Special consultation to discuss the implications of the Covid-19 crisis for excellence in mathematics and science education

Towards a meeting of the Trump Foundation's Advisory Council

Sunday, November 29, 2020, 6:30-7:30 p.m.

The Covid-19 crisis exposed the world to the immense importance of mathematics and the sciences to our lives. Formulas and models flood our screens, while physicians and scientists are the heroes of the era. Humanity awaits the development of a cure and a vaccine. Along with the difficulties of this period, it can also be a time of opportunity for education, when students become more motivated to study mathematics and the sciences.

At this stage of the crisis, only a handful of students in Israel are successfully learning mathematics and science at a high level. These are students who demonstrate traits of independence, flexibility and persistence – qualities they will also require in the future, in their employment and adult lives. They are paving a way forward through the eye of the storm, while the education system is mired in turmoil and many students are falling further and further behind.

We believe that excellence has an important role to play in helping more students to push through, especially in the areas of mathematics and the sciences. Excellence could serve as a catalyst that ignites a chain reaction and endows investment in learning with purpose and meaning. The clear message is that those who now quickly adjust, take responsibility, develop capabilities and invest in their learning, will be able to emerge from the crisis at a better starting point.

The roadmap we outlined in 2019 for middle schools has been directly and indirectly affected by the crisis. Some trajectories and directions that began prior to the Covid-19 period have slowed down, while others have accelerated and intensified. All this is happening simultaneously and rapidly, while it is still doubtful which developments are transitory and which will remain for years to come. This presents challenges, but also offers opportunities.

Questions for discussion

1. Can excellence in mathematics and the sciences genuinely thrive when the system's attention is focused on basic existential needs?
2. How could we assist students to take responsibility for their learning and help their teachers adapt to self and peer learning?
3. Will government and philanthropy be interested in cooperating to create an educational plan for the day after?

Participants

1. Dan **ARIELI**, Behavioral Economics Researcher, Adviser to the Minister of Education of Israel
2. Yoav **GALLANT** (MK), Minister of Education of Israel
3. Daniel **GAMULKA**, CEO, Maimonides Fund, Israel
4. Lior **KOTLER**, Education Coordinator, The Budgets Department, Ministry of Finance
5. Zbigniew **MARCINIAK**, Former Minister of Science and Deputy Minister of Education of Poland, Head of the Mathematics Group of PISA
6. Ophir **PAZ-PINES**, Head of the Institute for Local Government, Tel Aviv University and Former Minister of Interior
7. Eddy **SHALEV**, Founder and managing partner of the Genesis Partners Foundation
8. Lee **SHULMAN**, Former President of the National Academy of Education of the United States
9. Kobi **SHARZBORD**, Physics teacher and Laureate of the 2013 Trump Master Teacher Award and currently the chairperson of the Award Committee.
10. Dalit **STAUBER**, Former Director General of the Ministry of Education

Background material for the discussion

1. Strengthening the Foundation of Excellence in Middle School Studies of Mathematics and the Sciences – 2021 Update, In Wake of the COVID-19 Crisis
2. The Motivation of Outstanding Students - Attitudes of Middle School Students and Their Parents in the Second Lockdown During the COVID-19 Pandemic by Midgam Consulting and Research