

# ORT Israel Introduction

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Administration for R&D and Training



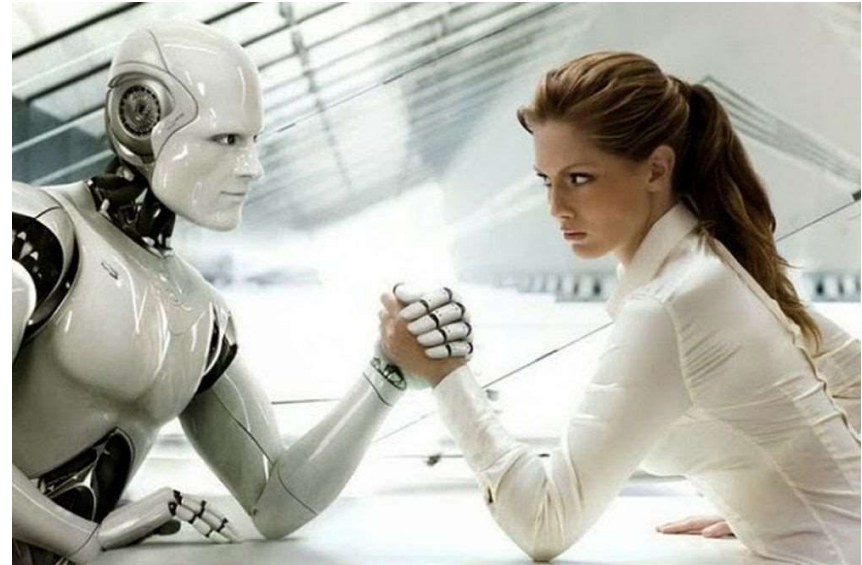
# The Era of the Education Disruption

- Access and equity
- Pedagogical shift
- Change in role of the teachers
- Personalized learning
- Assessment & evaluation
- Digital literacy and online safety
- Cost & sustainability
- Resistance to changes



# Failure to Keep Pace

- Educational disparities
- Significant skills gap
- Backlog in the innovation
- Weakening global competitiveness
- Limitation of the economic growth
- Mismatch between workforce skills and market demands



**Being on the edge of technologies developments is crucial for an advancement of any country and for ensuring a prosperous future for our children.**

## ORT's Vision

With over 75 years of expertise and an unwavering commitment to cutting-edge technology, ORT is the driving force behind future-ready sci-tech education in the Israeli Start-up Nation. Empowering learners to thrive in an ever-evolving world, we are passionate about shaping a transformative educational experience.



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# Mission

At the heart of our mission lies the power to shape a truly transformative educational experience that nurtures the character of future generations and equips them for the challenges that lie ahead. Through strategic partnerships, global connections, and collaborative efforts, we transcend boundaries and broaden horizons for pupils, students, and dedicated teaching staff. Together, we forge a path towards social-economic sustainability, empowering individuals and communities to thrive in a rapidly evolving world.

**Disclosure:** Ort Israel is a non profit organization, any incomes which are generated through our collaboration projects and donations are reinvested in the education of the Israeli students, in our schools and teachers, in order to strengthen Israeli education system sustainability.

