THE TRUMP FOUNDATION
קרן טראמפ

Advisory Council
Key Insights

12-13 November 2018

DRAFT

The Trump Foundation (Eddie and Jules Trump Family Foundation) was established in 2011 to help the Israeli education system expand the circle of excellence in the fields of mathematics and science. The foundation, together with many partners, invests in excellence. This is because in the 21st century, strong abilities in mathematics and science are "golden keys" to technological innovation, economic growth, scientific breakthroughs, reduction of social gaps, and success on a personal level.

To date, the focus has been on increasing the number of high school students studying mathematics and science in advanced (five-unit) tracks. In Israel, these study tracks have shown themselves to be fertile ground for breeding excellence, and some of their graduates go on to become groundbreaking professionals, scientists and innovators. It is heartening to report that thanks to an ongoing, collaborative effort on the part of dozens of organizations, there has recently been a sharp increase in the number of students studying in these tracks.

Following seven years of activity, the foundation is now approaching a new phase in its activities, intended to strengthen the basis of excellence. Israel's "excellence engine", accustomed to pulling a few cars, is now overloaded. The concern is that the system will find it difficult to haul and sustain this endeavor over time. Therefore, in the coming years, the foundation will concentrate on two pillars:

a. **Building professional infrastructures for quality teaching.** There is now a growing need for outstanding teachers who believe in each student, set ambitious goals, diagnose learning, adapt teaching, and provide constructive and reinforcing feedback. To meet this objective, the foundation is working with its partners to establish a strong professional infrastructure of quality teaching, including the National Institute for Advanced Teaching, the High-Tech to Teaching Task Force, the Cities of Excellence network and an intervention model in the periphery.

b. **Paving a road to the future in middle school.** There is a profound need to create systemic momentum in middle school, to raise the bar, to focus on learning, to build abilities, and to calibrate educational practice upwards. To meet this objective, the foundation aims to help develop challenging learning materials, adapt the teaching to each student, and to widen access to excellence tracks in order to provide greater options for students from all over the country and from diverse communities and backgrounds.

Ahead of this phase, in collaboration with its partners, the foundation established learning and planning teams, assisted by research and consultations with teachers and policymakers in Israel and around the world. The products of study and research were prepared and the professional community and the public were given access to the documents. The insights from the learning process were formulated to create a first draft of a roadmap.

All these materials served as the basis for discussion at the foundation's International Advisory Council. Council members are: Lee Shulman (chair), Danny Bar-Giora, Peggy Brookins, Shlomit Davidovitz, Leah Dolev, Marcia Linn, Talli Nachlieli, Eli Shalev, and Dalit Stauber. The Council met for intensive meetings on November 12-13, 2018; many educators were invited to join its discussions.

Everyone received the background materials and the discussion questions in advance and were asked to provide feedback and to propose critique, ideas and recommendations. The document below was written by the foundation staff and summarizes the main insights voiced during the discussions. This is a welcome opportunity to thank everyone who made the effort to read, respond and participate in the discussions, and to express gratitude to the Advisory Council members for their special efforts.

Making excellence a habit

In 2011, the foundation presented a philanthropic strategy to expand the circle of excellence in high school as a "roadmap." It described a ten-year plan with a beginning and an end, intended to help the education system change course in mathematics and science study, from deterioration to improvement and growth. The Ministry of Education (MOE) took up the reins and defined its investment as a "national program" to which it assigned targets, measures, timetables and budget.

When such a program is completed and no longer budgeted, and especially when its goal has been achieved, there is danger reality will revert to its former condition. Systems, not only people, have a tendency to fatigue; elastic characteristics cause them to return to old habits. The difficulty involved in persisting over time is now imminent, with particular hurdles for Israel, where staying the course bumps up against an entrepreneurial spirit which seeks to innovate, refresh and change.

Therefore, despite temptations and difficulties, if the appeal to students is around grit and persistence, then the education system must walk its talk. Creating professional infrastructures for quality teaching is a right step to prove it, however the clock is ticking. Establishment of the Institute for Advanced Teaching and the High-Tech to Teaching Task Force must be accelerated.

