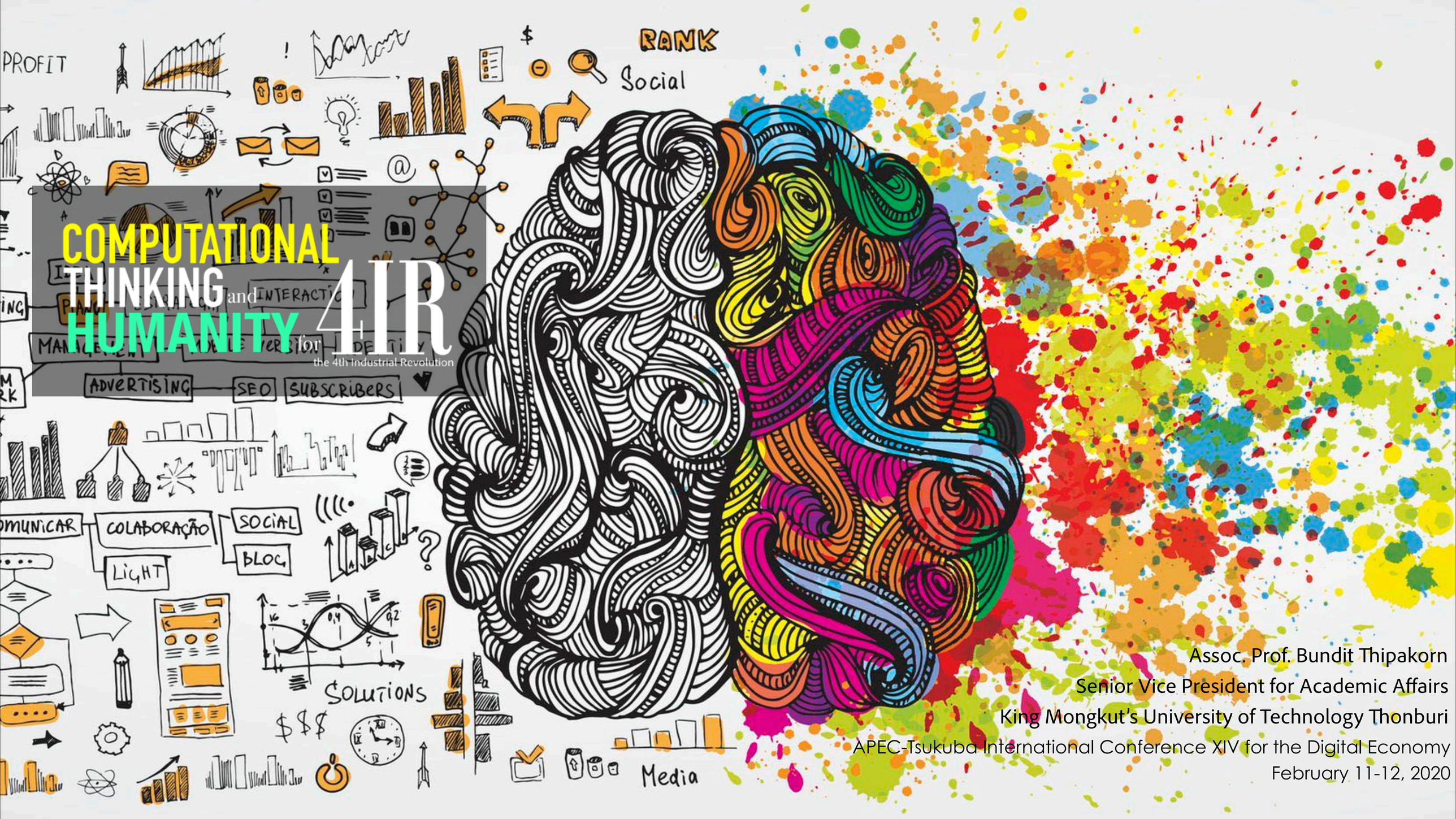


Assoc. Prof. Bundit Thipakorn
Senior Vice President for Academic Affairs
King Mongkut's University of Technology Thonburi

APEC-Tsukuba International Conference XIV for the Digital Economy
February 11-12, 2020