# Who We Are

## Israel's Largest and Leading Scientific-Technological Education Network

Independent → non political

Largest → no parallels in Israel or abroad

75 years of operation

100,000

Pupils & Students



8,000

Teachers &  
Administrators



252

Schools & Colleges



57

Local Authorities



10%

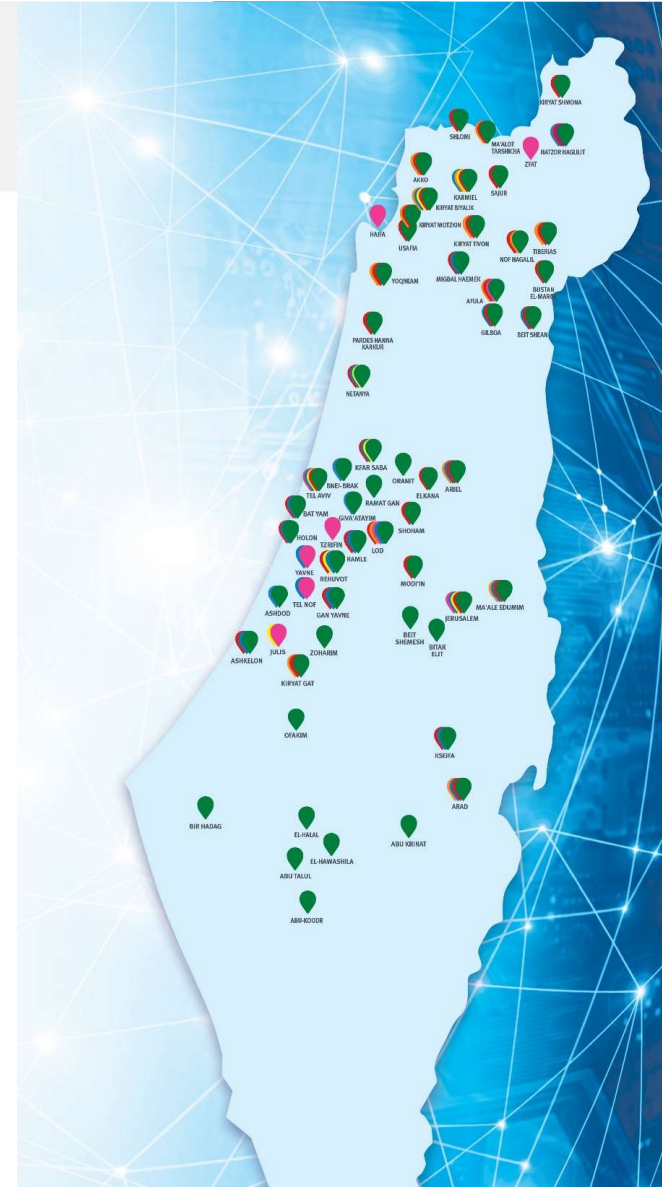
Of all High Schools'  
pupils in Israel





## Map

- 103 High Schools
- 82 Middle Schools
- 9 Vocational Schools
- 1 Elementary School
- 28 Practical Engineering Colleges
- 14 Centers for Diploma Studies
- 15 Science & Technology Centers



# R&D and Training Administration



Focus on sci-tech education



Largest of its kind with no parallels on the globe



50 experts with diverse sci-tech, academic and business background & administrative staff



Training more than 5000 teachers every year



Leader of international partnerships in the education industry

Developing innovative models, updated curriculum, advanced teaching and learning methods through unique collaboration between the R&D team and schools



# What We Do

- ✓ **ISTEAM** – advanced curricula in STEM subjects adapted to the demands of the local and international educational systems
- ✓ **Future Ready** skills & educational solutions and pedagogical methodologies development
- ✓ **SEL** – social emotional learning concepts
- ✓ On-site Training of principals and teachers to implement the ISTEAM curricula by ORT Israel trainers
- ✓ Pedagogical planning and architectural design of ISTEAM Schools, Innovation centers and ISTEAM laboratories by ORT Israel experts
- ✓ ORT Israel's ISTEAM Master Teachers who will spend a year in the location–teaching and training schools' principals and teachers
- ✓ Training workshops for school teachers in Israel by ORT Israel trainers
- ✓ Research on-demand
- ✓ Virtual campus and e-learning courses
- ✓ And more...

