

# The Initiative to Promote Technical Education in Youth Villages

## A Summary

In partnership with the Ministry of Education, the Rural Education Administration, and philanthropic foundations

June 2020



# Contents

▶ Opening Remarks	3	▶ Closing the Initiative	20
▶ Overview	5	▶ Initiative Summary	21
▶ The Need	7	▶ GANTT for the Initiative	21
▶ The vision	9	▶ Main successes	22
▶ Overall Goals	9	▶ Summary of the Initiative in the Youth Villages	23
▶ Working assumptions	10	▶ Financial Summary	34
▶ Activities	11	▶ Balance of 247,120 NIS.	34
▶ Results	12	▶ Thank you(s) and Summary	36
▶ Methodology	13	▶ Appendixes	38
▶ Intervention Models	13		
▶ Core Components of the Work Plan	14		
▶ What does the student receive in the continuum model?	14		
▶ Initiative Content	15		
▶ Uniqueness of the Initiative	15		
▶ Initiative Management Routines	16		
▶ Reports	16		
▶ Budget Principles	16		
▶ Work Interfaces	17		

# Opening Remarks

## Yoav Bar Sela (Colonel, Res.), Program Director

After 28 years of service in the air force, I decided to dedicate the second chapter in my professional life to social action. I chose to be a partner in entrepreneurship and investment in civil society. Over the last 5 years, in partnership with the stakeholders, we have developed and implemented the concept of an educational continuum for at-risk youth, students in youth villages, who are defined as “on the at-risk continuum”. Our aspiration is to provide an appropriate solution for these young people between the ages of 15–25.

Technical education in Israel, and particularly in youth villages, is a central axis in the continuum concept. It allows each student to choose a channel for significant development towards adult life—from school and the acquisition of a meaningful qualification, through military service in a needed profession, stable employment and professional career development in the technical job market.

The Initiative to Promote Technical Education in Youth Villages provides a complete solution for these young women and men, exposing them to the technical world, strengthening their knowledge in relevant professions, empowering them and supporting them during their transition points along the continuum; points

which are often ones of difficulty and crisis. In addition, the Initiative developed in a manner that strengthened the village infrastructure for technical education, positioning and strengthening the technical education tracks in the schools, advancing the integration of management tools by the school staff, increasing academic success among participants and enhancing the professional development of the educational staff.

An additional action model of the Initiative was the formation of an excellence and leadership group among junior high school students. Named, “Arrow to the North”, by the Kfar Silver Youth Village, the model focused on empowerment and excellence among junior high school students, building young leadership, and realizing their technical potential.

As can be seen from the data presented below, there have been admirable achievements in the participating villages during our two years of operation. The clear message that emerged during our summary meetings with the village directors and school principals is that they intend to continue to operate some of the Initiative’s activities in the coming years. This constitutes a badge of honor and appreciation of the Initiative.

I want to thank our partners in the Ministry of Education – in the Rural Education Administration and the Science and Technology Administration, our philanthropic partners who were involved and influenced the program. Among them, I would like to give particular mention to Atar Razy-Oren, CEO of the Beyachad Foundation, for her partnership and leadership throughout the Initiative and as chairperson of the Initiative during the last six months through its closing.

I would also like to take this opportunity to thank Avi Elbaz, former CEO of the Youth Villages for Advancement and Excellence, who recruited me for this important program, to Tali Zaka’el Peer who replaced him, Adi Zagorski for his professional assistance and partnership, and of course my right hand man, Idan Barkai, for his partnership and assistance whenever it was needed.

I sincerely hope that the tools and interventions that we have built and implemented will help many more students to succeed and to participate in and enjoy meaningful activities as mature, contributing and exceptional adults.

## Atar Razy-Oren, CEO Beyachad – The Stella and Yoel Carasso Family Foundation, Chairperson of the Initiative Steering Committee

Our starting point was our commitment to the students in youth villages. We knew that with proper mentoring, even the sky was not the limit for them. We saw technical education, the peak of which was awarding a practical engineering degree, as a significant vehicle for socio-economic mobility. Furthermore, it was clear that a technical education imparts vital life skills such as research, planning, teamwork, entrepreneurship, creativity and more.

The breakthrough in this project is reflected in the concept of the continuum model that offers mentoring of the student from high school through practical engineering studies, to military service and civilian employment.

The Initiative for Technical Education made it possible to create an exceptional partnership between leading figures in the Ministry of Education, philanthropy, the military, relevant social organizations and of course the youth villages. Thanks to the commitment and faith placed in us by the village directors, school principals, coordinators, staff of the Youth Villages for Excellence and Advancement and the other partners, we were able to meet the objectives we set for ourselves in a short period of two years.

