

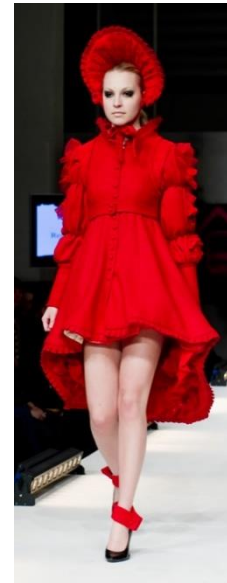
Developing competences and skills for Sustainable Circular Bioeconomy to meet the needs of the labour market

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Education in Finland

- In Finland vocational education is not only a second choice, about 1:1 choose VET after primary education.
- More than 50% of the students in VET are adults well over 20 years old.
- Dual education in the Finnish context exists both in secondary and higher education levels.

REFORM INITIATIVES FROM 2000 UNTIL TODAY



VET development

VET Reforms, 2018 onwards, preceded by 2003-2008 reform of work-based learning and competence-based curriculum

Focus: competence-based and customer-oriented education (modular, flexibility), workplace learning, use of digital learning environments.



Information Society development

Information Society strategy, 2000 until today

Focus: virtual learning & infrastructure, teachers' competences enhanced by the development of initial and in-service programmes concentrating on the future changes in the global context and technological changes affecting the world of work.



Teacher development

Teacher Education Forum, 2016 onwards, simultaneously with OPEKE 2017-2019 TVET Teacher education development project preceded by OPEPRO 1998-2000 to create a vision of teacher's work in 2010.

Focus: teachers as creative and resilient professionals with competences to create novel ideas and solutions to teaching and learning. Reforming initial TVET teacher education aligned with VET reform.

Alignment of strategies and systematic development, continuation & forecasting

Recommendation on the shared competences of UAS Bachelor's degrees
Graduating Bachelor's degree student...

LEARNING TO LEARN

recognises the strengths and development areas of their competence and learning methods, and they utilise the opportunities communities and digitalisation provide in their learning.

OPERATING IN A WORKPLACE

has versatile working life skills and is able to operate in a work community of their field.

ETHICS

adheres to the ethical principles and values of their field of profession, taking the principles of equality and non-discrimination into account.

SUSTAINABLE DEVELOPMENT

is familiar with the principles of sustainable development, promotes their implementation and acts responsibly as a professional and a member of society.

INTERNATIONALITY AND MULTICULTURALISM

is able to operate in a multicultural and international operating environment and network.

PROACTIVE DEVELOPMENT

seeks solutions that anticipate the future of their own field, applying its existing knowledge and research and development methods.

Recommendation on the shared competences of UAS **Master's** degrees

Graduating Master's degree student...

LEARNING TO LEARN

promotes their own and their community's continuous learning and competence development, drawing on knowledge from different fields and the opportunities of digitalisation.

OPERATING IN A WORKPLACE

is able to develop and manage their work community and reforms working life.

ETHICS

assesses and promotes the realisation of ethical principles and values of their field of profession in a work community, taking the principles equality and non-discrimination into account.

SUSTAINABLE DEVELOPMENT

develops and manages sustainable and responsible operating methods in their work and supports sustainable change in their work community and society.

INTERNATIONALITY AND MULTICULTURALISM

is able to develop and manage multicultural and international operating environments and networks.