DRIVERS OF CHANGE

the WORLD in Flux

intangible
dynamic
transient
discontinuity

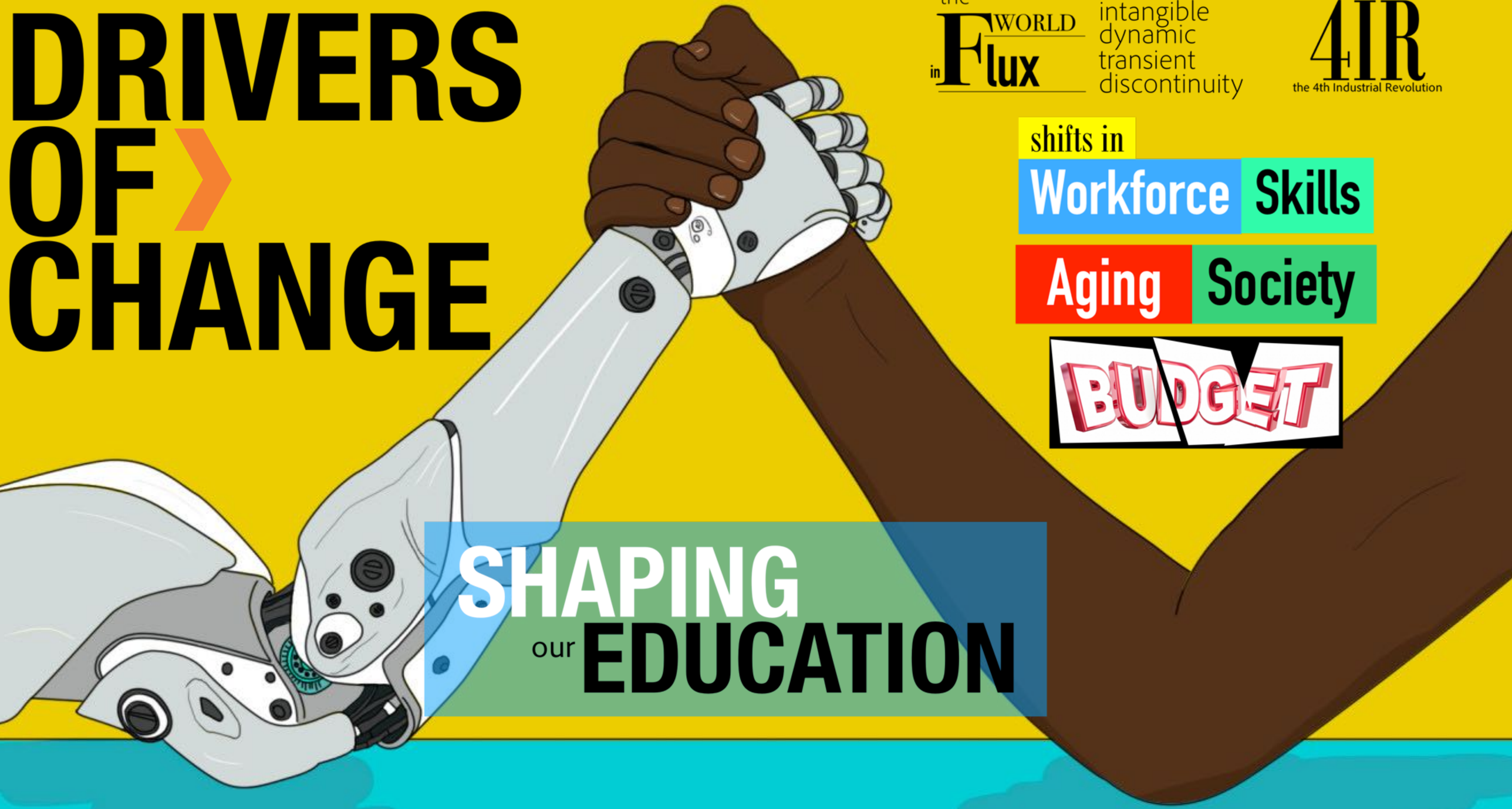
4IR
the 4th Industrial Revolution

shifts in

Workforce Skills

Aging Society

BUDGET



SHAPING our EDUCATION

INDUSTRIAL

the

ERA

rate of **CHANGE**

DISRUPTIVE

volatility
uncertainty
complexity
ambiguity

the

ERA

EFFICIENCY
and
PRODUCTIVITY

LEARN
to KNOW

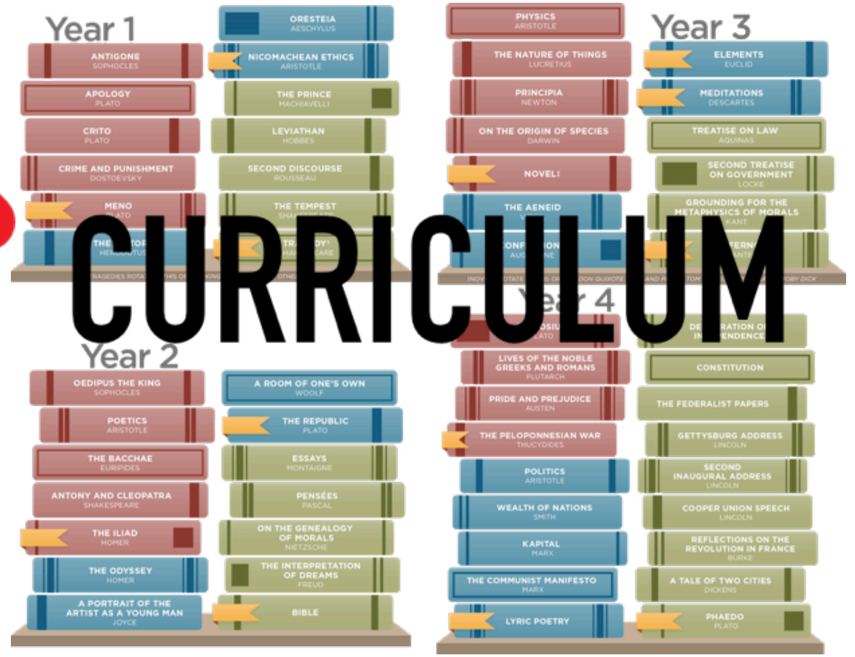
Intellectual