## Addressing The Challenges of the Era of the Education Disruption Era

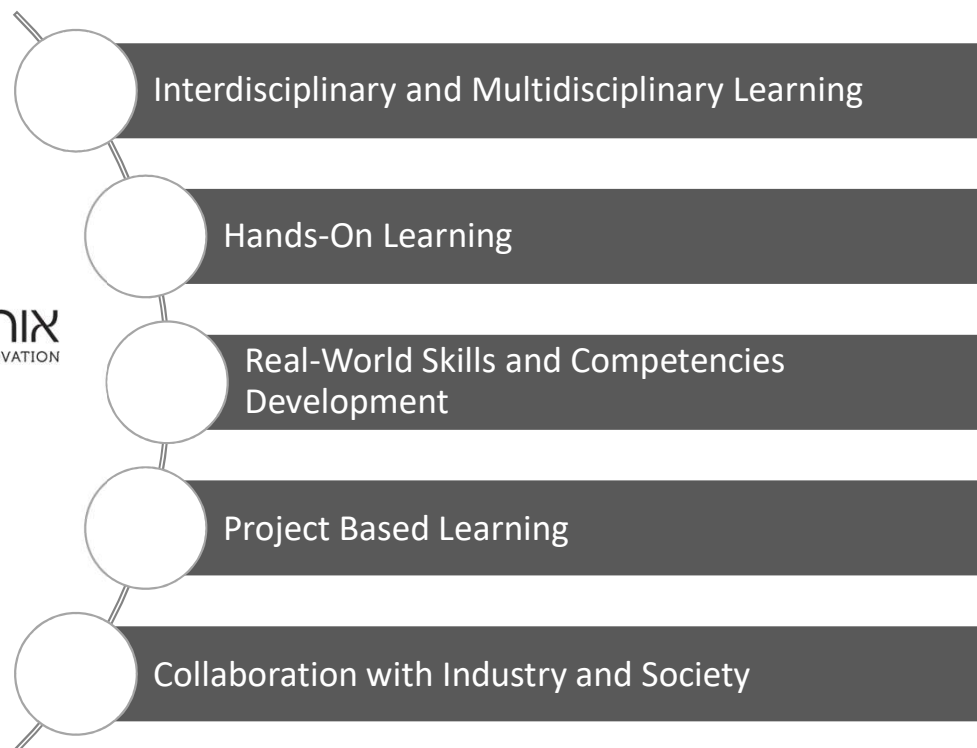
- Multi-faceted approach involving various stakeholders
- Providing equal access to technology
- Professional development & support
- Redefining teachers roles and mentoring them
- Infrastructure and resource allocation
- Flexible curriculum and personalized learning
- Digital literacy and online safety education
- Redefining evaluation & assessment tools
- Collaboration & communication
- Research & evaluation
- Critical thinking & problem solving approach
- Leadership state of mind
- Agility & adaptability
- Initiative and entrepreneurialism
- Curiosity and imagination



