with Internet search, social media interaction, or personalized helpers like Siri). It should also consider
   - Values & principles defined by the 'Declaration of Learner Rights' (incl. the principle of primacy of learner demands & interests)
   - Social design of new education based on systemic pedagogical & psychological research (incl. 'digital pedagogy')
2. If the transition to true life long learning happens:
   - The objective of education should not be 'acquisition of skills & knowledge', but support to life long human development (transition from competencies to meta-competencies, and from meta-competencies to existential competencies)
   - Educational should become integral, i.e. it should help develop not only our cognitive abilities and 'knowledge base', but also our bodies, our social & emotional intelligence – and this development should be supported by various educational technologies
   - Quality of learning process and related human feelings, such as love, joy, trust, and acceptance, - should be placed at the heart of educational processes.
3. Community (of practitioners driven by shared values) becomes a central space in knowledge acquisition and knowledge creation (that in the future become elements of the same process)

More details in …

Education Futures 2035 Map



Global Education Futures Report



GEF Infographics

Can be downloaded at www.edu2035.org