THE EDDIE & JULES
TRUMP FAMILY FOUNDATION
קרן טראמפ

Dear Partners,

The Trump Foundation began operating in 2012 with the aim of helping Israel maintain its relative advantage in the fields of science and technology. Education data during that period were a cause of great concern — a drastic decline in the number of high school graduates with five units in mathematics placed Israel's future as a successful high-tech nation at risk.

As a result of a joint effort, the decline was halted and the negative trajectory changed course. In 2022, the number of high school graduates with five units of mathematics reached a peak (with 150% growth), along with gender parity among graduates. The surge in the number of five-unit graduates also drove expansion in universities and the high-tech industry.

When the success in high schools began to materialize, the Trump Foundation turned to a complementary initiative in middle schools. The goal of this endeavor was to strengthen the foundation of excellence, allowing anyone prepared for the challenge, regardless of gender, sector or place of residence, to have the opportunity to fulfill the Israeli dream of working in a science or high-tech job.

The middle school initiative included development of learning materials aligned with skills needed in our modern era, as well as establishment of 250 excellence classes throughout the country. In 2022, the government decided to embrace the initiative and expand its activity, along with defining a national policy, setting goals, and dedicating resources.

The foundation is committed to assist with the implementation of the policy, which aims to bring Israel into the group of top 15 countries excelling in mathematics on the PISA assessment and to enable 15% of high school graduates to matriculate with a "high-tech matriculation." At the same time, the foundation will seek a significant increase in the percentage of female students and improvement in the representation of students from the periphery and Arab schools.

However, as the Latin proverb says: times change, and we change with them (tempora mutantur nos et mutamur in illis). Toward the second quarter of the 21st century, excellence is changing its shape. A technological revolution is bursting forth and stirring the imagination. We are rapidly approaching an era in which computers learn, think and create independently. The power relations between man and machine are quaking, and as a result, the standards of human excellence are shifting gears.

To prepare for this dramatic change, in this document, we propose a roadmap for the foundation for implementation from 2025 to 2035. Its mission is to boost the abilities of Israel's echelon of excellence so as to enable the country to maintain its leading position in the world as a science and technology nation. The foundation's role will be to serve as a catalyst, to build and upgrade capacities, and to ignite and propel all systems forward.

We are mindful of the fact that as the level of excellence increases, so too do the widening gaps. The fear of growing gaps multiplies in a post-war decade as the country needs to heal and recover, while public resources will be stretched to their limits. Particularly at these times, the foundation will have to dedicate extraordinary effort to stay the course and provide opportunities.

At this sensitive juncture in which we are planning our future steps, we will be convening the foundation's International Advisory Council for an exhaustive discussion. The council is a voluntary group serving as a critical friend, offering insights, comments and critiques of the proposed directions.

Ahead of the deliberations, deep-dive surveys and research were prepared on the various issues which comprise the proposed roadmap. These materials were the basis for preparing the attached document and they are fully available to the council members and the professional community.

We thank you for reading, for thinking, and for the insights and comments. We need them to continue to make improvements and progress along our shared path.

*The Trump Foundation Team*

# **Keeping Israel Strong While Leaving No One Behind**
## Excellence and Equality Towards an Era of Artificial Intelligence

Israel is not a miracle. It is an ongoing effort on the part of a nation determined to survive and prosper throughout the generations. In its 75 years and against all odds, the State of Israel has built a strong democracy, a robust economy, and a formidable military force. The secret of success lies in its talented men and women who transformed Israel into a nation of science and technology and a diverse, vibrant, and impassioned community, in whose heart beats love of nation and country.

At the beginning of the 21st century, Israel's ability to maintain its relative advantage was at risk. Looking at education as a predictor of the future indicated low achievements and increasing gaps. A sharp drop in the number of high school graduates with five units of mathematics and science attested to a shrinking echelon of Israeli scientific and technological excellence. The future of Israel as a science and high-tech nation was no longer assured.

With great effort, to which all sectors of Israeli society were partners, the decline was halted and the trend reversed. Thanks to the combined activity of the government, local authorities, academia, schools, civil society and philanthropy, the number of five-unit graduates grew by 150% within less than a decade. The momentum reached every part of the country, however, the gaps remained wide.

The growth of excellence in high school allowed universities to expand their degree tracks in engineering and computer science, and as a result, the high-tech industry expanded. At present, about 12% of workers in Israel are employed in the high-tech industry. More than an additional 5% are employed in technology R&D jobs in fields undergoing accelerated digitization processes. This is a particularly high rate, in which Israel leads the world.

One can never rest on laurels. Approaching the second quarter of the 21st century, the world is facing a huge technological transformation. Israel stands at the forefront of the imminent changes and thus, its opportunity is clear, but its vulnerability is also high. The sooner we prepare, the better we will be able to preserve our unique capability and relative advantage. At the same time, as the technological bar rises, we must ensure inclusive and fair participation.

The starting line for Israel is complicated, since at this same time, we are confronting two additional challenges. As the world recovers from the pandemic and prepares for the new AI revolution, our country is coping with internal turbulence and external threat. Our democracy and security are at stake. The ongoing emergency situation requires mobilization of resources and attention to urgent needs.

