Proposal for Canadian Hadassah-WIZO

High Tech Program for Girls in Grade 6
Empowering girls to pursue technology careers

A Project of The Tel Aviv Foundation

PROJECT BRIEF

Background

In Israel, the proportion of women working in computer science is 20% - 30%. The gender stigma about girls and science persists, and more needs to be done to lift female participation in this field. An important lever to address this is to expose girls to science and technology early and in a positive way so that they develop interest and motivation from a young age.

A new High-tech program for Grade 6 students has been designed in partnership between the Education Administration of the Municipality of Tel Aviv-Yafo, Israel Ministry of Education, Wix.com, and the Tel Aviv Teachers Development Center.

The goal of the program is to engage girls at elementary school level in computational thinking and coding in order to develop competency in, and a positive attitude towards science and technology.

The program will create a continuous learning track from elementary school through to middle school. It will serve as a continuation of a Computer Science, Coding and Robotics program, which was piloted last year for Grade 4 students and will now be extended to Grade 5 students. It will also serve as a feeder program to the middle school High Tech program, which piloted last year in Tel Aviv and will now be offered in all middle schools across the city. Forty per cent of program participants were girls; however, it is important to engage girls early and ongoing in order to reduce the gaps.

Program

In the first year, the program will be piloted in 30 elementary schools and impact 1000 students. The program is designed to reduce the gap in the number of boys and the number of girls who select STEM studies by targeting female students, both beginners and those with programming experience.

It will teach computational thinking, programming languages, team work, advanced creative thinking and problem solving skills in fun and interesting ways. Computation thinking refers to the collection of cognitive skills and abilities drawn from the world of programming and includes:

- Abstract and concrete thinking;
- Logic;
- Algorithmic thinking;
- Systems thinking;
- Problem solving skills;

30
schools

3,000
participants in 3 years

(**1,000** in Pilot Year)

- Team work and independent learning.

Teacher training for the program includes 30 hours of intensive study at WIX.com, materials and coaching from Israeli Ministry of Education facilitators, inter-school meet-ups and special High Tech events.

Based on the success of the pilot, the program will continue for a second and third year in order to embed the program and create a meaningful time period to measure its impact in terms of STEM subject uptake by girls in middle school.

EXPECTED IMPACT

A key long-term objective of the program is to increase the proportion of women working in High Tech roles. Many High-tech companies seek a more diverse workforce but struggle to find qualified female candidates. Empowering girls to choose computer science subjects at school is instrumental to addressing this challenge.

The Program will target 1,000 girls in its Pilot Year and then an additional 1,000 girls in each of its 2 operational years (total of 3,000).

Short term goal: 20% increase in the number of girls who elect to study computer science in middle school.

Long term goal: 40% increase in the number of girls who elect to do five units of computer science (the highest level) for matriculation. It is found that the vast majority of students who matriculate at this level go on to study computer science in university and pursue a career in the field.

THE INVESTMENT

The Tel Aviv Foundation is seeking a philanthropic investment towards a High Tech program for 1000 Grade 6 girls in 30 elementary schools for three years.

Year 1 (Pilot)

Program Costs

Equipment	$41,000
Training	$18,500
Facilitation	$10,500
Management Fee	$7,000
Total Program Budget	**$77,000**
Contribution from the Municipality of Tel Aviv-Yafo	$30,000
Contribution from the Ministry of Education	$8,500
Balance	**$38,500**

Years 2 + 3 (Operational)

Total Program Budget	**$154,000**
Contribution from the Municipality of Tel Aviv-Yafo	$60,000
Contribution from the Ministry of Education	$17,000
Balance	**$77,000**

REQUESTED DONATION $115,500

DONOR RECOGNITION

The program will be named according to the wishes of the donor throughout the partnership and will include the CHW brand.

The donor will be recognized in all publicity and materials related to the program.

In addition, a plaque will be affixed in participating schools to acknowledge the generous support given to the program.

ABOUT THE TEL AVIV FOUNDATION

The Tel Aviv Foundation, chaired by Mayor Ron Huldai, partners with donors from around the world to meet the evolving needs of the City of Tel Aviv-Yafo. The Foundation proudly serves as a driver of progress, elevating the City's quality of life through education, the arts, sports, social services, the environment and innovative urban projects.

The Tel Aviv Foundation provides for the needy and creates opportunities for a better future for all the residents of Tel Aviv-Yafo. Founded in 1977, it has established more than 600 projects and raised over $550 million worldwide, thereby touching the lives of the city's 450,000 residents and one million commuters and visitors.

All funds raised are designated for specific projects and boosted by the City's unique matching funds program. This dollar-for-dollar partnership ensures accountability, promotes co-operation between donor and recipient, and strengthens the bond between Israel and the Diaspora.

To learn more about The Tel Aviv Foundation please visit:

www.telavivfoundation.org