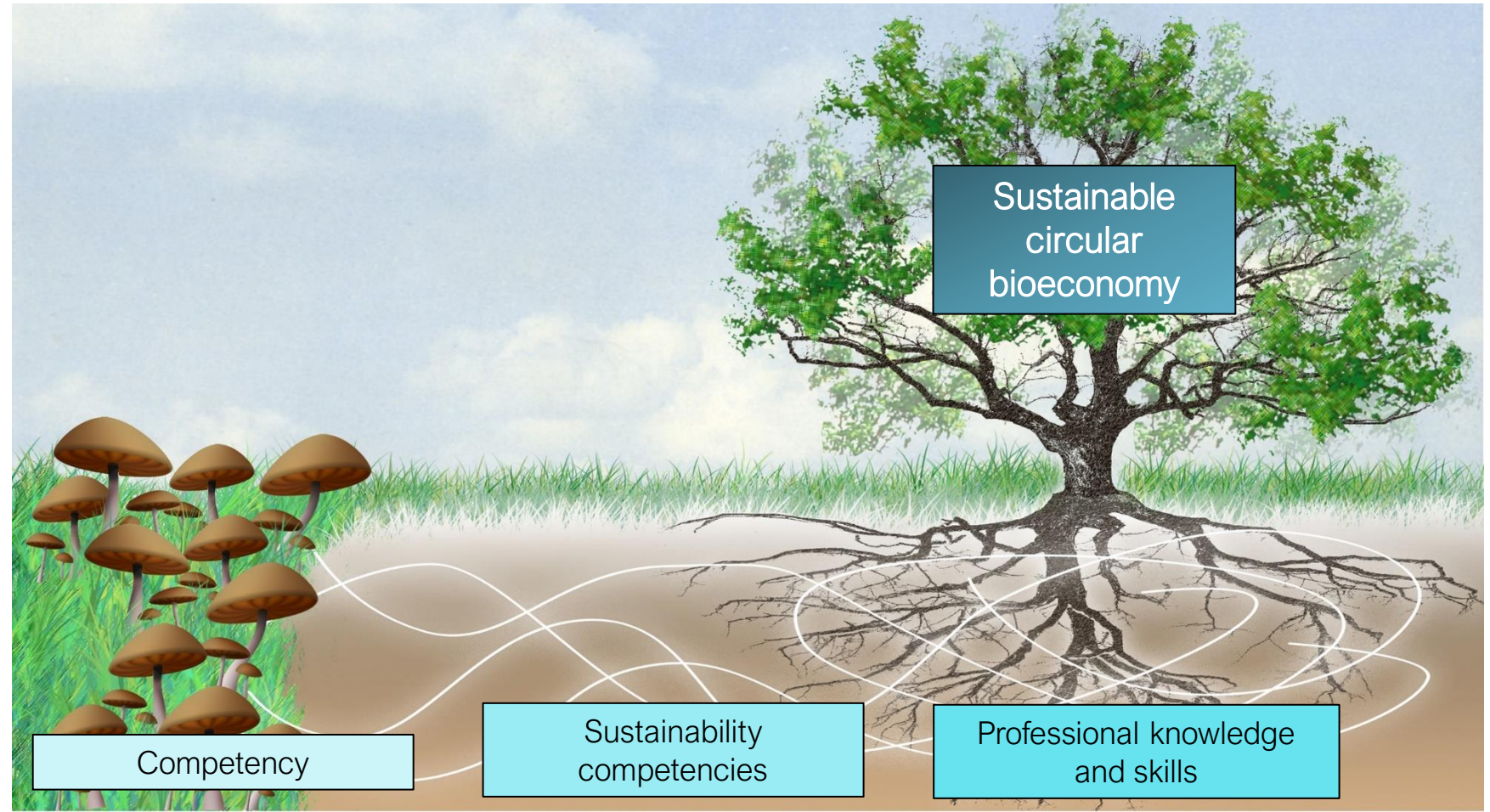
PROACTIVE DEVELOPMENT

is able to manage the development of new solutions that anticipate the future and produces new information using different research and development methods.

Emergence

“When things get together,
there then arises something
that was not there before,
and that character is
something that cannot be
stated in terms of the
elements which go to make
up the combination”