Additional measures are needed to ensure continuity. The resources allocated by the MOE have already been earmarked for the coming years in its budget base, however they must be anchored in the basic teaching hours. The position of an excellence coordinator in municipalities must become an integral part of the city payroll. The clinical teaching tools developed by the foundation must filter down more deeply into practice.

Excellence as a way of life is the flag the foundation must wave as it enters middle schools. It must celebrate the values of learning, striving for improvement, aspiring achievement, effort and grit. The call for excellence directed to students must also embrace parents, teachers, principals, and the system as a whole; they too must demonstrate excellence.

Catalyzing momentum around excellence

The foundation's roadmap identifies middle school as an undefined stage. In elementary school, children learn the basics and in high school they specialize for matriculation, but in middle school, there is no raison d'être. It should be noted however, that many do not agree with the foundation that the absence of definition is problematic. There are educators who believe in the "let a thousand flowers bloom" approach and view the lack of goals and measures as an opportunity for pedagogic innovation.

Parents also report that they are satisfied with the quality of their children's schools and with the level of their teachers. They do not see learning, but rather social relationships, as a key goal in middle school. Although parents want their children to take five-unit classes in high school, they do not expect the regular middle school study track to prepare them for this, unless they study in a special excellence track or with private tutors.

Even middle school teachers do not perceive themselves as part of the relay race whose objective is to bring more students to five-unit majors in high school. Some emphasize the importance of knowledge and skills, others believe that these are not the important factors. Some highlight encouragement of curiosity, experimentation and experience, but many others claim they have no time, ability or intention to systematically deal with these issues.

It is important to note that the MOE still does not have clear policy on this topic. Various divisions in the Ministry promote educational objectives and outlooks via different directives and programs that are not aligned with one another. Some prefer a broad tasting menu for all students and encouragement of curiosity by gaining experience in research; some promote solid knowledge and advanced level-based skills; and others strive for excellence and specialization in special tracks by an early age.

Only the students are highly focused on learning and excellence, as they report about themselves. They are very much aware of the importance of mathematics to their future and perceive themselves as ambitious. They acknowledge that success involves effort and report that what goes on today in middle school is a waste of time. Students demand that parents, teachers and principals support and encourage them to succeed, and emphasize that they expect their investment in their studies to pay off not only in the future, but in the present as well.

In light of the above, it is recommended that the foundation *create a deeper connection to students, to arouse their motivation for excellence in mathematics and science study, and to give expression to their voices which call for the adults around them not to give up on them. With the focus on the students, the foundation must build public awareness regarding the depth of the problem in middle school and then create momentum around a message intended to recruit parents, teachers, and the education system. The foundation must stimulate professional and public discourse concerning the changing meaning of excellence in the 21st century and harness many diverse communities to discussion and action. The foundation and the MOE must discuss the need for profound change in policy, definition of goals, clarification of concepts, and building national programs to create a focus on excellence and on raising the bar.*

Cultivating personalized learning

Students come to middle school from a number of elementary schools. Each school teaches somewhat differently and the gaps between them are noticeable. Towards the transition from elementary to middle school, students are often offered to take tests for admission to excellence classes and ability groupings. Those that are selected to join these tracks are typically those that already displayed knowledge, ability and motivation in elementary school.

This way it is easy to miss many students who are late bloomers. It is not difficult to label them too early and place them in a regular classroom or in a less advanced ability grouping. If the school does not have precise diagnostic tools and scales that push and enable students to move up to higher groupings, the gaps will in many cases quickly grow and widen.

The MEITZAV and TIMSS tests show that the gaps in Israel are consistent with the educational and income levels of the student's family. In eighth grade, there is already a gap in excess of two years in mathematics, and it appears that it is practically impossible to bridge it in a single classroom for all students. The impression is that students from more established families are much more prepared for learning in middle school – a phenomenon which requires serious consideration.

For this purpose, seventh grade teachers need a diagnostic tool to help them identify each student's knowledge, abilities and difficulties. There are schools that use a number of diagnostic tools but they do not necessarily focus on mathematics and science, and most of them do not present the results in terms of comparison to the norm. Diagnostic results are used largely for teaching heterogeneous classes, or ahead of division into ability groupings.