The Initiative ended before its full potential was realized, but many practical insights and knowledge were gained from it. This paper summa-

rizes its path, knowledge, insights, and conclusions. I am sure that we will not be the last to walk this path. Those who follow us are invited to use all the information contained herein.

I will end by offering my thanks to all of our wonderful partners, at home and abroad. Your passion and commitment have made this venture an asset, one that it is so difficult for all of us to part from right now, before it had a chance to realize its full potential.

# Overview

One of the cornerstones for the growth and development of a youth village student is the building of an educational continuum that will support the village graduate throughout his or her life, including military service and finding employment.

In recent years, technical education has been going through a process of renewal and has focused on the goal of ensuring that graduates of the educational system complete their education with a “toolbox” that will allow them to integrate and succeed in life.

Youth villages serve as a platform for combining science and technical studies with the understanding that this track supports a continuous process through the military, higher education, and the job market.

In 2016, the Public Forum for Youth Villages decided to act to promote technical education in youth villages and began to formulate a quality initiative, whose peak would be a practical engineering degree, as a complementary channel to theoretical matriculation studies. In 2017, the Ministry of Education made a strategic decision to develop the technical education system in youth villages at a cost of 20 million NIS per year for three years. In this context, it was decided that in parallel to the Ministry’s program, the philanthropic partnership (in the context of the Public Forum) would develop a systematic model for accessing and developing technical education as an experimental program (pilot) in

four villages (out of the six villages that participated in the preliminary assessment process). It was further agreed that in the future this model would constitute the Ministry’s optimal model for other youth villages in Israel.

The representatives of the philanthropic partnership were: World ORT Kadima Mada, the Beyachad Foundation, The Rosalinde and Arthur Gilbert Foundation, the Daniel Judisman Foundation, and the Tzurim Foundation.

The Initiative was originally managed by the Public Forum, and after a year moved to the management and leadership of Youth Villages for Advancement and Excellence Ltd. (a company for the benefit of the public, PBO), which is experienced in the world of youth villages, and particularly in the villages chosen for the project. At the end of 2019, Youth Villages for Advancement and Excellence was disbanded and the leadership of the project, with regard to the philanthropists, was assumed by the CEO of the Beyachad Foundation, with the goal of finding a new body to lead the project in the coming years, along with additional philanthropic partners. Despite the efforts, which lasted several months, a new home for the Initiative was not found and it was closed at the end of the 2019–2020 school year, in June 2020.

## **Background on Youth Villages for Advancement and Excellence Ltd. (PBO) – Initiative Operator**

The Naor Foundation, founded by Israeli philanthropist and Israel Prize winner Mr. Avi Naor, set as its mission to work to advance children and youth at risk through deep and long-term commitment to youth villages, in partnership with leading philanthropists from Israel and around the world. Over the years, the Foundation founded a company for the benefit of the public: Youth Villages for Advancement and Excellence Ltd., whose goal was to advance the vision of the Naor Foundation in youth villages. In recent years, the PBO operated a number of programs, including the Tormim La'kfar Initiative, renovation initiatives in youth villages and welfare boarding programs, and the Initiative to Promote Technical Education in Youth Villages. Youth Villages for Advancement and Excellence (PBO) led these projects in collaboration with philanthropic bodies in Israel and abroad, government ministries (the Ministry of Education, the Ministry of Welfare, and the Ministry of Defense), organizations in the business sector, and public representatives from various sectors in Israel.

### **The PBO staff leading the project included:**

- ▶ CEO of Youth Villages for Advancement and Excellence and Chair of the steering committee: Avi Elbaz (2016–2018), Tali Zaka'el Peer (2019), Atar Razy-Oren, CEO of the Beyachad Foundation and chair of the steering committee (2020 until closure)
- ▶ Program Director: Yoav Bar Sela (Colonel Res.) – managed the Initiative, planned and supervised the work plan, mentored villages, cultivated the connections to the military, and more.
- ▶ Strategic Mentor: Idan Barkai – organizational consultant, partner in planning program measurement and evaluation and writing materials.
- ▶ Administrative Coordinator: Adi Zagorski.

# The Need



Currently, technical education in Israel provides students with a technical certificate or degree alongside, or as an alternative to, a matriculation certificate. For young people, it is a significant channel for connecting their education to the military and to the worlds of industry and technology. The importance of this continuum is even greater for youth village students, who come from complex personal and family backgrounds and a more challenging starting point. The technical certification track is meant to provide them with significant opportunities for developing their personal and professional future.

