Africa Special on 21st Century Competencies: Skills & Innovation for Job Creation

Skills For Innovation

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intel.

Our purpose
is to create world-changing technology that
enriches the lives of every person on earth

INTEL'S RISE STRATEGY

Making a positive impact on society, business, planet

RESPONSIBLE — Revolutionize how technology will improve health and safety

INCLUSIVE — Make technology fully inclusive and expand digital readiness

SUSTAINABLE — Achieve carbon neutral computing to address climate change

ENABLING — Accelerate the ways we enable progress through our technology and the expertise and passion of our employees

RESPONSIBLE
INCLUSIVE
SUSTAINABLE
ENABLING

GLOBAL CHALLENGES

TECHNOLOGY INDUSTRY INITIATIVES

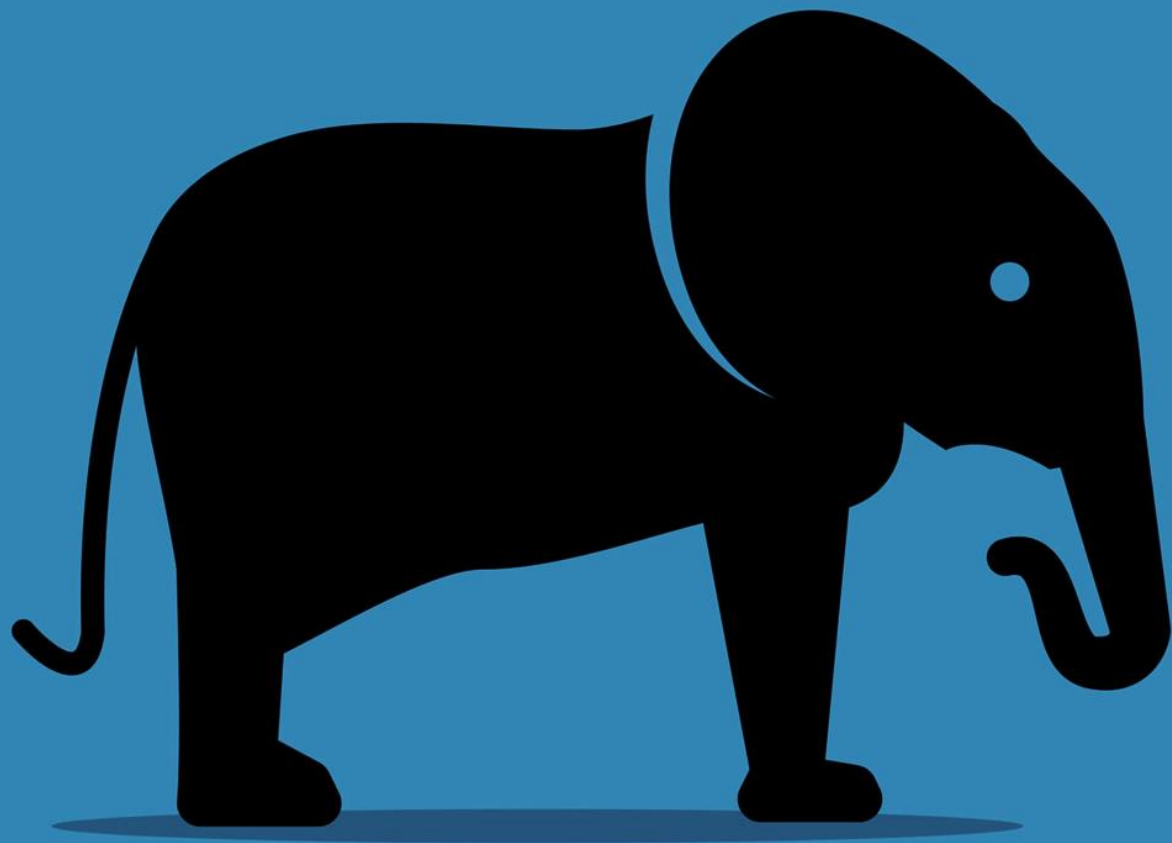INTEL OPERATIONAL & SUPPLY CHAIN GOALS

Education in COVID-19 Crisis

The time for authentic, engaging, seamless, anytime-anywhere learning has come.

What will Intel do to provide an equitable environment for all learners, and ensure that technology enables the greatest positive change in human history for our worldwide education system?

We cannot teach our kids to compete with the machines who are smarter – we have to teach our kids something unique. In this way, 30 years later, kids will have a chance.