This set of priorities comes at the expense of the young generation. Their studies were postponed and abbreviated during the COVID-19 lockdowns, resulting in academic, social, and emotional gaps. Following the seventh of October, school students are once again paying a steep price. The trauma of war is multiplied with a sense that the adults are not focused on them. They understand that the time they have to build their capabilities is running out.

Signs being received from the education system are worrisome; the data attests to significant impairment in learning, especially among weaker communities. The Ministry of Education has reduced the amount of material to be learned to make up for the learning loss and a significant teacher shortage. We are concerned that the coming years will be "lean years," marked by a decrease in the government budget, a decline in academic achievements, and an increase in gaps.

Towards such a scenario, philanthropy has an extraordinary role to play. It must look beyond the war towards the inevitable rehabilitation and healing period of Israeli society. At this juncture, philanthropy must stand alongside the young generation and recruit the adults to refocus efforts for their sake. It is the younger generation that must pave the way for the country to rebuild, strengthen, and create a new future for Israel.

In this endeavor the Trump Foundation has a unique commitment. By investing in educational excellence and expanding its reach, the foundation may be able to ensure Israel's leading position at the forefront of science and technology. Ahead of an era of machine learning and artificial intelligence, the foundation must drive a national process that will enable anyone prepared to take on the challenge of excellence, regardless of gender, sector, background, or place of residence, to realize their talent and achieve their dreams.

# What have we done so far?

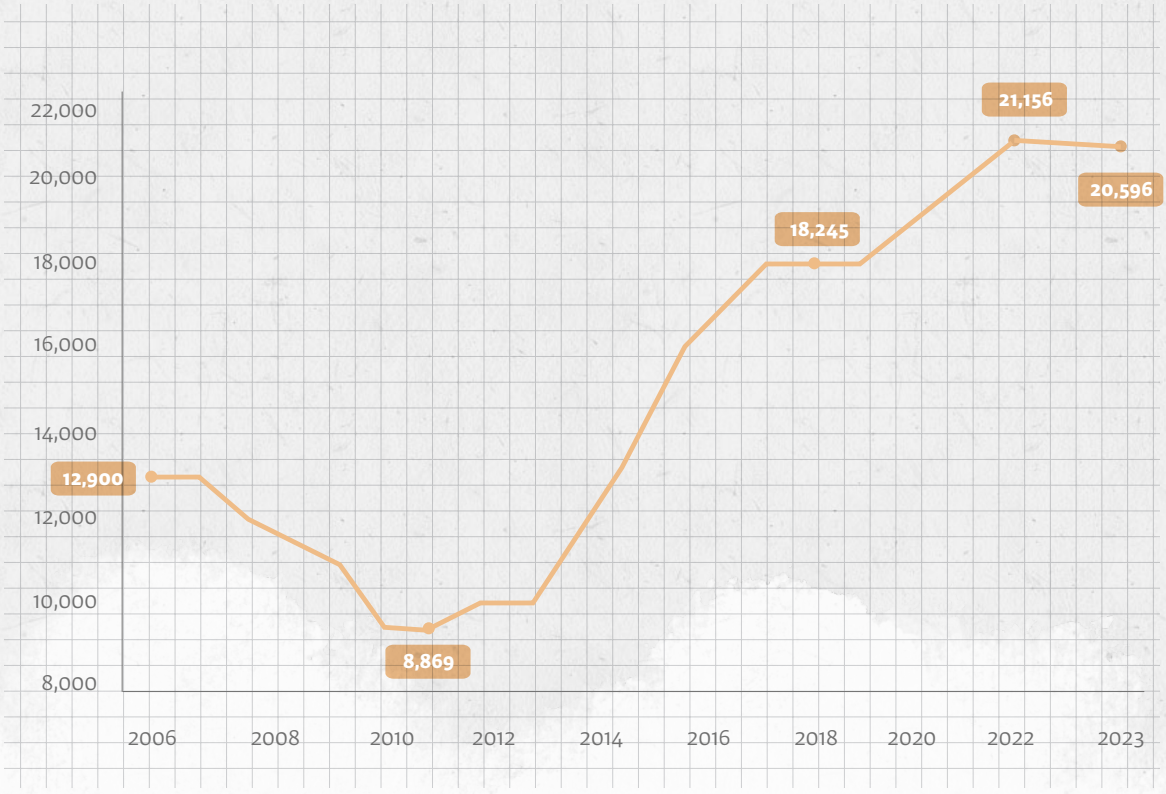
## Five Units in Mathematics

The national initiative to double the number of high school graduates with five units in mathematics succeeded. Significant growth occurred across Israel in all communities and localities. In 2022, a decade after the effort began, a peak of 21,500 graduates was recorded, and for the first time with a majority of female students. This systemic improvement is currently at risk following the impact of the pandemic, the war, and the unstable situation taking place in the country.

To drive the doubling of five-unit graduates, the Trump Foundation adopted a "catalytic philanthropy" approach. The foundation, together with its partners, created a new generation of teachers who opened hundreds of new classes. Teaching faculties organized themselves into communities of learning and formulated expertise in advanced teaching methods. Partnerships were created with dozens of cities, networks, and districts which strived to achieve specified operational targets and established local support systems.

When the capabilities on the ground were ready, the foundation initiated a broad inter-sectoral coalition ("5X2") and worked together with all the stakeholders to drive a shared national policy. In parallel, the foundation directed public attention to the big decline in and the great importance of the five-unit matriculation track. In this manner, a support network was built at scale, which enabled schools to promote the initiative effectively.