KNOWN

INFORMATION

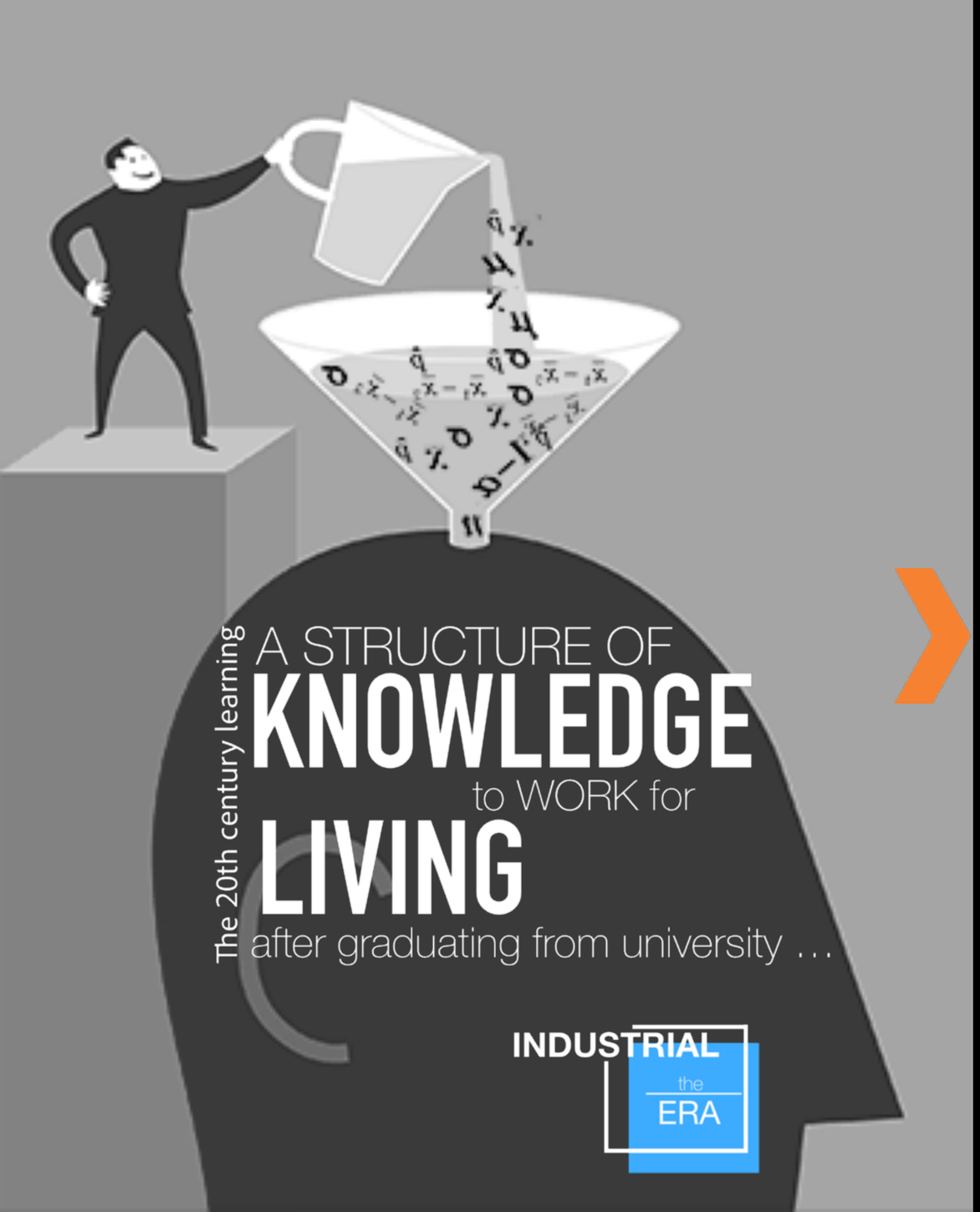
Courses

CONSTRUCTING
KNOWLEDGE



CURRICULUM

BYST



The 20th century learning

A STRUCTURE OF

KNOWLEDGE

to WORK for

LIVING

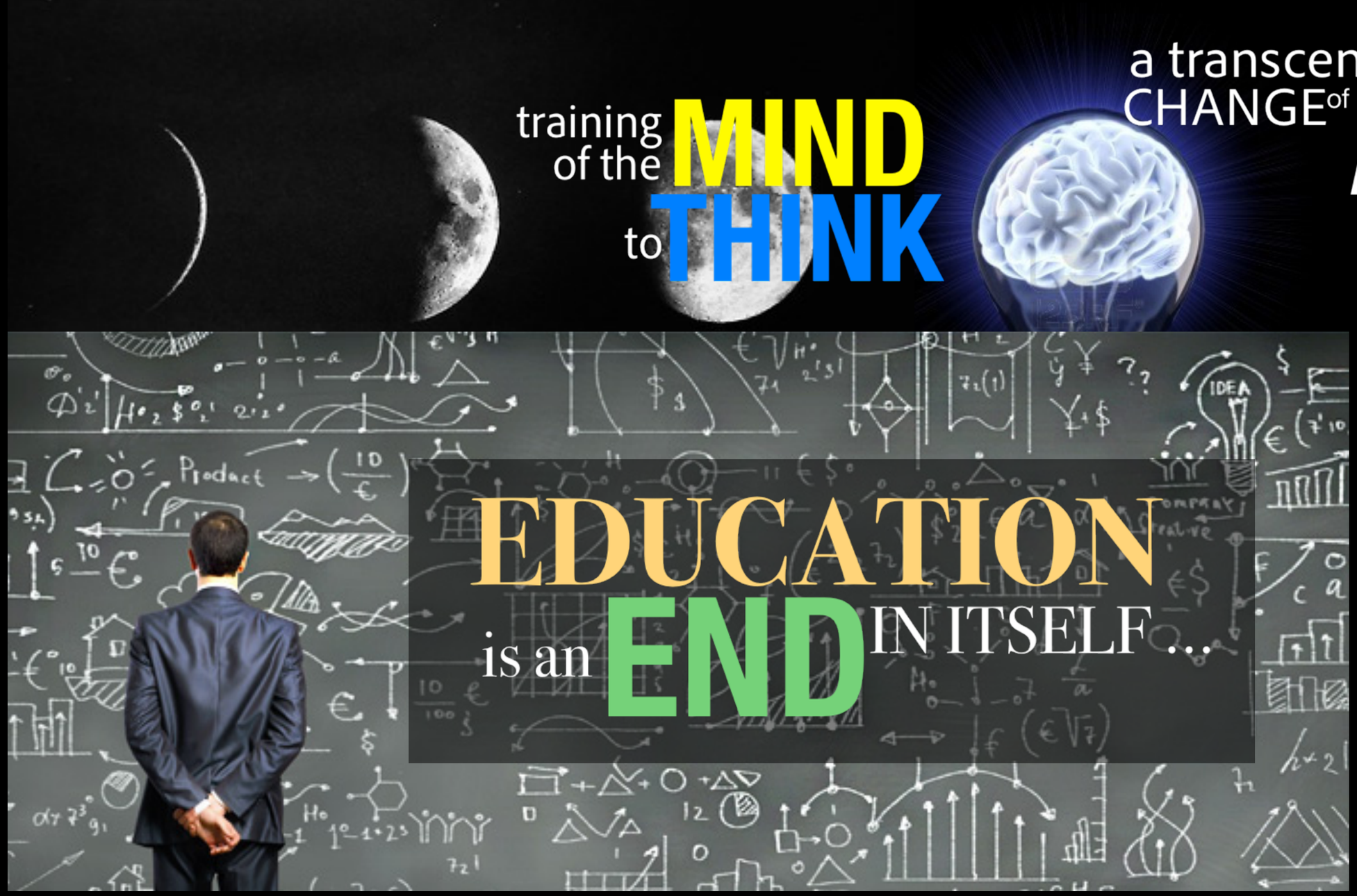
after graduating from university …

INDUSTRIAL the ERA

SHiFT

DISRUPTIVE the ERA

BYST


training of the MIND to THINK
a transcendental CHANGE of MIND and/or ATTITUDE
EDUCATION
is an END IN ITSELF ...