The diagnostic results should be used to help build a personalized learning plan for each student. The reference is to a multi-level program which relies on the student's individual progress, sets goals, measures and timetables, and details the planned activities. This is a simple plan to prepare and implement which will place the student, the teacher, and the parents "on the same page" around which the dialog between them will take place.

The challenge is to develop simple, not simplified nor oversophisticated tools and methods that will provide teachers, students, and parents with immediate, valuable information, but whose implementation will not require professional development, additional time, or changes in teaching preparations. The foundation must understand that those interested today in personalized learning plans are chiefly students and parents. As a whole, teachers are not yet convinced that this is desirable or possible.

In light of this, the foundation should *assist the development and enhancement of diagnostic and monitoring tools and templates and tools for personalized curricula in mathematics and science. The aim is that by the first PTA meeting in seventh grade, the parents and student, together with the subject-area teacher, will discuss the diagnostic test results and the personalized plan proposed by the teacher for the next semester and for the academic year. During the year, meetings about progress and difficulties will be held, so as to lead the student to exert effort and investment in learning, so that as many students as possible will be able to successfully participate in excellence classes and advanced ability groupings. At the end of ninth grade, the teachers (and the students) will need feedback using an objective diagnostic instrument that will shed light on the extent of the students' preparedness, both cognitive and emotional, as well as their study habits, for studies at the five-unit level in high school.*

Developing challenging learning materials

It is clear that a rather large gap exists between the place where students are academically when they finish ninth grade and where they should be at the beginning of tenth grade. In mathematics, the indications of this gap are the high dropout rates from five-unit classes and the low rate of those excelling in the PISA tests. The gap is even greater in science where studies almost never lead to five-units and most of the students do not continue to study any of the sciences in high school.

The mathematics curriculum in Israel has recently undergone a change in which increasing emphasis is given to smooth the transition from middle school to high school. The impression is that the focus is on deepening the base of mathematical knowledge and skills, and less on implementation and on building skills of advanced literacy. MOE officials expect improvement on the MEITZAV and the TIMSS tests, as well as on the transition to five-units in high school, but not on the PISA test.

The science curriculum has remained unchanged for many years, with modifications to accommodate the fewer hours of study. The options for deep quantitative science learning are limited, because science class is heterogeneous and the common denominator among students in terms of their mathematics abilities is low. Excellence tracks that were established in recent years do not align with this curriculum, and offer challenging materials and deeper experiences for a select group of high achieving students.

The teachers report on a sense of confusion. They acknowledge a gap between their expectations and the abilities and possibilities at their disposal. The quality of the learning materials varies and reports are heard of the difficulty in finding challenging academic assignments which would stimulate deeper thinking. Teachers report that they do not feel "ownership" over the materials and do not have the time to help students reach a deeper level of understanding.

The title of the foundation's roadmap includes the phrase "raising the bar" which, in part, refers to the level of the challenge and the depth of the learning materials. The foundation must now map the existing materials, strengthen those that meet the high level, and when needed, invest in development of new materials. It is essential to figure out in advance the way the materials are used in the system, and not to leave off after expert development and a successful trial.

The roadmap also states that the foundation will focus on expanding excellence tracks in middle school which offer a "package" of high-level mathematics with advanced implementation in scientific areas. It is therefore important, first and foremost, to focus development efforts on materials that will serve these tracks and only afterwards, if needed and possible, on other study tracks.

In light of this, the foundation should *assist the development of challenging learning materials which combine higher mathematics level, advanced literacy, real world relevance, and scientific applicability. Development should be conducted with in-depth collaboration developers of materials and operators of excellence tracks. It is important to include teachers in the development teams, to encourage development by teachers, and to create development environments which enable teachers to offer feedback, to choose assignments, and to make adaptations. Relying on teacher communities as a place where teachers work together on development and modifications to learning materials can be encouraged.*

Nurturing high quality teaching

Great teachers in middle school say that they blossom in situations where there are no clear goals dictated from above. In a vacuum of top-down policy they find fertile ground for initiative and creativity. These teachers, however, are a minority and even they report that the space given to their professional autonomy is small and declining. They feel the system is increasing its supervision, measurement and control, and does not allow them almost any flexibility.