### High School Graduates with Five Units in Mathematics: 2006 to 2023




[1] For details about the five-unit initiative, the "catalytic philanthropy" approach, results, insights, and lessons learned, see the book: Excellence and the Israeli Spirit (2022).

## PISA in middle school

In the second phase, in 2018, the foundation decided to initiate a complementary process to strengthen the base of excellence in middle schools. The goal of this second stage was to open the ranks of excellence to anyone prepared to take on the challenge, enabling them as of middle school, to strengthen their foundation of knowledge, develop essential skills, and to begin to specialize in an advanced level of study.

In many countries, the middle school curriculum and teaching methods were adapted to the global technological developments. They realized that in a fast-moving world which relies on computers and robots for routine tasks, human skills needed to focus on complex problem-solving under conditions of uncertainty. These include modelling, transfer and reasoning skills, as well as abilities of self-learning, creativity, and teamwork. Each country defined its own path towards these skills, using a shared language, built in the conceptual framework of the international PISA studies.

The foundation turned to the Mathematics Expert Group of the OECD for advice. The goal was for the OECD to assist Israeli educational R&D organizations to develop innovative curricula aligned with the PISA framework. The aim was for students to learn mathematics through diverse contexts, such as autonomous vehicles, spread of disease, or basketball games, in order to learn mathematical concepts. These real-life contexts allow teachers to showcase how mathematics-based solutions can solve social, environmental, and local community problems.

To ensure that the learning materials developed by the R&D organizations would be incorporated into middle schools, the foundation turned to local authorities, districts, and networks. Collaborations were established with those that agreed to commit to opening excellence classes in middle schools. They chose from an arsenal of new material and received instructional mentoring from the R&D entity. As a result, approximately 500 learning tasks were developed, 1,700 teachers trained, and 250 new excellence classes opened.

The current outcome of this effort with respect to the percentage of students excelling in mathematics on the PISA study, is that Israeli students rose from the 31$^{st}$ place in 2018 to the 22$^{nd}$ place in the world in 2022. This relative improvement was also made possible by the declining achievements of many other countries in the Western world due to immigration and the pandemic. Israel's results exposed widening gender gaps, as well as significant disparities between the rich and poor and between Jewish and Arab students.

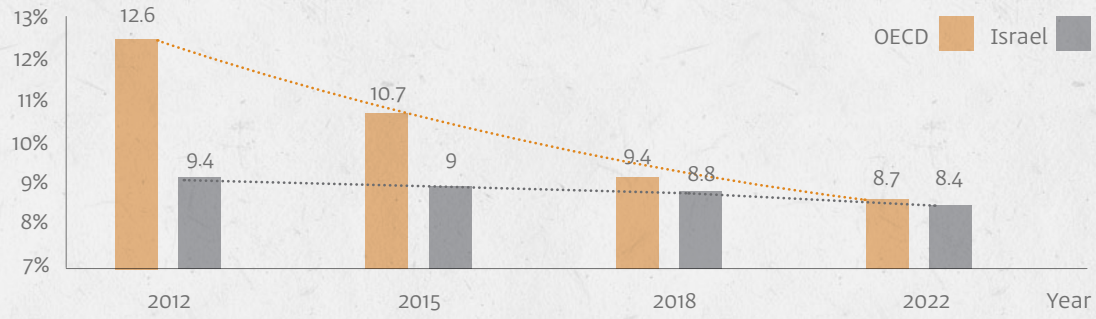
## PISA 2022: Country Rankings by Excellence in Mathematics

Top 15

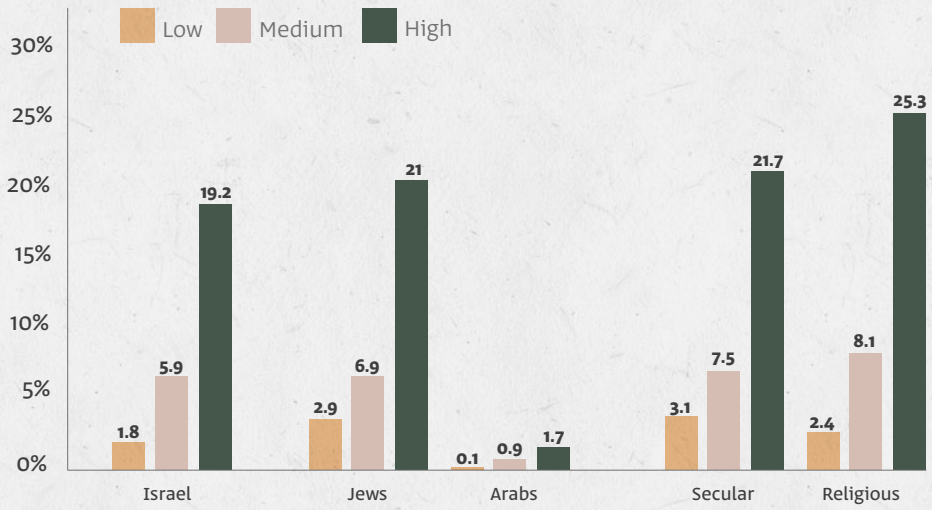
| Group A | Group B | Group C | Group D |
|---|---|---|---|
| | | Average | Below Average |
| 1st-6th | 7th-15th | 17th-24th | 25th-33rd |
| Singapore | Switzerland | Sweden | USA |
| Taiwan | Netherlands | Slovenia | Slovak Republic |
| Macao | Australia | Poland | France |
| Hong Kong | Estonia | Germany | Ireland |
| Japan | Canada | Finland | Lithuania |
| South Korea | Belgium | **Israel** | Malaysia |
| | UK | Hungary | Italy |
| | Czech Republic | Denmark | Norway |
| | Austria, New Zealand | | Portugal |