COMPUTATIONAL THINKING and HUMANITY for 4IR

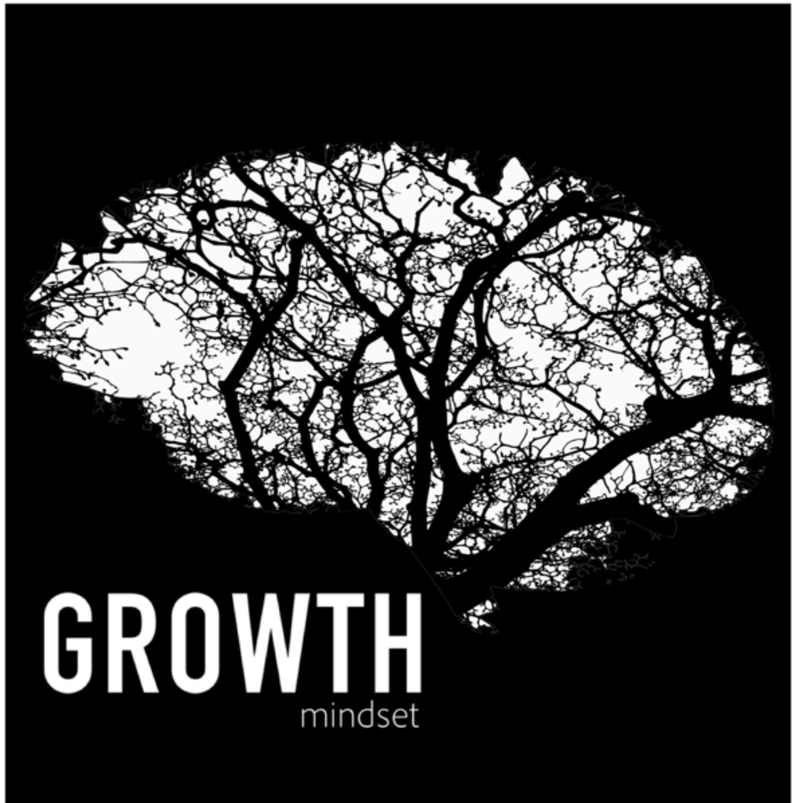
the 4th Industrial Revolution

HABIT of MIND

KMUTT

BYST

TRANSFORMING KNOWLEDGE



The 21st century learning

A STRUCTURE OF **COMPETENCES** to SUCCESSFULLY **THRIVE** in the world in flux …

INFORMATION

↕

UNKNOWN

↓

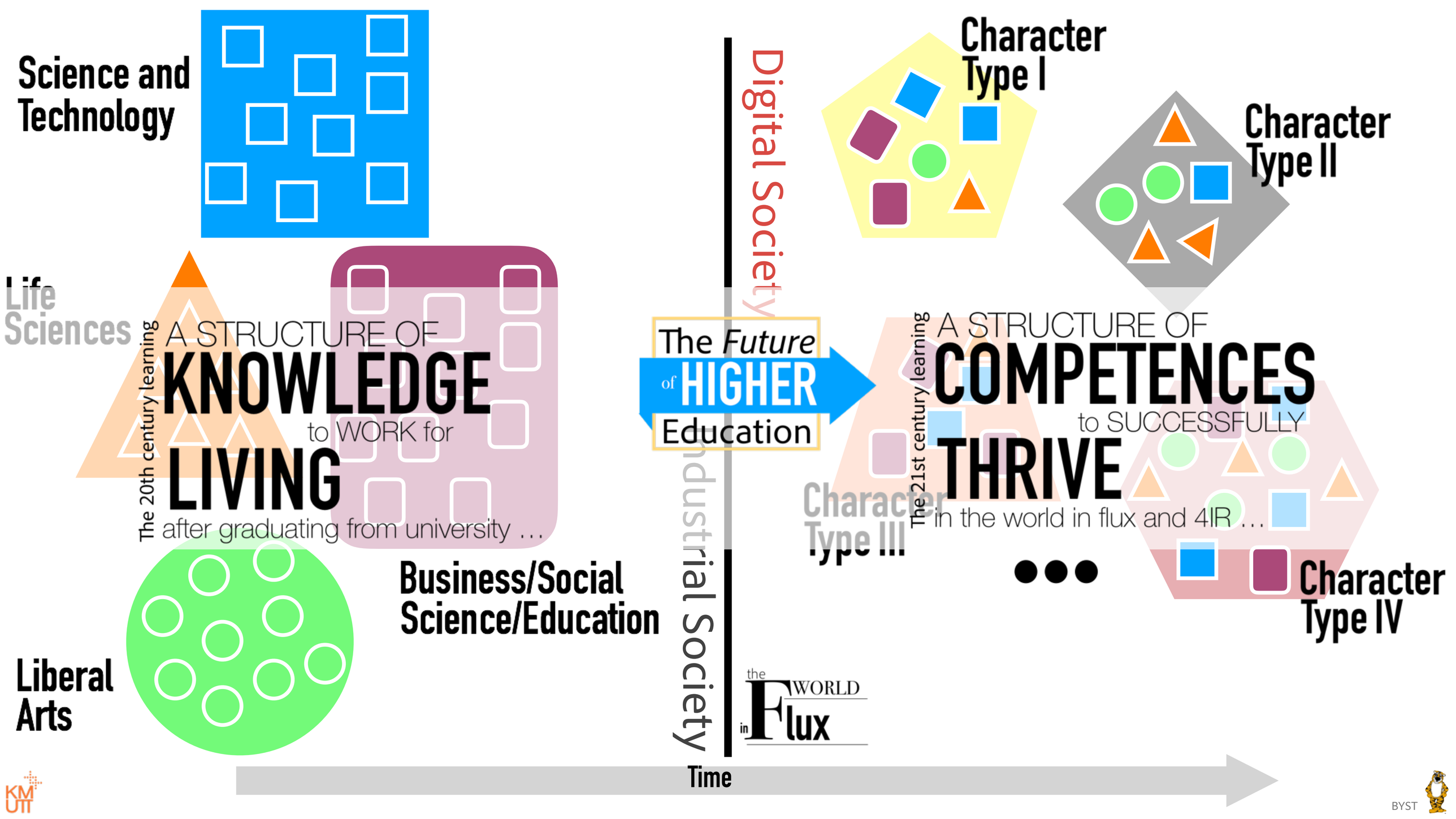
INNOVATIVE and **GROWTH**

LEARN to **BE** character

It is about **WHAT** students **CAN DO** with **WHAT** they **KNOW** ...

