# International Baccalaureate and The Fourth Industrial Revolution



May 3, 2019 2:00 p.m.

#### **Presenters**

#### Contact us at

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 What is the Fourth Industrial Revolution?

> How can we prepare students for the Fourth Industrial Revolution?

 What is the alignment between IB and the Fourth Industrial Revolution?

 What is the Fourth Industrial Revolution?

## What is the Fourth Industrial Revolution?

#### Navigating the next industrial revolution



				OF THE WORLD
Revolution		Year	What happened?	
<b>Ö</b>	1	1784	Steam, water, mechanical production equipment	
	2	1870	Division of labour, electricity, mass production	
	3	1969	The computer, electronics and the internet	
•	4	?	The barriers between man and machine dissolve	

### CENTER FOR THE FOURTH INDUSTRIAL REVOLUTION







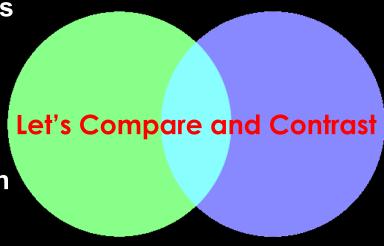
"The Fourth Industrial Revolution, which includes developments in previously disjointed fields such as artificial intelligence and machine-learning, robotics, nanotechnology, 3-D printing, and genetics and biotechnology, will cause widespread disruption not only to business models but also to labor markets over the next five years, with enormous change predicted in the skill sets needed to thrive in the new landscape."

How can we prepare students for the Fourth Industrial Revolution?

#### Top 10 Skills to Thrive in the Fourth Industrial Revolution: World Economic Forum

#### In 2015

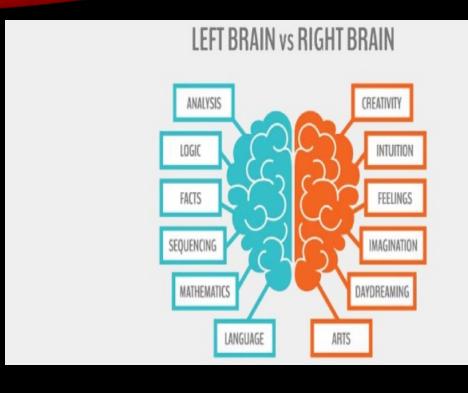
- 1. Complex Problem Solving
- 2. Coordinating with Others
- 3. People Management
- 4. Critical Thinking
- 5. Negotiation
- 6. Quality Control
- 7. Service Orientation
- 8. Judgement and Decision
- Making
- 9. Active Listening
- 10. Creativity



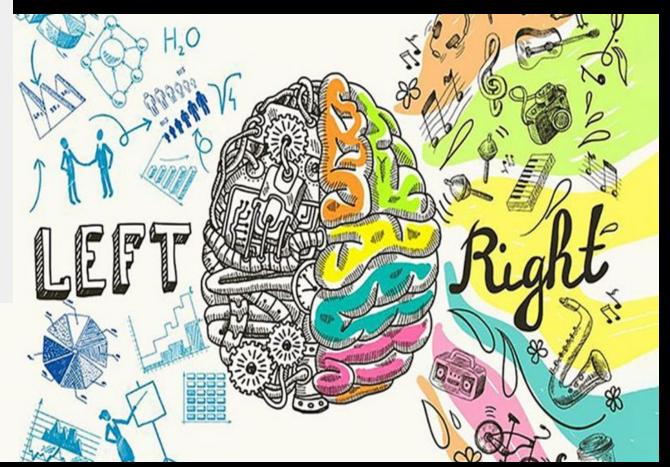
#### In 2020

- 1. People Management -1
- 5. Complex Problem Solving
- 2. Critical Thinking +4
- 3. Creativity +7
- 4. Coordinating with Others -3
- 6. Emotional Intelligence NEW
- 7. Judgement and Decision Making
- 8. Service Orientation-1
- 9. Negotiation -4
- **10 Cognitive Flexibility NEW**

## THE END OF THE "LEFT BRAIN" VS "RIGHT BRAIN



WHAT DOES THIS MEAN TO EDUCATORS?



 What is the alignment between IB and the Fourth Industrial Revolution?

#### IB MISSION STATEMENT

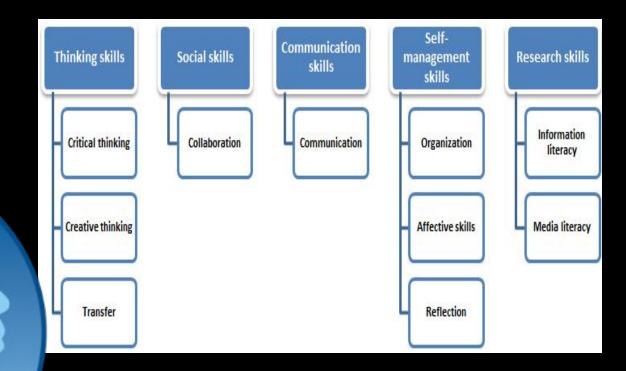
The International Baccalaureate aims to develop inquiring, knowledgeable and caring young people who help to create a better and more peaceful world through intercultural understanding and respect.