Israel 2018

## Rate of Excellence in Mathematics: PISA 2012-2022



## Excelling Students by Socio-Economic Status and Sector




## Percentage of Top Performers, 2022

## Where are we headed now?

Our attention is now turning to the second quarter of the 21st century and to the changes occurring around the world and in Israel. The technological revolution, the global pandemic, the war, and the increasingly widening social gaps, all have implications for building the next generation of excellence in Israel. It is not possible to put things on hold; the world is moving quickly and advancing at enormous speed, the opportunities are great, but the challenges are also massive.

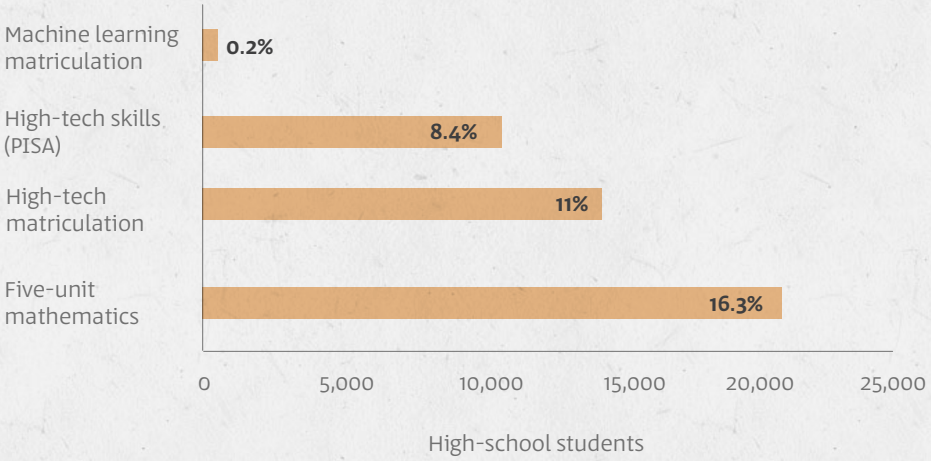
An effort to prepare the next generation of talent in the areas of science and technology will have to take these developments into consideration. We understand that for Israel to return to being a high-tech nation with groundbreaking science and technology, we need to expose the youth to high-order skills, expand the reach of our programs and include as many students as possible regardless of gender, ethnicity, or economic background.

The expansion effort would be measured against the "high-tech matriculation" index. This index includes a combination of advanced studies at the five-unit level in mathematics, English, physics, and/or computer science. Expanding the proportion of graduates of this combined track to 15% of high school graduates annually (about 20,000 students) is an ambitious yet achievable target for the coming years.

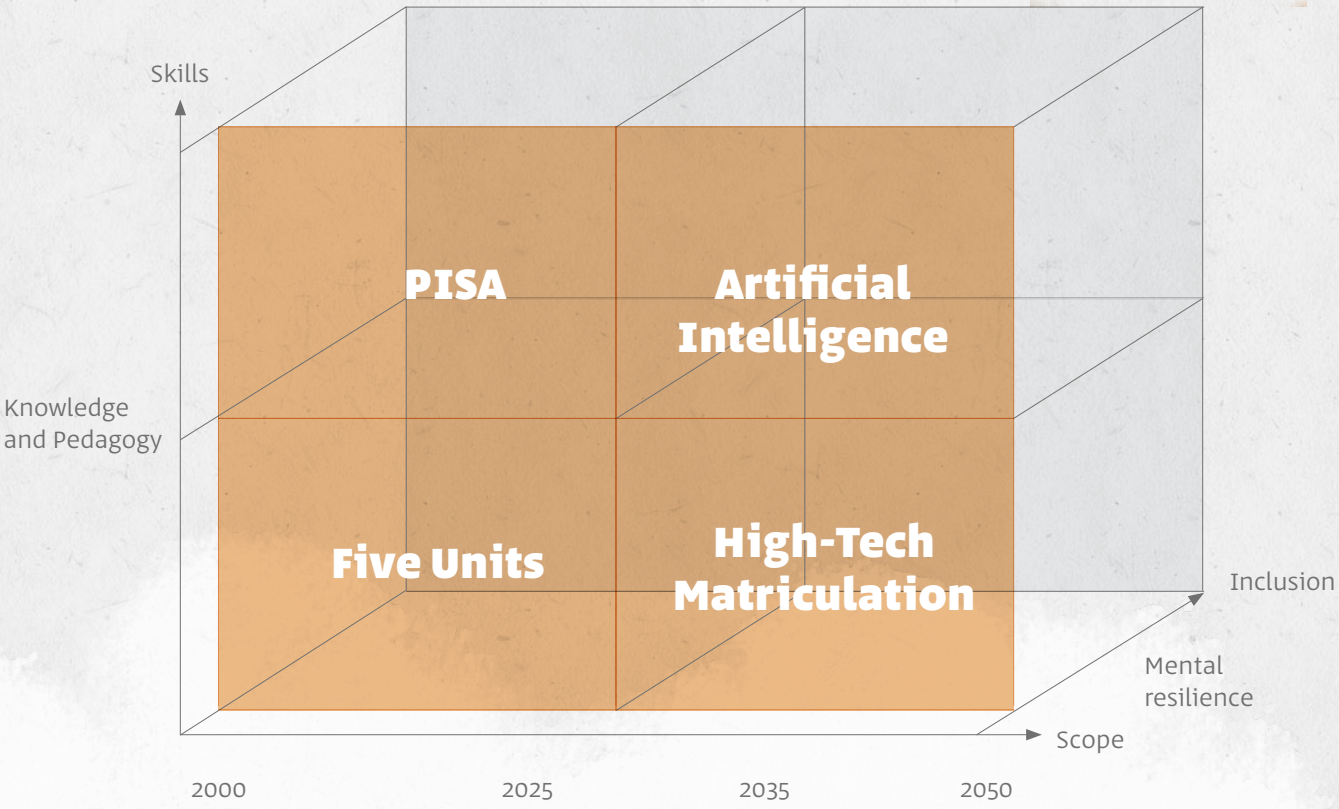
The upgrade effort will aim to adapt the content of studies to the digital revolution taking place around the world. It will require the revision of the national mathematics curriculum to correspond to the PISA framework, and then preparing the ground for the era of machine learning and artificial intelligence. The upgraded content is a big leap forward in terms of knowledge and skill, which is essential for Israel to keep up with the new reality that is now rapidly unfolding.