JACK MA,
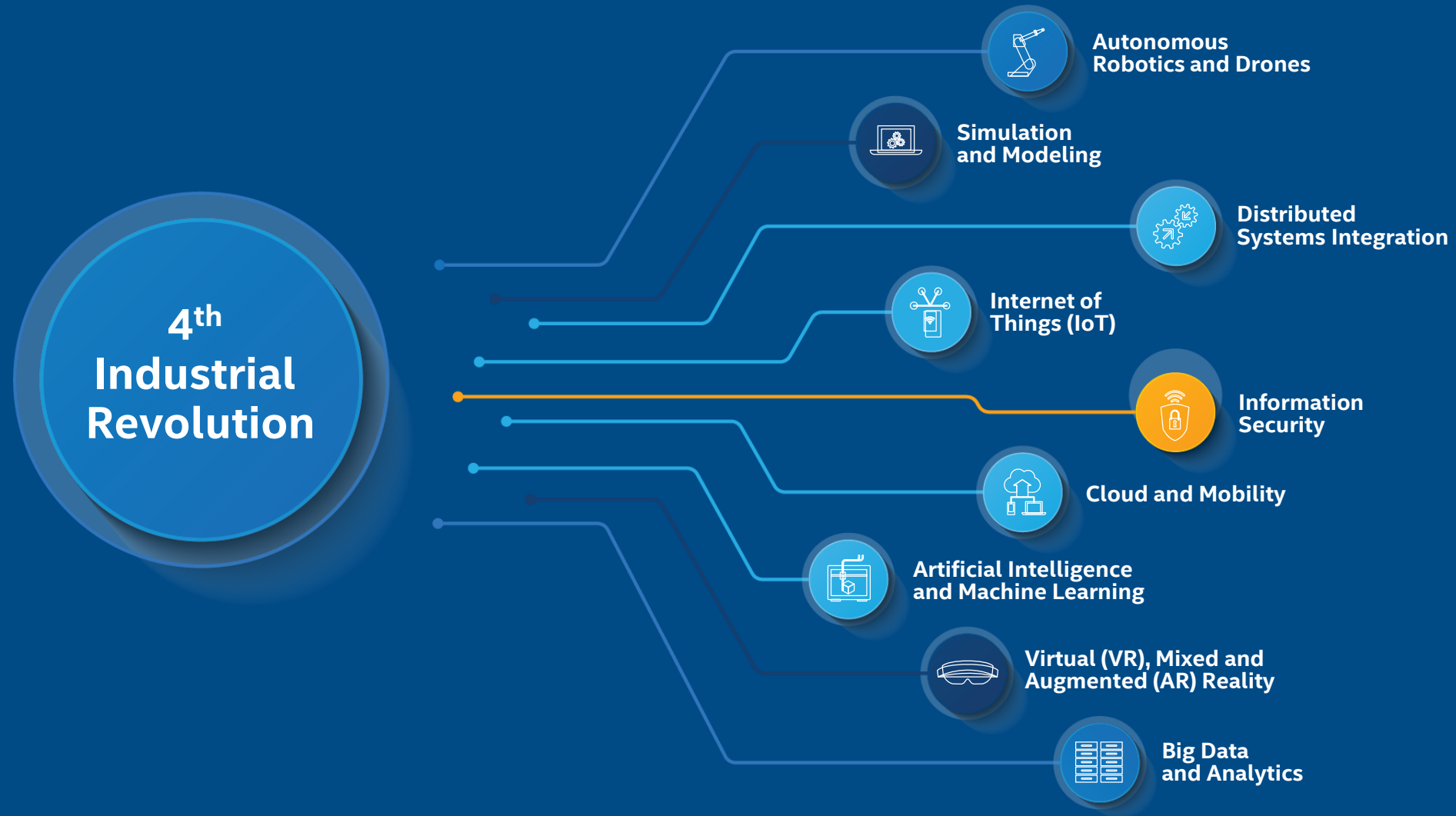former head of Alibaba speaking
to 2018 World Economic Forum

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NEW INTEL® EDUCATION VISION

"SKILLS FOR INNOVATION"