Herbert Mead

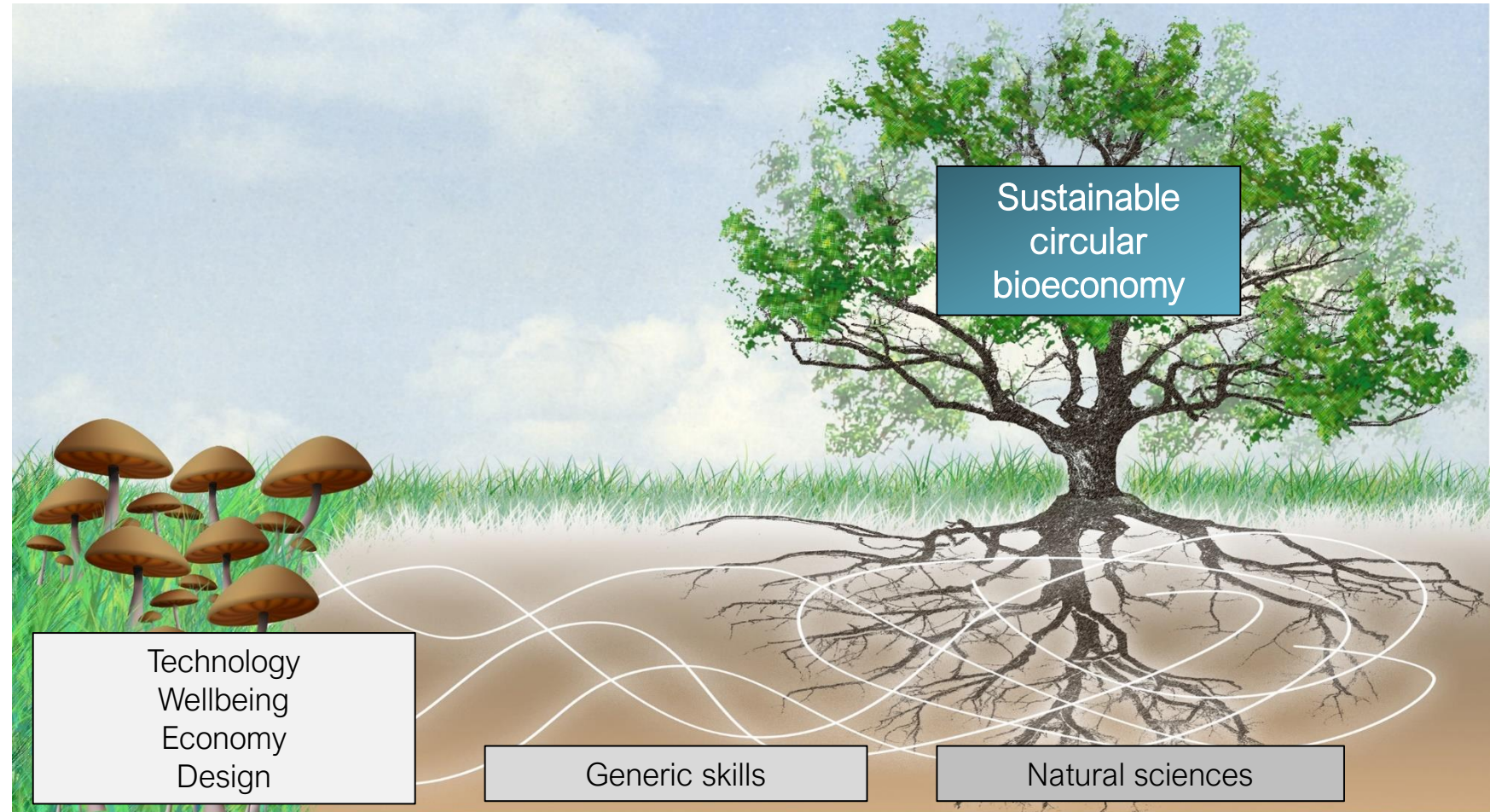


Modified after: Riihimäki et al. 2017

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School of Bioeconomy

Bachelor's degree

- Agricultural and Rural Industries
- Forestry
- Horticulture
- Landscape Design and Construction
- Sustainable Development
- Biotechnology and food engineering