The inclusion effort will focus on strengthening content knowledge, building mental resilience, and acquiring cognitive, emotional, and social skills, while special attention will be given to the more vulnerable groups, such as female students, the social periphery, and the Arab society. In the time of healing and rehabilitation which will follow the war, the importance of these skills grows, especially for those exposed to increased gaps.

## Excellence in Schools: 2023




## Expand, Upgrade and Diversify



# High-tech matriculation

From semiconductors to the internet, from mobile to social and cloud technologies, and from startups to unicorns, Israeli high-tech is vibrant, creative, and ever-evolving. Israel is where science-based initiatives, along with advancements in cyber, bioinformatics, security systems, and artificial intelligence are emerging from every corner. Israel is always at the forefront of advanced technology, riding its waves with innovation and audacity.

Within just a few decades, Israel has created a prosperous high-tech nation, an industry which accounts for more than half of the country's exports, a quarter of the government's tax income, and ranks third globally in the number of start-up companies whose shares are listed on NASDAQ. It's no wonder that in every poll, the dream of Israel's youth at the beginning of the 21st century was to be part of the high-tech industry.

Israel's high-tech industry requires more and more talent. Today, Israeli high-tech accounts for 12% of the workers in the economy, and an additional 5% who are employed in technology jobs in areas undergoing digitization processes. At present, most such employees are male, Jewish, secular, and from the center of the country. In 2022, a government committee formulated recommendations for how to increase and diversify the types of employees in high-tech companies.

The government committee relied on a longitudinal study conducted for the foundation by the Aaron Institute for Economic Policy at Reichman University. The research found that when they were in high school, most high-tech employees studied five units of mathematics and of these, many also matriculated in five units of English, physics, and/or computer science. This combination of subjects, which was subsequently termed "high-tech matriculation," was found to be the most significant predictor of working in Israeli high-tech.

As a result, the committee recommended that the government define a target of increasing the percentage of "high-tech matriculation" graduates in Israel from 9% in 2019 to 15% in 2028 (about 20,000 students), while placing special emphasis on increasing the numbers of female students, Arab students, and those from the periphery. The government adopted the recommendations and put together a package of financial incentives for schools to open excellence classes in middle schools and study tracks in high school.

The Trump Foundation assisted the work of the committee during the planning stage and will continue to do so until 2035, in collaboration with the government during the implementation processes and the necessary upgrades. The foundation's role will concentrate on the following steps:

**1. Data and research.** Expanding "high-tech matriculation" rates requires close familiarity with the young students; those who choose the track, those who study parts of it, and those with the ability who, for various reasons, do not. Quantitative analyses and in-depth qualitative research regarding the demand will be needed, alongside a comprehensive understanding at the national and local levels, of the supply of classes, study tracks, teaching hours and teachers.

**2. Management support.** During very difficult times and amidst an apparent trend of decline, the government set ambitious targets. Moving the needle back to an upward trajectory will require keeping close watch on progress data as well as highly effective coordination within the government, and vis-à-vis the education field, with industry and civil society. The foundation will work to assist the government in establishing a shared management structure, conducting data analysis, building work plans, and in creating the necessary coordination for execution.