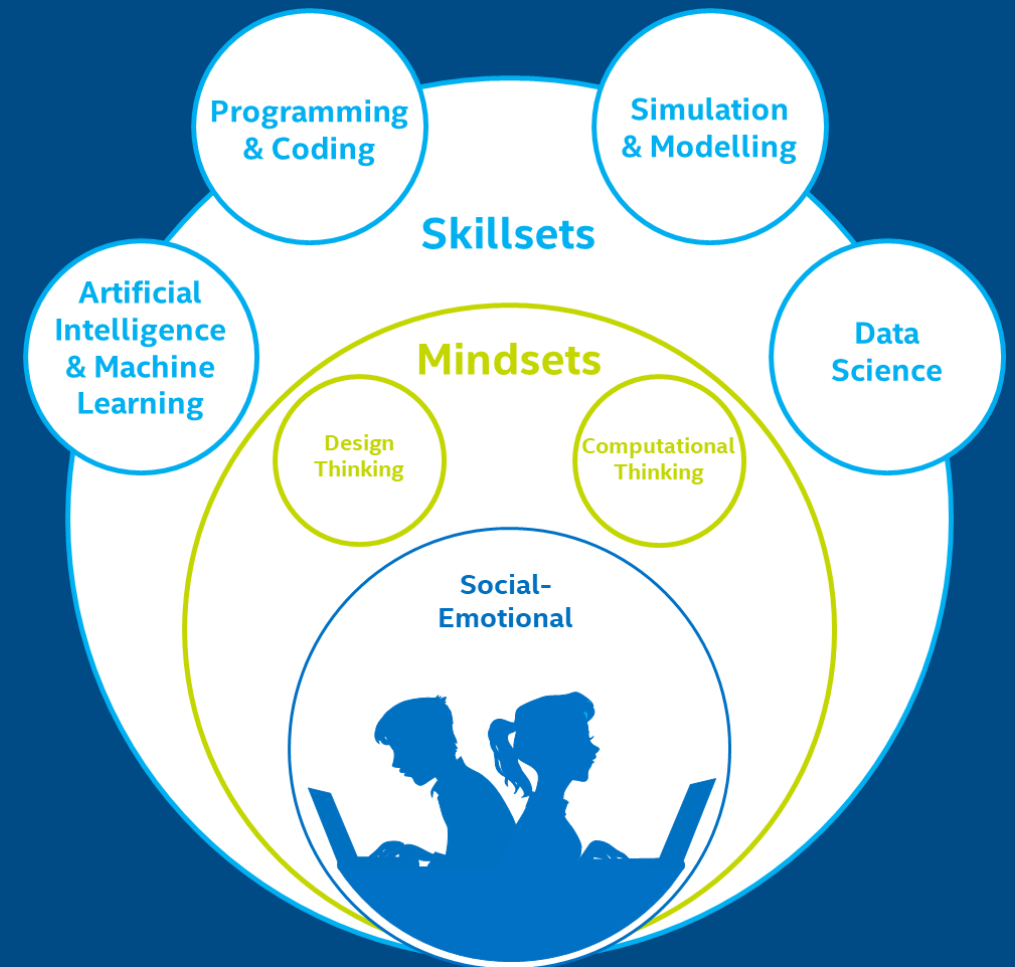**Empowering the Next Generation of Innovators**