FOCUSING ON **COMPETENCE** not **KNOWLEDGE**


it's the
CHARACTER
not the
INTELLECT


Science and Technology
Life Sciences
Business/Social Science/Education
Liberal Arts
The 20th century learning
A STRUCTURE OF
KNOWLEDGE
to WORK for
LIVING
after graduating from university …
Digital Society
Industrial Society
The Future of HIGHER Education
Character Type I
Character Type II
Character Type III
Character Type IV
The 21st century learning
A STRUCTURE OF
COMPETENCES
to SUCCESSFULLY
THRIVE
in the world in flux and 4IR …
the WORLD in Flux
Time

The 20th century learning

A STRUCTURE OF

KNOWLEDGE

to WORK for

LIVING

after graduating from university …

The 21st century learning

A STRUCTURE OF

COMPETENCES

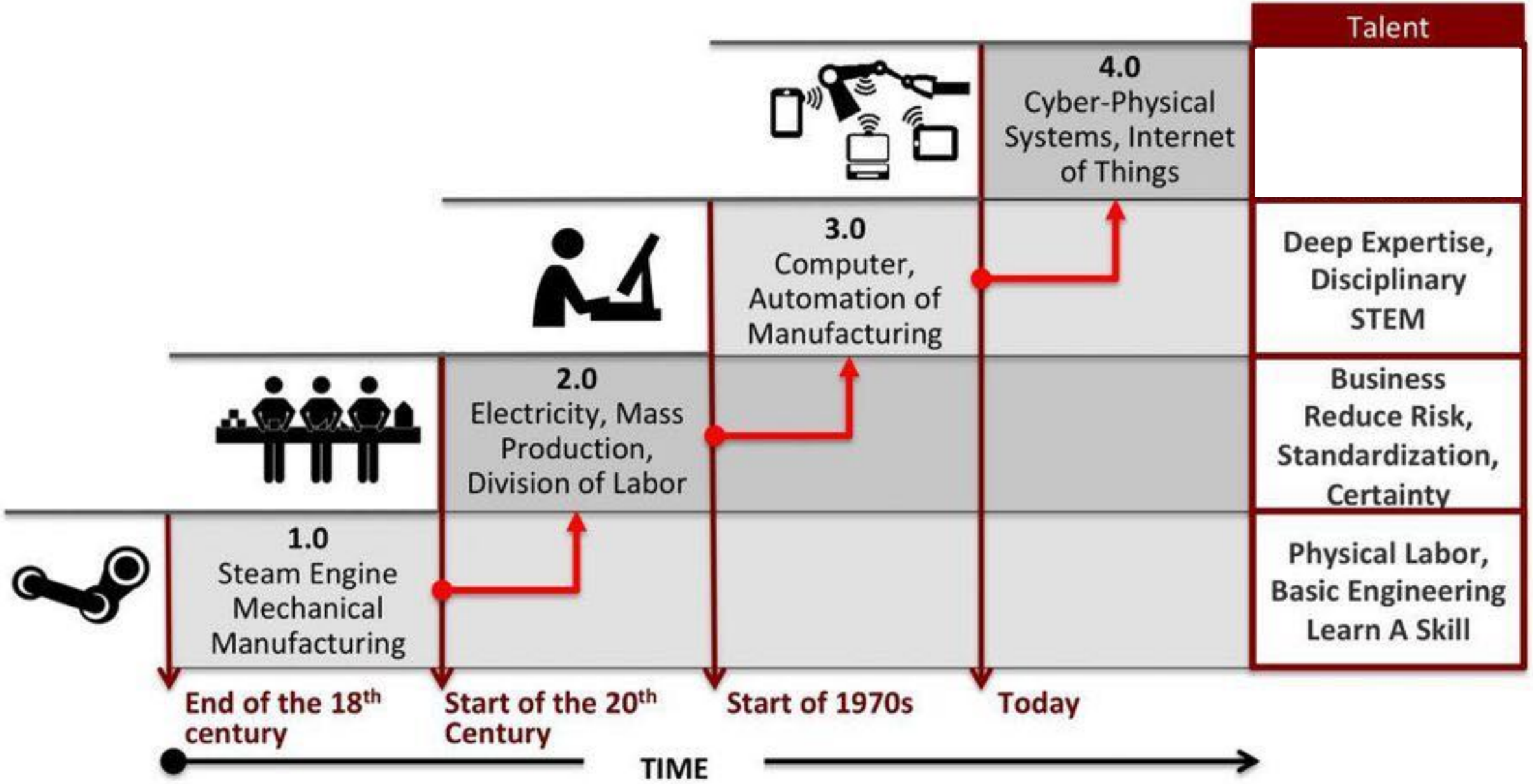
to SUCCESSFULLY

THRIVE

in the world of 4.0 …

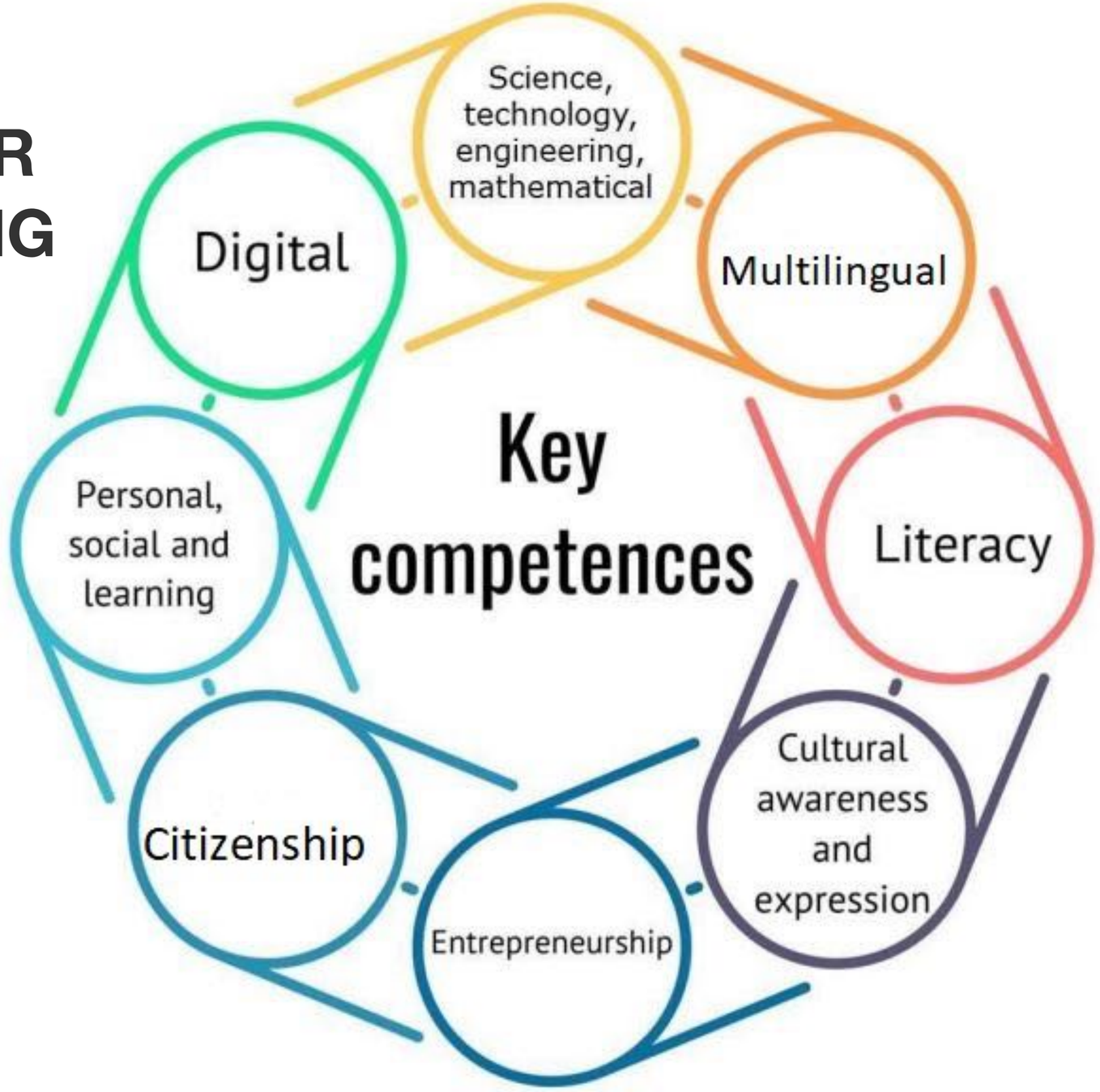
The *Future* of HIGHER Education

Future of Work: 4th Industrial Revolution (World Economic Forum)




LEARNING IS NEVER ENDING GGG...

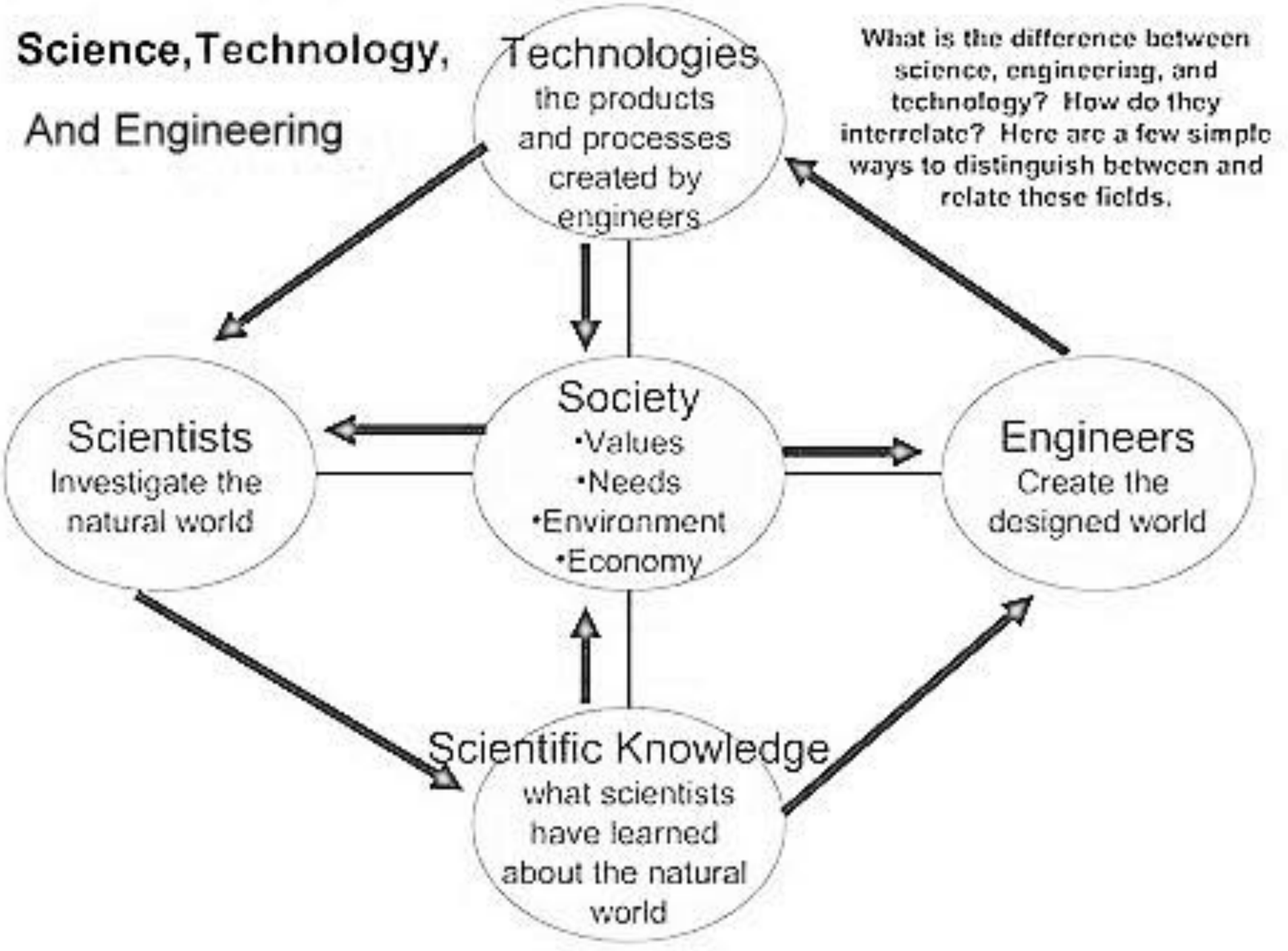
EUROPEAN KEY COMPETENCES FOR LIFELONG LEARNING