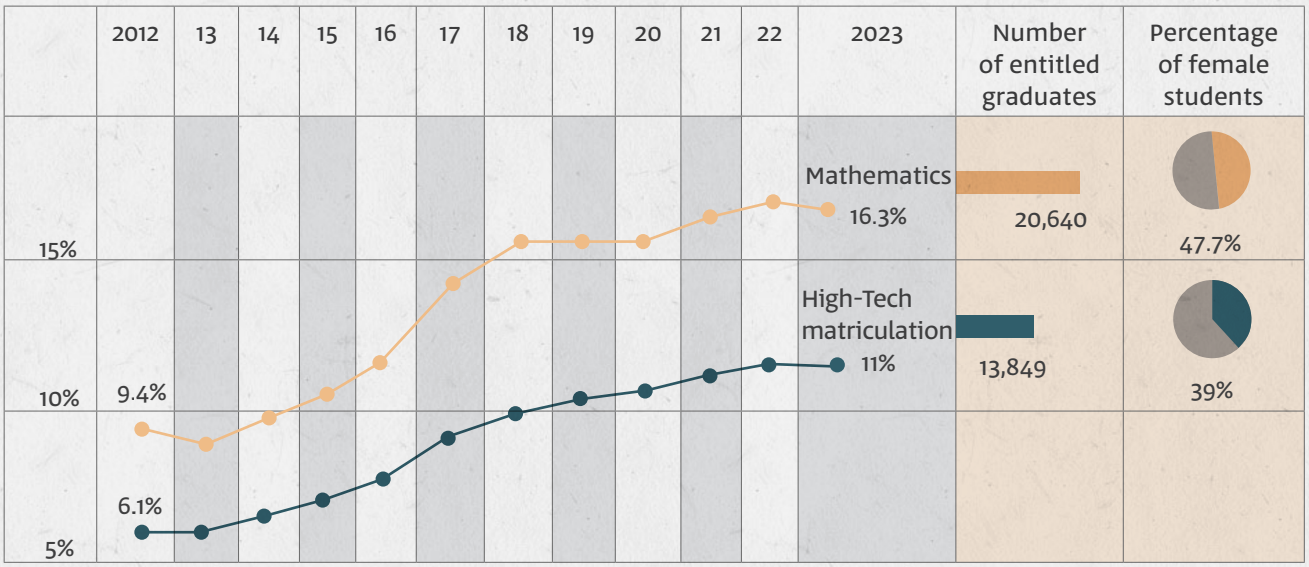
**3. Collective impact.** "High-tech matriculation" is a measurable target shared by a student, their parents, the school, and the education system. It is also an important target for academia, industry, philanthropy, and government and as such, it is fitting and relevant for a support network to be built at scale, jointly by all the stakeholders. The foundation will catalyze the creation of an inter-sector coalition around the target using the collective impact model and a public campaign.

**4. Partnerships with municipalities, districts and school networks.** Our previous experience taught us the importance of local leadership by the operator of schools in districts, education networks, and local authorities. The foundation will create partnerships with those operators on the local level that are committed to expanding and diversifying the "high-tech matriculation" learning circles in their education jurisdiction and will dedicate resources and prioritize this topic.

**5. NextGen upgrade.** A higher rate of "high-tech matriculation" graduates is a quantitative step. However, approaching the second quarter of the 21st century, it is necessary but no longer sufficient. We will need to integrate PISA skills in the excellence classes and high-tech tracks and incorporate advanced content required for artificial intelligence and machine learning. In order to open the doors of excellence, we will also address gender and social and emotional support.

## National Average and Percentage of Female Students

National average of the percentage entitled to a matriculation certificate which includes 5 units in mathematics; national average of the percentage entitled to a high-tech matriculation certificate which includes 5 units in mathematics, 5 units in English, and 5 units in physics/computer science, 2012-2022



# PISA — TOP15

In 2022, the Ministry of Education reached out to the foundation. Its director general publicly announced that the Ministry had decided to adapt the national middle school mathematics curriculum at all levels to the PISA framework. This change was presented as part of the plans to upgrade education in Israel in line with 21st century skills. The foundation was asked to help, to make the learning materials its partners developed available to teachers and to help them prepare professionally.

A joint team led by the Ministry was established at the University of Haifa, which was chosen by the Ministry as the professional integration entity. A four-year plan was formulated for adapting the curriculum, customizing the learning materials and training thousands of teachers. A joint budget of 20 million NIS was allocated to this initiative, shared equally between the Ministry and the foundation. Implementation activities began immediately, however when the government changed and the war started, internal disagreements within the Ministry slowed the progress.

In the next five years, the foundation will work together with the Ministry to complete the initiative. The target is for Israel to be among the top 15 countries excelling in mathematics on the PISA assessment by 2029. The foundation's role will be to help apply policy by means of infrastructure development and building capabilities as well as enlisting the professional community. At this point, the foundation will take the following steps:

**1. Supporting government policy.** High performing education systems around the world adapted their national curricula and aligned their tests with the PISA framework as a necessary element for improvement. Learning from their experience, the foundation will hold continuous conversations with the Ministry at all levels, to constantly confirm that the policies and activities that are undertaken and communicated to the teachers are in step with the PISA framework.

**2. "Maor" program.** The University of Haifa's collaboration with the Ministry and the foundation is called Maor. It is the main implementation arm responsible for customizing the national curriculum. The foundation will confirm that its support is directed towards alignment of the curriculum with the PISA framework, while providing professional development and instructional coaching to teachers, and developing additional components as needed.

**3. Learning materials.** Alongside the customization of learning tasks to the new curriculum, it will be necessary to ensure that the available tasks cover all the topics which are included in the PISA framework. Areas that need enhancement in the Israeli curriculum are statistics and probability, computational thinking, and applied geometry. Development of these areas will include textbooks, diagnostics, and learning objects and tools for self-learning and automatic feedback.