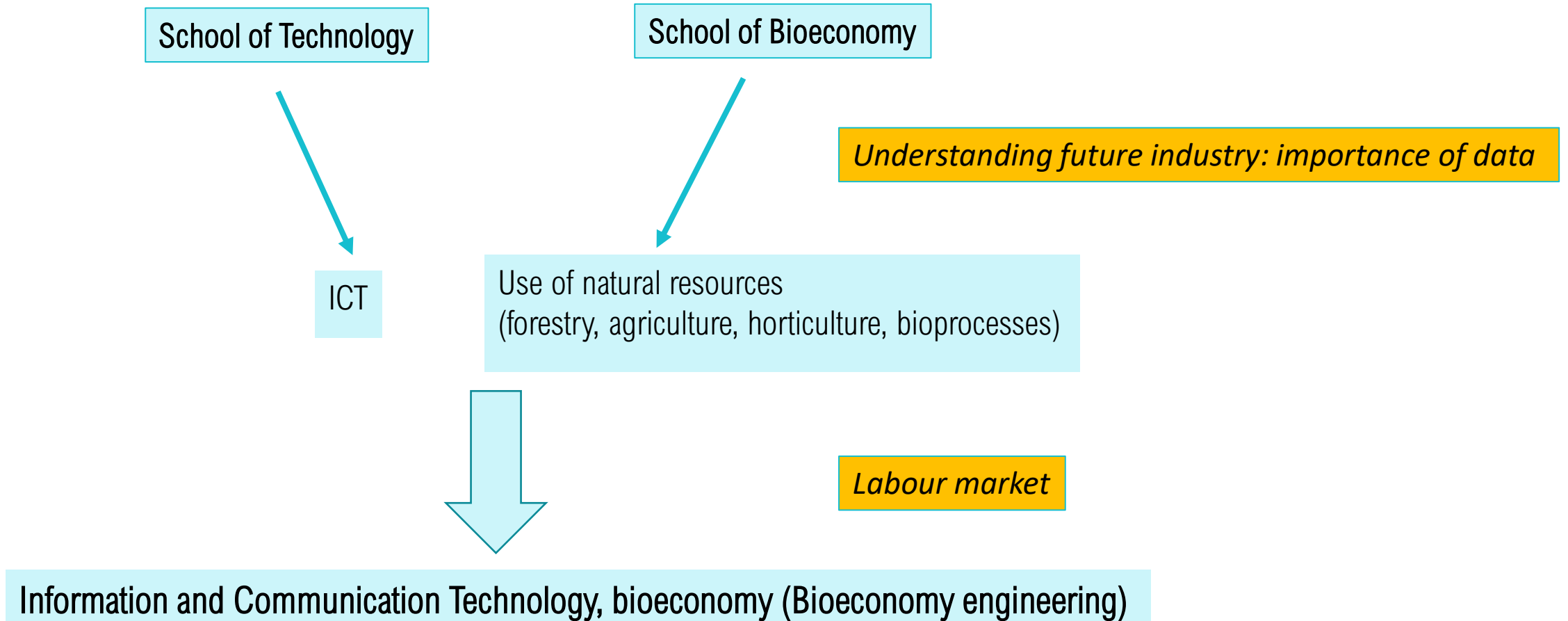
- Equine Business management
- Bioeconomy Engineering (*Int. 2020*)
- Smart organic farming (*Int. 2021*)

Master level

- Solutions for Bioeconomy



ICT engineering, Bioeconomy



ICT engineering, Bioeconomy

DEGREE PROGRAMME



WHAT WILL YOU LEARN?

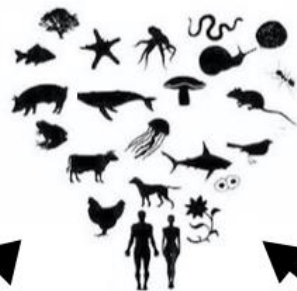
This degree programme in ICT, Bioeconomy will equip you as an engineer with the knowledge and skills that put your sustainable development goals into action. You will achieve this by gaining the competences to integrate digitalization and data technology with biomass flows management of land, forest and waters. You will acquire team work skills to reshape communication between bioproduction, processing, business, markets and consumers. Principles of the circular economy and sparing use of natural resources are integral principles of the study programme.



WHAT WILL YOU BECOME?

After graduation, you will be an engineer specialized in producing smart information and data-based solutions for the management of bioeconomy, the production and processing industry and supply chains. You are able to work with businesses and enterprises, engineering agencies, government, the public sector and non-governmental organisations. Your specific positions can be in projects, design, development, training, sales, consultancy, management, entrepreneurship and as specialist.

SEVA



EGO



ECO



Hope for the better future is based on competencies within each one of us.