Personality & Motivation (Self)
Performance (Self & Feedback)
Change Agility
Mental Agility
Self-awareness
People Agility
Results Agility
Learning Agility


data
process
things
people
INDUSTRY
4.0
intangible
dynamic
transient
CONNECTED
of everything

Science, Technology, And Engineering



What is the difference between science, engineering, and technology? How do they interrelate? Here are a few simple ways to distinguish between and relate these fields.


COMPUTATIONAL
THINKING and
HUMANITY for 4IR
the 4th Industrial Revolution
CONNECTED
ALL THINKINGS
PROFIT
RANK
Social
ADVERTISING
SEO
SUBSCRIBERS
COLABORAÇÃO
SOCIAL
BLOG
LIGHT
SOLUTIONS
Media

2minds

COMPUTATIONAL HUMANITY

KMUTT

BYST

LEFT
brain

love the familiar

practical linear

I am order.

categorise

SCIENTIST accurate realistic

MATHEMATICIAN

always in control analytical

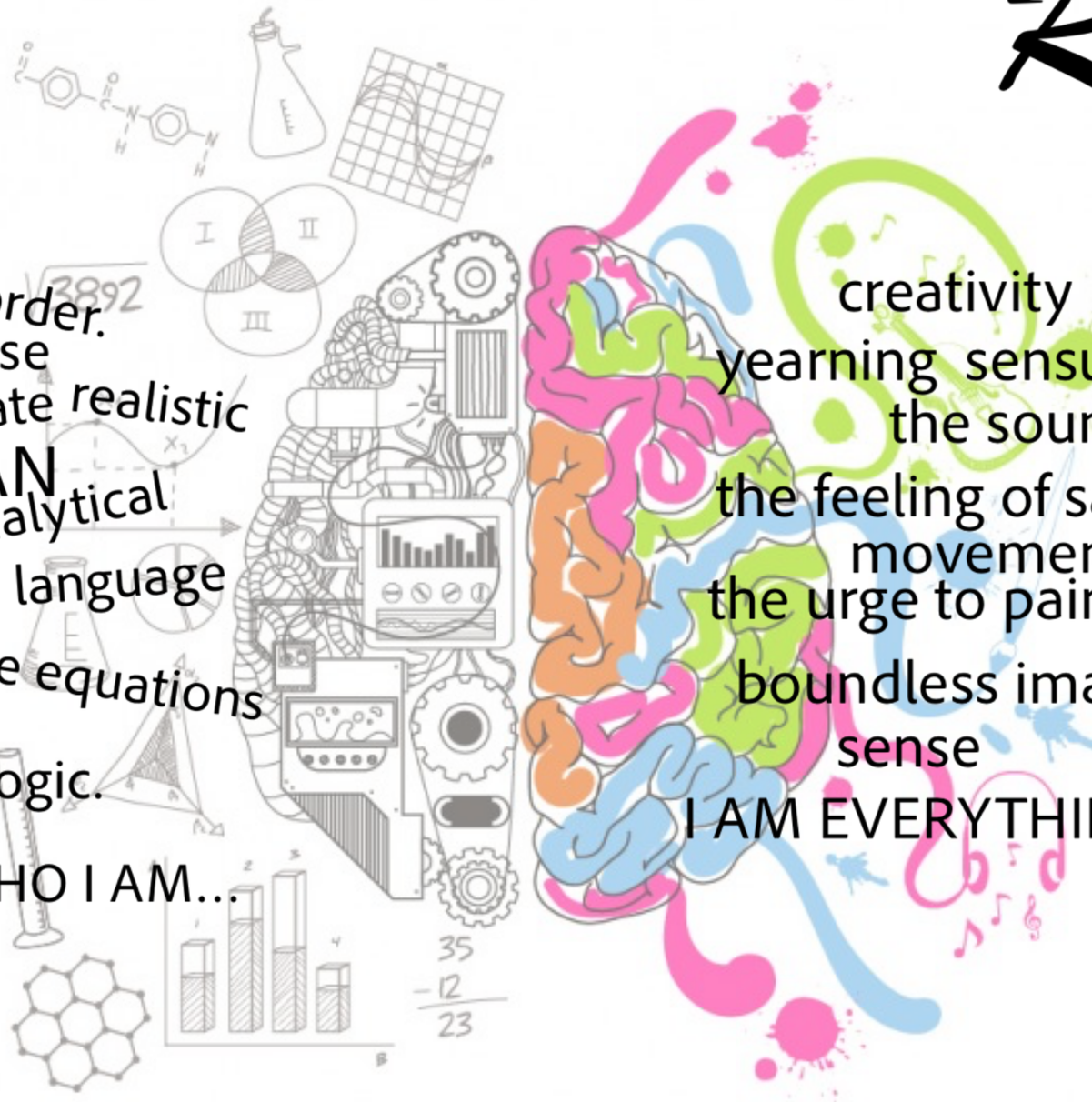
a master of words and language

strategic calculate equations

play with numbers

I am logic.