**4. Teacher professional development.** It turned out that teaching the new applied mathematics tasks is difficult for the teachers. Therefore, we encouraged our partners to offer the teachers dedicated learning frameworks which help them develop their instructional practice. The foundation will be adding designated pedagogical tools, such as simulations and classroom-based videos, to this effort.

**5. Convening the professional community.** We now understand that the PISA mission is not a primary concern for students, parents, and the public, since it is chiefly a professional infrastructure undertaking by policy, research and practice entities. Therefore, the foundation will focus its convening efforts on connecting professionals in a shared discourse around the PISA framework and the pedagogy that it demands, and the systemic organization efforts.

**6. Excellence classes.** The main path for integrating applied mathematics into Israeli classrooms is through the national mandatory curriculum. In parallel to this primary route, the foundation will strive to incorporate applied mathematics tasks into excellence classes as well. This effort will target students who study in advanced tracks and have the potential of becoming top performers on the PISA scale.

# Artificial intelligence

A new global technological revolution is sparking the imagination, with the appearance of algorithms for self-learning and the development of neural networks that simulate human intelligence. These innovative capabilities allow the computer not only to perform tasks or make decisions based on data, but to transform into an entity capable of thinking and understanding. Computers will soon be able to develop and create — exactly like the human brain, and in some cases, even better than humans.

The implications of this technological revolution are immense, and the opportunities are almost endless. The day is not far when it will be possible to heal diseases, protect the environment, and significantly improve the quality of life. Areas of expertise will change beyond recognition; entire professions will disappear, and others will appear in their place. And with them, danger and risk will increase, social gaps might widen, and ethical dilemmas will intensify.

The effects of such changes on education will be far-reaching. What is the role of a teacher and a classroom in an era where every student has a "personal mentor" who knows them so well that it can adapt the content, the pace, the attitude and the feedback to their individual preferences? And what does a student need to learn in order to engage with advanced computers that can cope better than humans with complex problems, and do so more efficiently and creatively?

This will be a new world that will impact us all, as users, as learners, and as professionals. At the forefront of the technological revolution, there will be scientists and developers, who will pave the way forward. This echelon of excellence that the world relies on, will have a crucial leadership position, to pave the way and safeguard humanity. For Israel, they are a highly valuable asset, and one needs to think through and plan in advance how to prepare them well.

Other countries around the world, such as Singapore, Korea, Japan, New Zealand, and Canada began to systematically address this issue almost a decade ago. They have already adapted their official school curricula to the different levels of learning. Education departments of international bodies, among them the OECD and UNESCO, have put together groups of experts from different countries to begin formulating common standards and measures.

The role of the foundation in this realm would be to serve as a "field catalyst" for seeding this area in Israel's schools. The foundation will accelerate the pioneering attempts of educators on the ground, encourage joint learning between professionals, develop innovative programs, and train teachers to teach at scale. The foundation will need to embrace a swift pace of movement in this direction and very close feedback loops for improvement since this is a very rapidly developing field:

**1. Learning, deep and fast**. We need to learn from those who started before us, including the practices of other countries, and the thinking processes and standardization attempts of international bodies. We will use the increasingly growing experience of pilot programs in Israel to learn about what works and what needs improvement. We must continually look ahead to anticipate technological developments and respond as quickly as possible.

**2. Creating a knowledge center.** The foundation must centralize the unique expertise that exists in Israel within the scientific community and in highly advanced industry. We will convene a network of experts to serve as a beacon of high standards, and to open the doors for educators to cutting edge science and technology. This network of experts will formulate high-level recommendations regarding the policy, the directions for activity, and the required content to be applied.

**3. Content development**. It would make sense for the Ministry of Education to think through the necessary adaptations to the curriculum. Such adaptations will reasonably emerge from "reverse engineering" the knowledge and skills applied by scientists and developers. The foundation will help in this process and encourage the development of suitable learning material. This content will be developed by experts and undergo pilot studies and preparations for wider scale implementation.

**4. Teachers and teaching.** In preparing for new content to be integrated into high school studies, it will be necessary to train a select group of pioneer teachers who will practice and become highly proficient in their instruction of the new content. This group will lead the gradual spread of teacher communities of learning and the building of frameworks for dedicated professional development for many additional teachers. Alongside this process, tools for online and self-learning will be developed to support teaching and to provide a solution to the teacher shortage.

**5. Implementation at scale.** The "high-tech matriculation" track is a vehicle for wider implementation. As it stands today, it includes the standard high-level curricula of mathematics, English, physics and computer science. We will need to convince the education system to upgrade the content offered in this track with the artificial intelligence material. We will aim for a target of 15,000 high-tech matriculation graduates to be equipped with AI knowledge and skills, so they are well-prepared to become future developers and scientists.

# Mental resilience

Many more students could succeed in the excellence tracks; however, for various reasons they either choose not to enroll in them or enroll but drop out along the way. Some of the reasons for this include emotional and social barriers that relate to mental resilience. The absence of such resilience can even exist in a strong and competitive environment but is more frequently found in a more vulnerable environment characterized by a dearth of options and lack of role models and support.

In recent years, strengthening mental abilities has become a recognized path in many areas that nurture excellence. Athletes and musicians develop their mental skills alongside their efforts to improve their mastery of their technical and physical skills. They acquire tools that help them cope with continuous effort, extreme difficulty and sometimes failure, and with the need to persevere and maintain their grit.