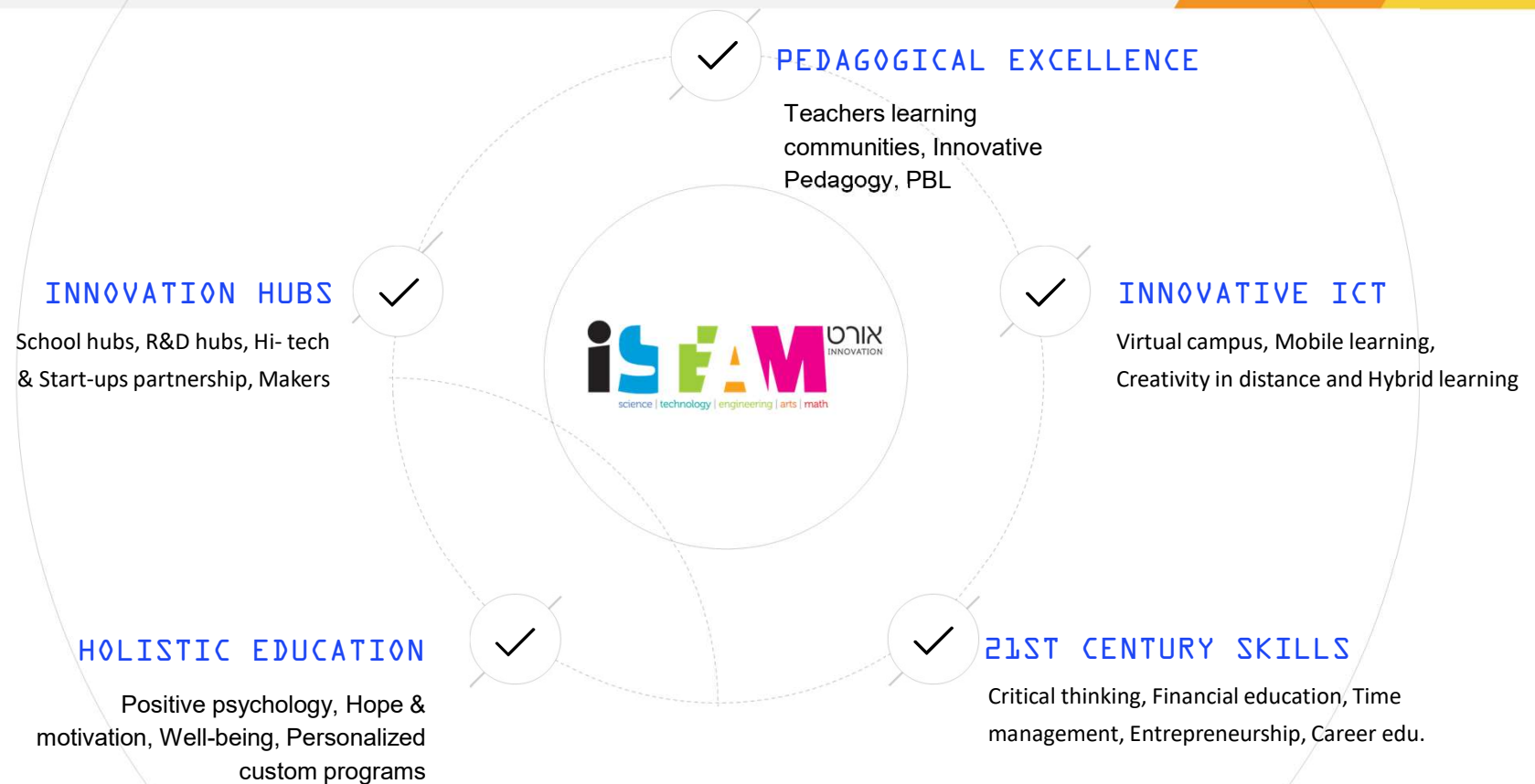
Startup Education Faculty

The iSTEAM program is built upon ORT Israel vast knowledge and experience in PBL - Project Based Learning and Design Thinking.

Using innovative pedagogies the program aims to nurture the skills for tomorrow's world as Problem-Solvers and Innovators in the Startup Economy.



# Key Components of Start Up Education



# ORT iSTEAM Programs

- Neuroscience
- Nanotechnology
- Precision technologies
- Bio-Med engineering, biomimicry & cardio science
- Science & engineering
- Aerospace & aviation
- Cyber
- Robotics
- Food-Tech & precise agriculture
- Autotech
- Makers – involving 3D technologies

## Additional Projects:

- Well being
- Financial literacy
- Digital citizenship
- Autonomous transportation
- Time management
- Practical philosophy
- ORT Aviv Virtual Campus
- 2050 Leadership Development
- Pedagogy meets innovative physical environments
- *Organizational excellence and leadership – programs for the business sector.*



# ORT International Projects

- EU Projects:
  - Nanotechnology in education
  - OSOS – Open Schools for Open Societies
  - SALL – Schools As Living Labs – FoodTech focus
- US Sponsored Project: Thinking English
- Azerbaijani ministry of science and education: The Innovative Azerbaijani Schools Roadmap and training of principals and teachers
- In process of discussing additional collaborations with education centers in Korea, China, Uzbekistan
- *We're looking to expand our horizons in order to support the transition of education through the digital disruption period and prepare the teachers and pupils being future ready...*

# Collaboration with the Ministry of Science and Education of Azerbaijan

- **2018 – Today** : 5 phases of yearly activities
  - ✓ Over 300 educators (teachers, principals, inspectors etc.) were trained by ORT Israel experts in the innovative pedagogy and cutting edge education curricula
  - ✓ Adaptation of ORT educational philosophy thought the whole country by establishing dozens of innovative STEAM centers; and implementation of ORT inspired curricula among large portion of the Azerbaijani education system
- **2022**: Submitting comprehensive roadmap report to the ministry of science and education of Azerbaijan.
- **Up to 2026**: 100 schools in Azerbaijan will operate according to the ORT guidelines supervised and accompanied by ORT experts
- In the following years ORT will develop number of innovative curricula for the Azerbaijani education system



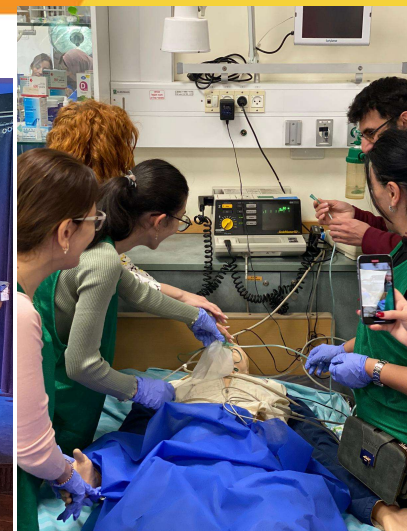
# 2023 Leadership Seminar



AZƏRBAYCAN RESPUBLİKASI  
ELM VƏ TƏHSİL NAZİRLİYİ

- **Baku (September)-Israel (November):**
  - ✓ Project Based Learning (PBL)
  - ✓ Skills and Learning Methodologies
  - ✓ Mindset and Approach: Teachers as Change Agents
  - ✓ Innovative Learning Spaces
  - ✓ Social Emotional Learning (SEL)

\*It is a second seminar among many planned.