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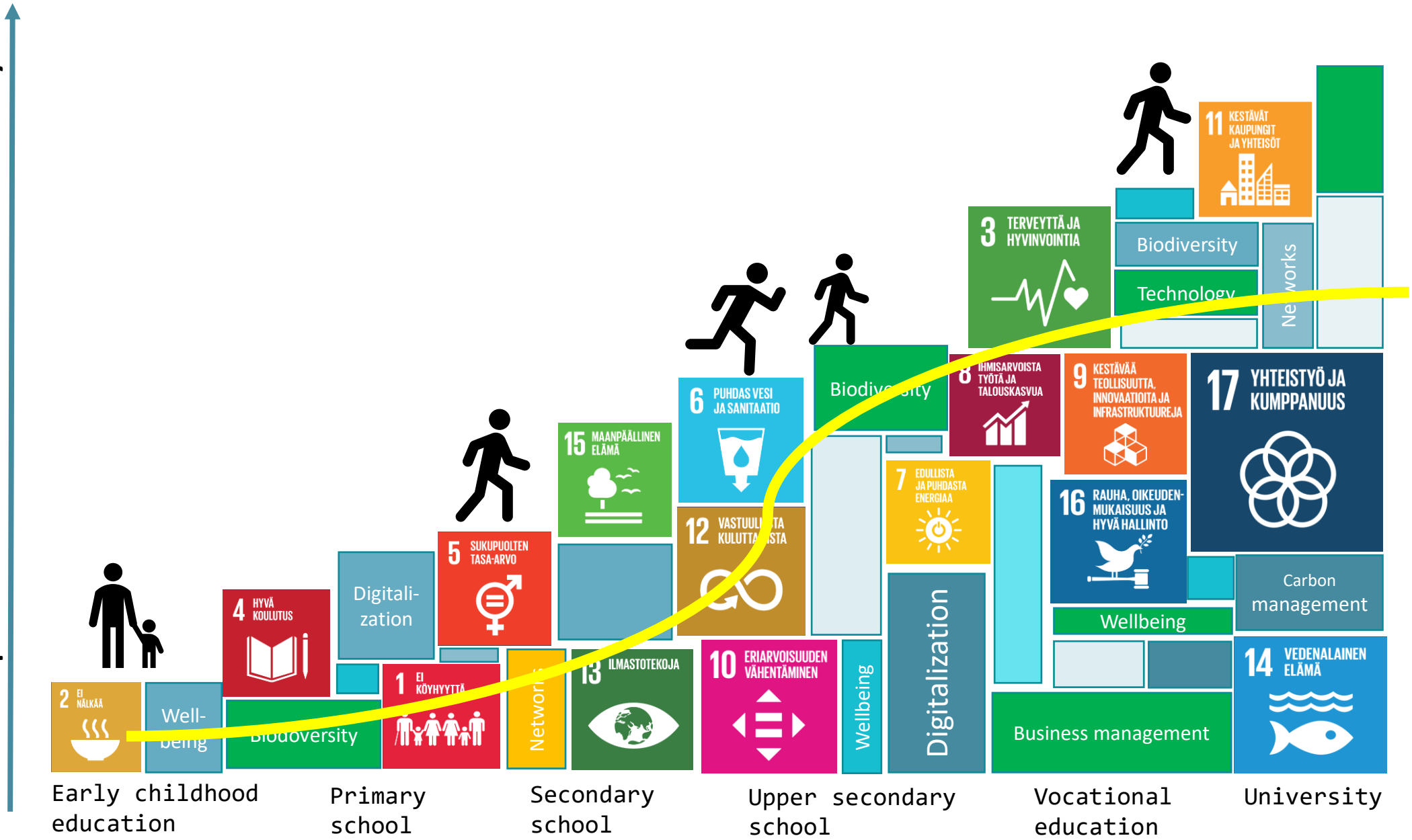
Each act and every action not taken are statements for or against alternative future world.

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Small solutions and actions are like streams, that grow into a wide river. A large river has power to make a change - but the origin is in tiny droplets.

Joutsenvirta, M. & Salonen, A

Competences for sustainable circular bioeconomy



Lifelong Learning



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HAMK Instagram



HAMK YouTube



HAMK SnapChat

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