Schools also realize that in order to encourage and support students to choose, persevere and succeed in excellence tracks, they cannot settle for just learning the material and improving cognitive skills. They must instill in students the faith in their ability and willingness to invest and make a huge effort. They must help students acquire social and emotional tools that reinforce their resilience, especially in disadvantaged communities, which are more sensitive to social and economic gaps.

We are aware that excellence track students need mental skills as a matter of a necessary foundation for learning, certainly during crisis times such as the pandemic and the war. School closures and the extended stays shuttered at home, have caused damage to these skills, by distancing students from their friends and the familiar routine of school. Now, fear, trauma, and anxiety about the future will likely all have implications for students' ability to focus on learning.

This troubling reality is unfolding just as, in parallel, the turbulent emergence of the AI revolution is occurring. With AI, academic demands will rise, requirements from students will be higher, and mental skills will have a particularly significant role to play. As in sports and music, schools will need to find a way to incorporate them in a structured manner as an integral component of the excellence track learning process.

The Trump Foundation will help schools in this effort, by harnessing the professional knowhow from the field of psychology and customizing it to the specific needs of the excellence track students. Special emphasis will be placed on working within the school system so that mental skills become part and parcel of learning in an excellence track:

**1. Identifying the needs.** Social and emotional skills (SEL) have become very popular in recent years, particularly in responding to post-war trauma. However, there is not enough specialization focusing on excellence students and their specific needs. The foundation will work with experts to study the special needs of excellence students in-depth, to identify crucial junctures of choice and breaking points. This process will distinguish among the center and periphery, gender, and cultural backgrounds.

**2. Development of tools and methods.** After assessing the needs, educational psychologists will partner with teachers of excellence tracks to jointly develop diagnostic tools, learning kits and training systems. These materials will cover topics such as self-management in a high-achievement environment, willingness to persevere and put in effort, strengthening self-efficacy, encouraging and maintaining motivation and curiosity, and harnessing the peer group.

**3. Online self-learning.** As part of the development of tools and methods, a special effort will be made to develop technology-based solutions. These will enable teachers to use them for purposes of diagnosis and to shape a specific response, and to address a group or individual difficulty. In this manner, we hope the assimilation of emotional responses in the conventional learning process will be smoother and allow for on-time feedback to students and teachers.

**4. Instructional coaching.** Schools will need to train their education faculties, especially teachers and department heads. The goal is to instill mental skills that will be integrated into their routine work. For that purpose, instructional coaches will be trained to mentor teachers in their professional learning communities. The coaches will help teachers develop specific expertise to be incorporated in diverse excellence frameworks.

**5. Integration into excellence tracks.** The tools, content, and methods, and the dedicated training structure will target the middle school excellence classes and the high-tech matriculation tracks in high school. The methods of their integration into these platforms still need to be developed. Currently, there are no time slots available for this content in the high-tech matriculation track, and the foundation will need to engage its partners and the government in discourse on how it can be effectively included.

# Social gaps

Israel's future depends on its cadre of excellence, the artery which places the country at the forefront of science and technology and enables it to survive and prosper. Right now, an extraordinary opportunity stands before Israeli excellence. However, there is concern that when Israel emerges from the war and raises the level of excellence to meet the demands of the new technological era, the large gaps within the country will become even wider.

This concern is growing because of the Swords of Iron War. The tens of thousands evacuated from the North and the South encountered their pre-existing gaps in full-force. They discerned the center's quality of life and level of learning and many of them are debating whether to stay or return home. The trauma of the war, its cost and its continuation, make it difficult to begin the process of healing and rehabilitation.

In the shadow of these circumstances, the foundation is asking itself whether and how it can provide equal opportunity for excellence regardless of background, gender, ethnicity, or place of residence. How can it upgrade and expand Israel's circle of excellence without leaving any group or community behind, and enable anyone prepared to take on the challenge of excellence to become a significant part of the Israeli success story?

Regarding the gender gap, our analysis is emphatically: "Yes!" We assume that with joint effort, equal achievements in excellence levels can be attained between female and male students. In practice, the five-unit mathematics endeavor already provided proof of feasibility. In 2022, absolute gender equality was recorded between female and male students in the five-unit track in high school.

Full gender equality is not yet reflected in skills measured on the PISA test, in "high-tech matriculation" measures in high school, in technology positions in the IDF, in university engineering and computer science faculties, and in R&D divisions in Israeli high-tech companies. In the coming years, the foundation will place emphasis on the gender aspect of its activities in secondary schools with the aim of realizing the full potential for equality.

Regarding the socioeconomic and Jewish-Arab gaps, our answer here does not have an exclamation point. We witnessed impressive improvement in five-unit mathematics and high-tech matriculation rates in those local authorities in the periphery and the Arab society where excellence has been established as a top probity. Nonetheless, in looking at preparedness for high-tech through the PISA skills lens, there are very large gaps.

In-depth studies show that such gaps cannot be closed within one generation but rather over at least two or more. At the same time, the foundation's commitment to not leaving anyone behind will be expressed in giving preference and priority to addressing these gaps and to dedicated public and media activity, while paying close attention to progress and overcoming difficulties.

## Israel's Excellence Track: A View of the Gaps