I KNOWN EXACTLY WHO I AM…



RIGHT
brain

creativity free spirit passion

yearning sensuality taste

the sound of roaring laughter

the feeling of sand beneath bare feet

movement vivid colours

the urge to paint on an empty canvas

boundless imagination art poetry

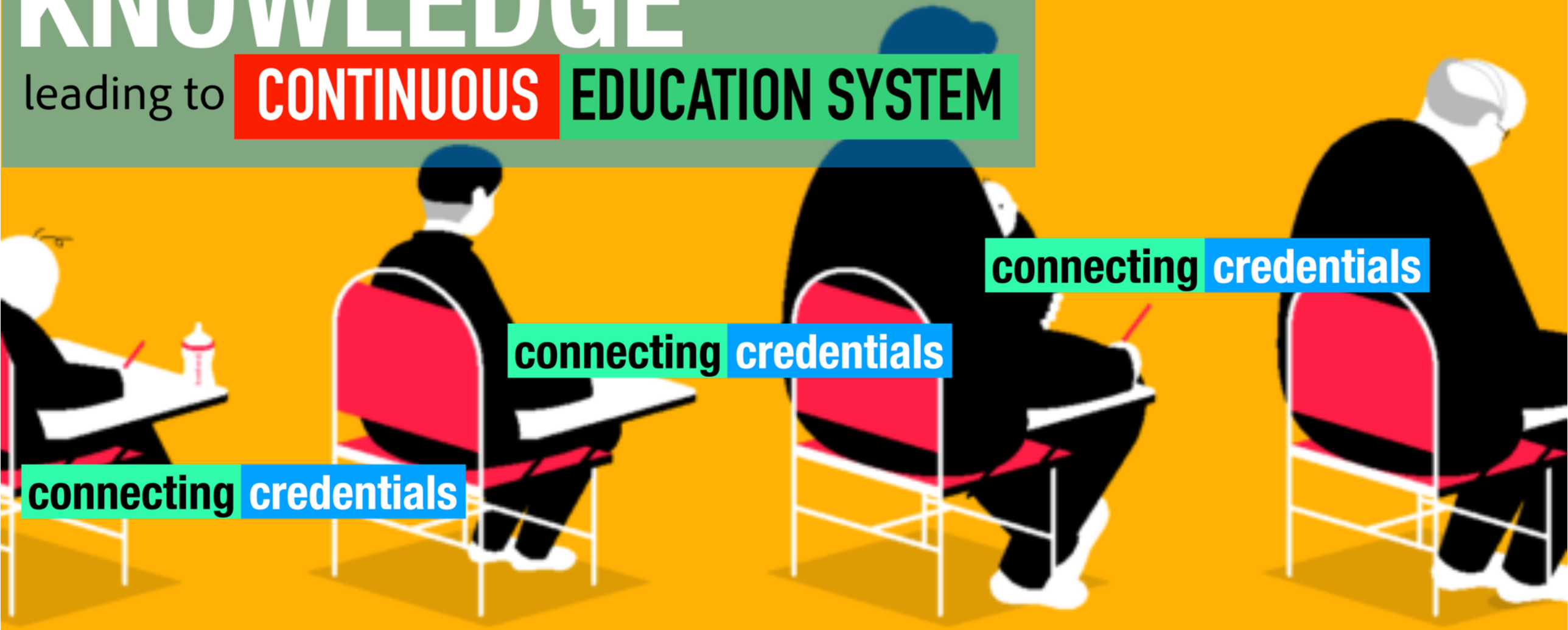
sense feel

I AM EVERYTHING I WANTED TO BE …

transforming

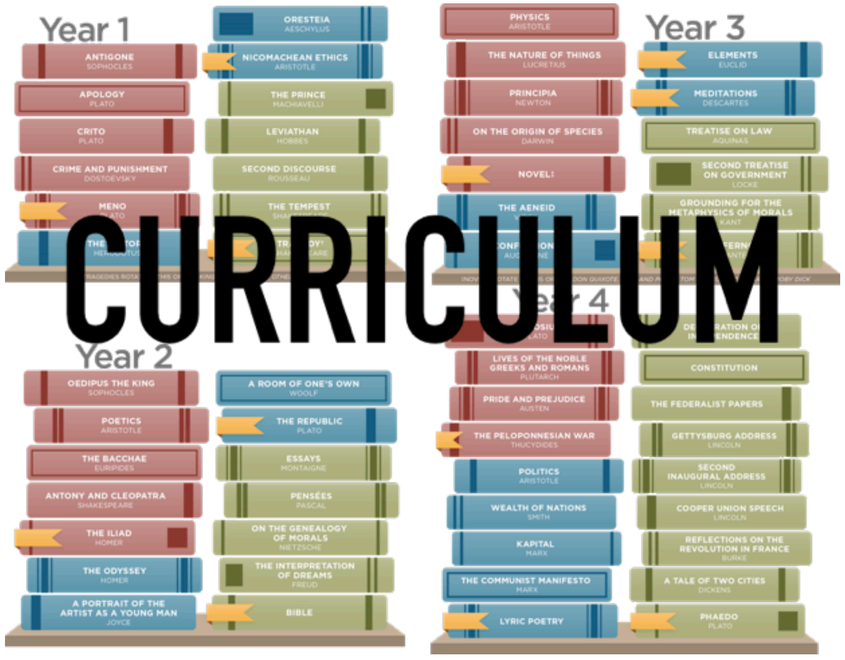
KNOWLEDGE

leading to **CONTINUOUS** **EDUCATION SYSTEM**



the world in "FLUX"

Courses



CURRICULUM

DEGREE QUALIFICATION PROFILE

CULMINATING LEARNIN OUTCOMES

"PLO"

Programme Learning Outcomes
(or Expected or Intended Learning Outcomes)

Principle of curriculum design for “Learning to be”:

- Don’t start with “what to teach”.
- Curriculum must be structure.
- Learning modules must be seminal.
- Learning activities/pedagogies must be “personalized”.


UNBUNDLING
and
REBUNDLING

OUTCOMES

ACHIEVEMENT of student from LEARNING

Growth of Student

engaging

MICRO CREDENTIALS

growth

MICRO CREDENTIALS

branching

MICRO CREDENTIALS

moving on

CULMINATING LEARNIN OUTCOMES

from learning Development

CREDENTIAL

"PLO"

Programme Learning Outcomes
(or Expected or Intended Learning Outcomes)

- What characters do our students need to “**BE**” ? **EXPERIENCES**
- What competences do our students need to be able to “**DO**” ? **practical knowledge**
- What literacies do our students need to “**KNOW**” ? **fundamental concepts**

If you're not prepared to be **wrong**,
you'll **never** come up with **anything** original.

- Sir Ken Robinson

Goalcast