# ORT – Azerbaijani MoSE



AZƏRBAYCAN RESPUBLİKASI  
ELM VƏ TƏHSİL NAZİRLİYİ

## 1. STEAM & Skill-based Curriculum Development and Training

Entrepreneurship

Think in English

Financial  
Education

Time  
management

Neuroscience

Bio-engineering

Urban  
Agriculture

## 2. Mentoring for Educational Leaders:

- ✓ On site mentoring for principals and teachers by leading principals of ORT Israel schools and pedagogical experts from the R&D Center
- ✓ Focused and short trainings

## 3. A 4-week training for educational leaders (expanding the Innovative Azerbaijani School model)

## 4. Train the Trainers:

- ✓ Training of leading teachers to become change agents
- ✓ Establishment of school-based learning communities through high quality in-service trainings (e.g., interdisciplinary learning, teaching skills, etc.)

# Training of the Azerbaijani Staff – Main

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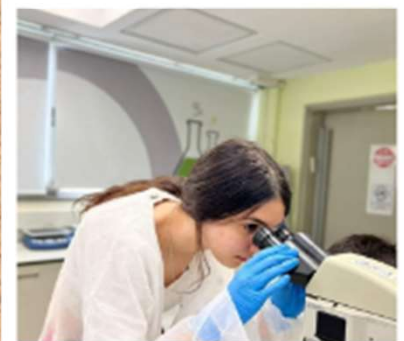


# Auto-Tech in Action





# Food-Tech in Practice



# Food-Tech in Practice





# Design & Architecture



# ORT Executive Leadership Team



**Prof. Amnon Shashua**  
Founder, Mobileye

**Chemi Peres**  
Managing Partner &  
Co-Founder, Pitango.  
Chairman, Peres  
Center for Peace &  
Innovation

**Zvi Peleg**  
Director General,  
ORT Israel

**Lilach Asher Topilski**  
Senior Partner, FIMI  
Opportunity Funds;  
(former) CEO, Discount  
Bank

**Yosi Bachar, Z"l**  
(former) Director  
General Finance  
Ministry.

**Aaron Mankovski**  
Managing Partner,  
Pitango



**Marius Nacht –**  
Chairman, Checkpoint

**Yuval Ariav**  
General Partner,  
LioBird Ventures;  
Founder, Fundbox;

**Miki Bar**  
Brigadier General  
(Ret.) IDF  
Founder, DSRaider

**Itzhak Aberchoen**  
CEO, Shufersal  
(largest supermarket  
chain in Israel)

**Aviv Kochavi**  
Chief of Staff, IDF

**Nir Barkat**  
Founder, BRM, IVN,  
(former) Mayor of  
Jerusalem

ORT Israel Graduates (selected group) -  
National Leaders in Science, Technology,  
Education, Business and Defence



# Values

- ✓ **Inclusion and equality** – students principals and teachers from all demographical segments of Israel regardless gender, color, race, religion
- ✓ **Equal** education and development **opportunities** to pupils and students in every region of Israel, regardless socio-economic environment
- ✓ Being on the edge of the **innovation** in order to be sci-tech **future ready**
- ✓ Strengthening the **reputation of Israeli sci-tech start-up nation**
- ✓ Strengthening **sustainability** of Israeli education

# Collaboration and Partnerships Opportunities

- Collaborations with the ministries of education and schools in various countries
- Collaboration with Ed-Tech distributors and agents from various geographical regions
- Collaboration with BIG Tech companies, Ed-Tech startups, education organizations and research centers
- Sponsorships, grants, donations

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**We're excited to partner up  
and explore mutual  
collaboration opportunities!**



# Questions?

# Thank You



Israel's Leading Science and Technology Educational Network  
Schools & Colleges For Sciences & Advanced Technology