To this end the organization works with schools, governments and international organizations to develop challenging programmes of international education and rigorous assessment.

These programmes encourage students across the world to become active, compassionate and lifelong learners who understand that other people, with their differences, can also be right.

## THE IB LEARNER PROFILE & APPROACHES TO LEARNING SKILLS

The IB learner profile represents
10 attributes valued by IB World
Schools. We believe these
attributes, and others like them,
can help individuals and
groups become responsible
members of local, national and
global communities.



#### Intellectual

WEF:

Complex problem

IB:

solving

Inquirers

**Critical Thinking** 

Knowledgeable

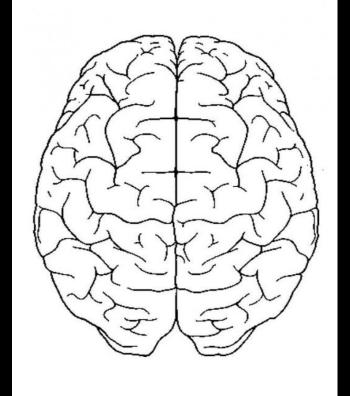
Judgement and Decision Making

Thinkers

Cognitive Flexibility

Reflective

Creative



#### Emotional

WEF:

Creativity Emotional Intelligence

**IB:** Principled

Balanced

Caring

Risk-Takers

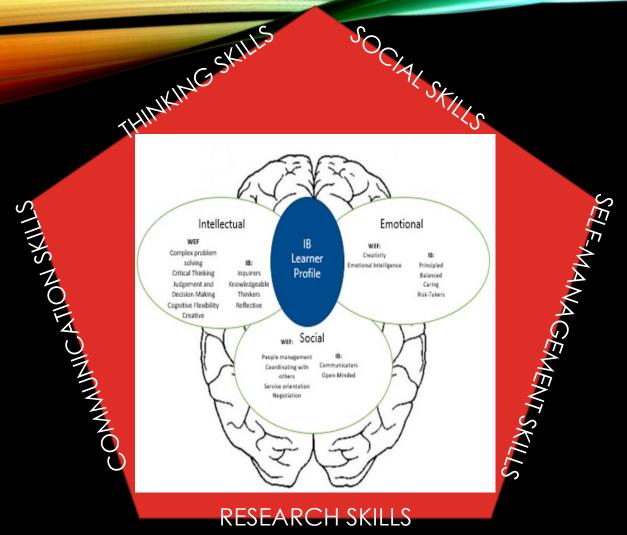
WEF:

People management Coordinating with

others Service

orientation Negotiation **IB:**Communicators
Open-Minded

Social



Mental Dimension	Emotional Dimension		Social Dimension		
WEF	IB	WEF	IB	WEF	IB
Complex Problem Solving	Inquirers	Emotional Intelligence	Principled	People Management	Communicators
Critical Thinking	Knowledgeable		Caring	Coordinating with Others	Open-minded
Creativity	Thinkers			Service Orientation	
Judgement and Decision Making	Risk-takers			Negotiation	
Cognitive Flexibility	Balanced				
	Reflective				

### A UNIVERSITY PERSPECTIVE: WHY IB STUDENTS?

- What do they bring to the table?
- How does this meet the demands of university life?
- What kind of things do "Fourth Industrial Ready" IB students do on campus?

## IB AND 4<sup>TH</sup> INDUSTRIAL REVOLUTION: IMPACT ON LOW INCOME/FIRST GENERATION STUDENTS

- In what ways does the Fourth Industrial Revolution have major implications for these students?
- Why is teaching the top ten skills particularly important for this group of students?
- How does it impact their opportunities?

## WHY ARE IB GRADUATES A GOOD FIT FOR YOUR CAMPUS?

Mature

Inquirers

Globallyaware

Multilingual/ Multicultural

Engaged in their learning

Encouraged to be self-mangers

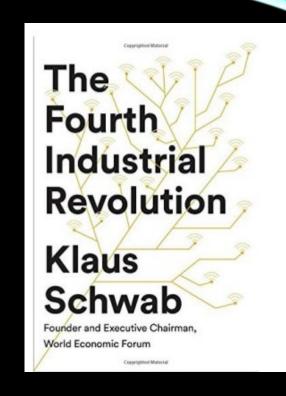
Committed to Service and Action in their community

#### LIFE AFTER COLLEGE

- "The new measure of a sufficiently prepared student is one who has knowledge and skills to keep learning beyond secondary school, first in formal settings and then in the workplace throughout their careers, so that they are capable of adapting to unpredictable changes and new economic conditions and opportunities."
- David Conley, Getting Ready for College Careers, and the Common Core (2013)

### REFELECTIVE CLOSEOUT: QUESTIONS FOR EDUCATORS TO CONSIDER

- How are your students provoked to think beyond classrooms?
- In what ways can we prepare students for a world that doesn't exist today?
- How does your school foster creativity and innovation at the forefront?
- Are your students encourage to be developing problem solvers and designers?
- Why is it important to encourage an alternate status quo in schools?
- How can your full school community be productive collectively?





#### QUESTIONS?

## THANK YOU for attending this session!

#### We'd love to hear from you!

Please submit a session evaluation via the conference mobile app or from www.pcacac.org.