4th Industrial Revolution

4th Industrial Revolution

- Autonomous Robotics and Drones
- Simulation and Modeling
- Distributed Systems Integration
- Internet of Things (IoT)
- Information Security
- Cloud and Mobility
- Artificial Intelligence and Machine Learning
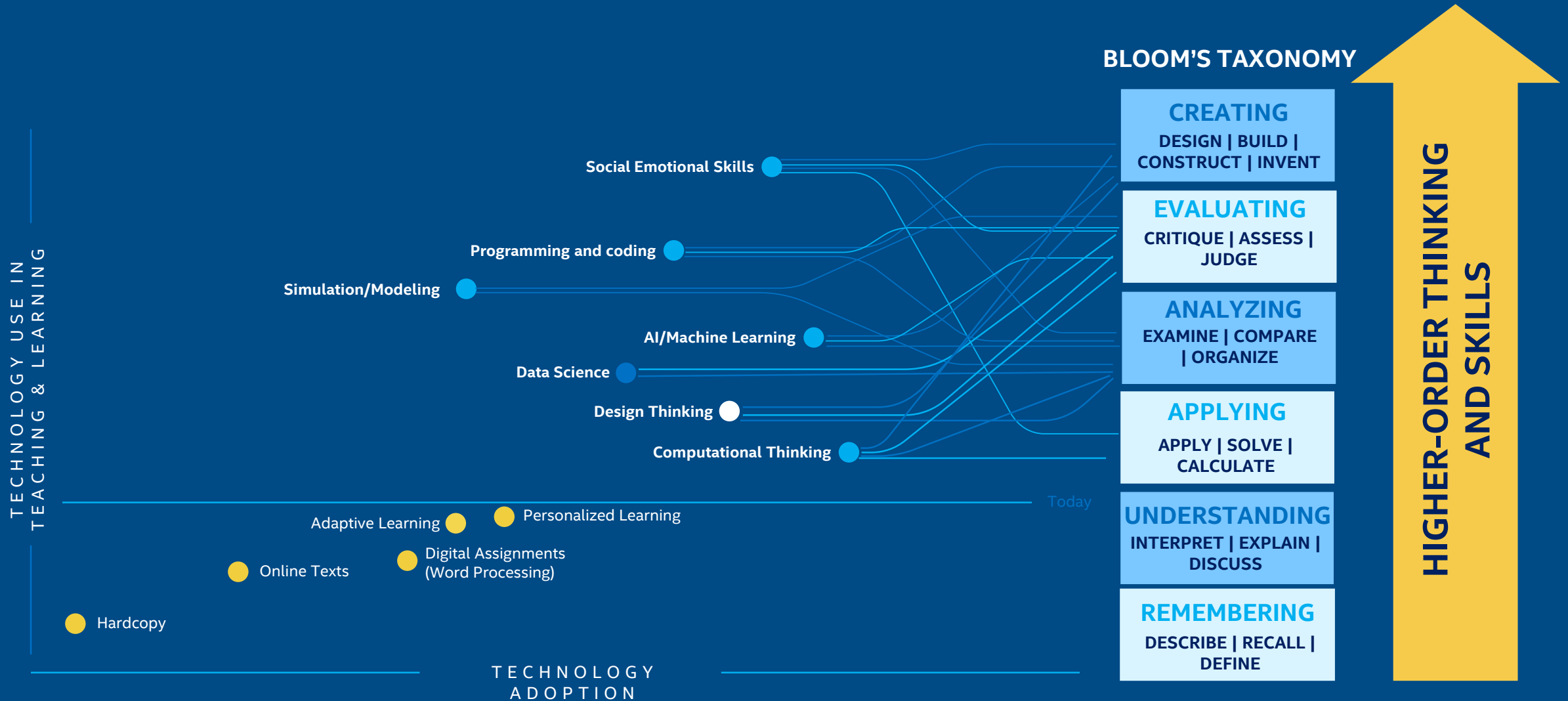- Virtual (VR), Mixed and Augmented (AR) Reality
- Big Data and Analytics
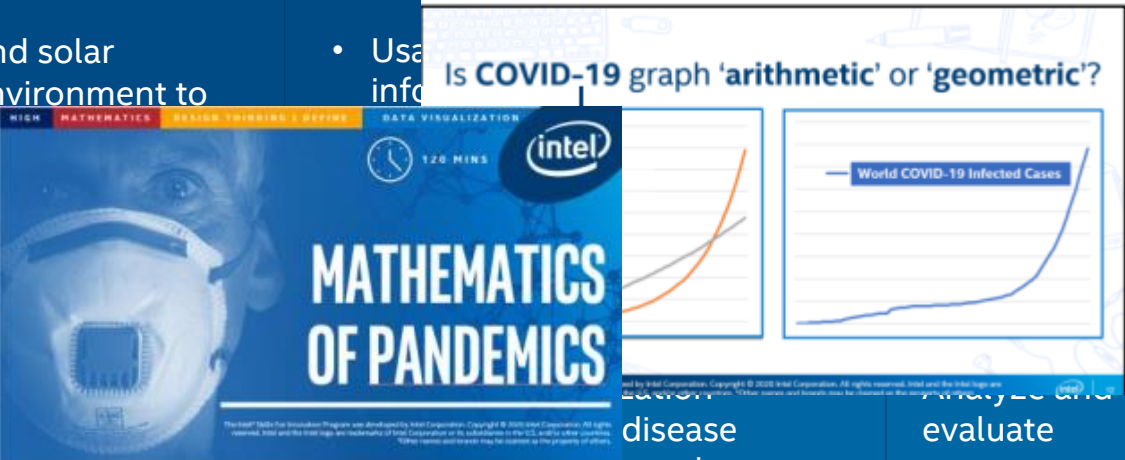
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Skill areas under focus

- Intel's Skills for Innovation approach is based on a model of necessary skills for student success in the 'new collar,' industry 4.0 economy.

- List of skills is not exhaustive but is to be considered as a starting point.