The teachers feel they are not trusted. They say the prevailing attitude toward them is that they are "consumers" of programs and materials prepared by others, and their only role is to "transmit" them in the classroom. They note that they wish to be much more thorough and independent but, they claim, they have no time to do so. They say they have no objective diagnostic tool available that would make it possible for them to receive feedback about their work and their students' progress.

Policy makers noted they do not believe that it is possible or desirable to give professional autonomy to all middle-school teachers. They stressed that the quality of teaching in middle school is not as good as in high school. Salary disparities between middle-school and high-school teachers are over 40% due to different wage agreements and this is one of the reasons that teachers prefer to teach in high school.

This is a particular challenge to the foundation. As a foundation that works with teachers and on behalf of teachers, it must acknowledge that a deep change in the current reality is beyond its capacity. In contrast to high school where there is a relatively small and highly educated group of teachers, in middle school, there is no huge teacher shortage and no retirement wave is expected in the coming years. This means that the foundation will, at most, be able to serve as a catalyst for change processes.

In light of this, the foundation should *ignite a movement that proclaims the importance of middle school and provides strong support and public standing for teachers. It must harness the High-Tech to Teaching Task Force and the Institute for Advanced Teaching so that they create a specialization in middle school for training and professional development. The foundation roadmap notes that middle school students are at an age where they build their identity and they need a guiding hand and a personalized curriculum. This requires dedicated training and development for teachers.*

Expanding the menu of excellence tracks

The local community is well aware of the widening gaps in middle school. No one wants their child to be on the wrong side of the gap. As a result, in recent years, initiatives to establish special schools have popped up in different cities. They seek to attract outstanding students who gain entrance via admissions tests. This is the same reason school principals open separate excellence classes starting in seventh grade.

Many educators believe that this is a negative process that only widens gaps. They come out against early tracking and stress that shared learning is socially and academically advantageous. When schools are divided into strong and weak it is likely that teaching and learning is easier due to homogeneity but it becomes impossible to bridge the gap. This is also the case when a separation is made too early within the school and there is no practical possibility of moving up in level.

But, and this is an important "but" – a school that is organized around encouraging excellence can turn diversity into opportunity. The foundation's roadmap proposed this, and emphasized that the number of excellence tracks must be significantly expanded and students encouraged to move up in their levels. Schools must be exemplars of excellence in their practice, must define goals and measures, collect and analyze data, and place trust in, provide support and good working conditions for the professional staff.

There are schools in Israel that are already doing so and 40% of their ninth graders study in tracks which combine higher mathematics with applications in science. Of these, there are schools with a similar rate of twelfth grade graduates who complete five-units in mathematics and science subjects. The foundation must identify these schools, single them out for praise, and enable others to learn from them.

On the other hand, there are schools in which the gap between intention and practice is significant. Quality of management varies and they do not systematically rely on diagnostics and analysis. Regarding issues related to excellence tracks, they operate on "automatic pilot" and have almost no transfers to the special tracks throughout the years. In the high ability groupings in mathematics, there is no effective correlation between knowledge level and skill at the end of ninth grade and what is needed for tenth grade.

These problems appear mainly in the Arab sector and religious schools and in the periphery, though in the center too, there is no effective support system for principals. They do not enjoy regular mentoring. Their professional development is not organized in teacher communities unless charters or the superintendent call upon them. Professional organizations and experts that can help principals with the process of organizing the school around strengthening excellence are sorely lacking.

In light of this, the Foundation should *consider four incremental steps of activity:*

a. *Identify schools that succeed in meeting the qualitative and quantitative targets of at least 40% of ninth grade graduates who have completed a combined excellence track and demonstrate satisfactory preparedness for five-unit tracks. Their experience should be documented, learned from, and disseminated.*
b. *Assist in developing capabilities and expertise that will be available to school principals who choose to lead a road to organize their school around excellence.*
c. *Help expand the number of excellence tracks available today in schools. Place emphasis on broad access in seventh grade and on the creation of advanced specializations in ninth grade.*
d. *Team up with charters and districts to demonstrate and implement a process to combine data, regularities, continuums, diagnostics, teacher communities, and personalized learning plans, at scale.*