Technology-Enabled Learning Skills Development

BLOOM'S TAXONOMY

CREATING
DESIGN | BUILD | CONSTRUCT | INVENT

EVALUATING
CRITIQUE | ASSESS | JUDGE

ANALYZING
EXAMINE | COMPARE | ORGANIZE

APPLYING
APPLY | SOLVE | CALCULATE

UNDERSTANDING
INTERPRET | EXPLAIN | DISCUSS

REMEMBERING
DESCRIBE | RECALL | DEFINE

HIGHER-ORDER THINKING AND SKILLS

TECHNOLOGY USE IN TEACHING & LEARNING

Social Emotional Skills
Programming and coding
Simulation/Modeling
AI/Machine Learning
Data Science
Design Thinking
Computational Thinking

Today

Adaptive Learning
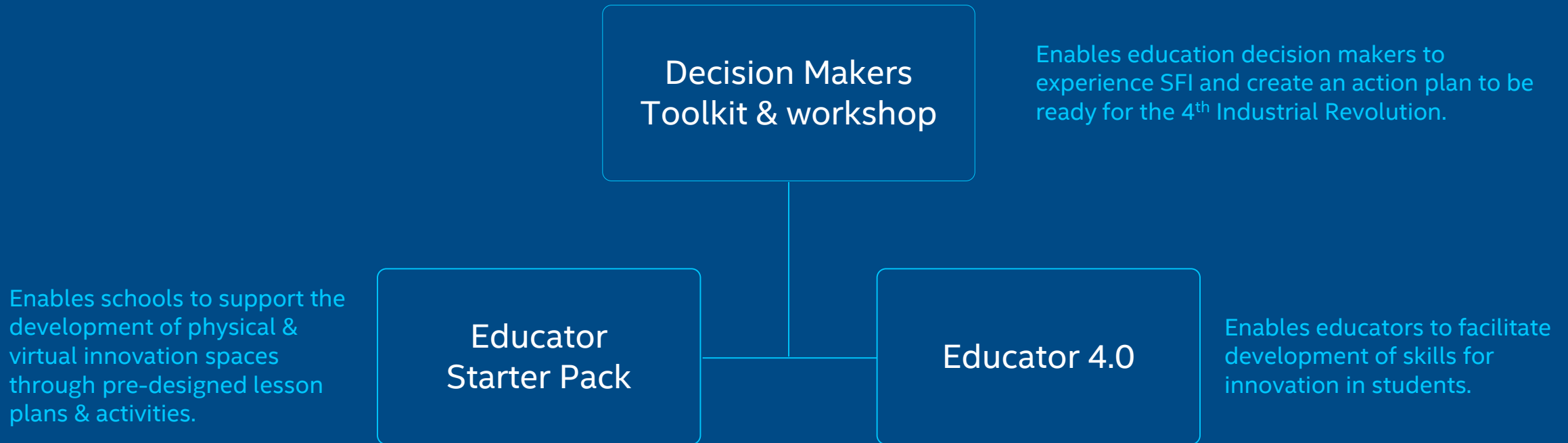Personalized Learning
Online Texts
Digital Assignments (Word Processing)
Hardcopy

TECHNOLOGY ADOPTION

INTEGRATE SKILL BUILDING ACTIVITIES INTO TEACHING & LEARNING

LEVEL	SUBJECT	LEARNING EXPERIENCES	TECHNOLOGY USAGE	COGNITIVE OUTCOMES
HIGH SCHOOL	STEM	• Model rooftop availability and solar coverage across an urban environment to identify possible location sit... • Create rooftop farm prototy... withstand wind-loading.	• Usa... info...	
MIDDLE SCHOOL	Humanities	Modelling of virulence and spre... epidemics (Spanish Flu, SARS, ... study historical impact.	...ization... disease models to compare and contrast.	...evaluate
PRIMARY SCHOOL	Language	Create an advertisement to invite your friends to ride in your roller coaster	Green screen video recording, video editing, audio transcription and online publishing tools.	Evaluate and create

Skills For Innovation Resources

Decision Makers Toolkit & workshop

Enables education decision makers to experience SFI and create an action plan to be ready for the 4th Industrial Revolution.

Enables schools to support the development of physical & virtual innovation spaces through pre-designed lesson plans & activities.

Educator Starter Pack

Educator 4.0

Enables educators to facilitate development of skills for innovation in students.

Allows decision makers and educators to understand, experience, and implement SFI vision

Reach out to us through Africa Brains!