At the same time, there are a number of challenges which make it difficult to develop significant technical tracks in youth villages, such as:

- ▶ At a national level technological education has a negative reputation.
- ▶ The schools have outdated educational infrastructure which does not support advanced technologies; the educational environment is neither attractive nor challenging for pupils.
- ▶ Lack of professional teachers and lack of a sufficiently large teacher reserve.
- ▶ Lack of appropriate teacher training for technical subjects.
- ▶ Lack of adequate mastery of students of basic subjects as the critical basis for technical studies: full command of Hebrew with an emphasis on writing and reading comprehension, math, and English language proficiency (including technical English).

As a result, there is a low percentage of youth village students studying in technical tracks, and an even lower number of youth village graduates who pursue these tracks in order to attain certification as practical engineers. Since for many youth village graduates a technical education is meant to be an alternative or an option beyond a matriculation certificate, the significance is that some students graduate without a matriculation or other significant certificate, and therefore their employment and academic future is in doubt.

Another challenge at a national level involves the worsening in recent years of the manifestations of emotional and family difficulties of youth at risk, the ongoing insecurities that characterize these children and youth in general, and those in out-of-home placements in particular. Youth villages are committed to developing a rich framework of advanced and up to date solutions adapted to the challenges of tomorrow in order to provide their students with the best possible tools for their development as graduates who are able integrate into the workforce and reach their full potential.

# Logical Model of the Initiative

## Initiative Infrastructure

### ▶ Build and Lead the Partnership

Management of the Steering Committee at a national level: Ministry of Education and philanthropy

Management of the Steering Committee in each village

- All of the stakeholders in the village
- Mentor the Village Initiative Coordinator

### ▶ Committee Activities

- Specify goals and methods
- Coordinate expectations and divide roles between the partners
- Management and supervision
- Budgeting
- Professional knowledge, connections and reputation
- Formative evaluation

### ▶ Develop work routine

### ▶ Manage philanthropic partnerships

## Key Actions Directed Towards Target Audiences

### ▶ Advancement and Excellence, POB)

#### Youth Village Steering Committee

1. Build and manage a work plan, including an implementation status meeting regarding the work plan every 3 weeks
2. Identify relevant programs for the benefit of the village
3. Professional mentoring of program coordinator in the village

### ▶ The Village

#### Designated activities for the benefit of the students

1. Field trips and workshops
2. Practical experience
3. Tutoring in core subjects
4. Mentor students in grades 13-14

#### Program Management

1. Manage and implement the work plan
2. Manage the relationship with Ta'asayeda, the military, industry, and complementary education programs

### ▶ Ministry of Education

#### Intervention programs for the benefit of the students

1. Designate additional resources for the Initiative – tutoring hours in math and English
2. Designate existing programs for the benefit of the Initiative
3. Additional funding for equipment.

**Educational staff:** partners in building and operating the program for the professional development of the educational teams

**Program management:** participation in the Initiative Steering and sub committees

### ▶ Military

1. Implementation of the Shacharut model
2. Field trips to bases
3. Meetings with commanders
4. Predicted placement for technical service

## Results

### ▶ Medium-term results

#### Educational Measurements

- High rate of registration for the track – number registering for 10th grade
- High rate of registration for practical engineering – number registering for grade 13
- Attendance (prevent dropout)
- Educational achievements: math and English: 9th grade end of year, 10th mid and end of year, 12th matriculation grades
- Rate of attaining full or technical matriculation
- Rate of attaining a practical engineering certificate

#### Measurements regarding graduate traits

- Responsibility
- Teamwork
- High feelings of capability
- Strong orientation towards the future and feelings of hopefulness
- Motivated to continue studying.

### ▶ Long-term results

Socio-economic mobility: children attain a higher level of education than their parents and earn more than their parents.



## The vision

**To develop and broaden technical education in youth villages while creating and leveraging strategic collaborations at the national level that will provide the students with the tools and skills needed for optimal integration into Israeli society.**

We envision a technical track graduate with the knowledge, skills, abilities, and values that will enable him or her to cope with the evolving job market—one that will only continue to change—a graduate who is supported by an educational system with teachers who are up to date and an advanced learning environment, and who has studied a curriculum which combines the acquisition of knowledge alongside practical experience. Technical track graduates hold full matriculation certificates and have the option of receiving a practical engineering degree at the end of grade 14. For

students who have difficulty attaining this level of achievement, unique programs will be designed, allowing them to complete 12 years of education with a significant certificate with faith in themselves and high self-esteem. Graduates of technical studies in youth villages will receive the opportunity for meaningful learning based on 21st-century skills, research, depth, creative thinking, teamwork, and practical experience that connects relevant theoretical knowledge to everyday life and opens the door for further studies and professional development.

## Overall Goals

**1** Create an opportunity for social-economic mobility: Technical track graduates complete their studies with full matriculation and some with a practical engineering degree.

**2** Practical engineers with appropriate training for the needs of the military and the changing job market.

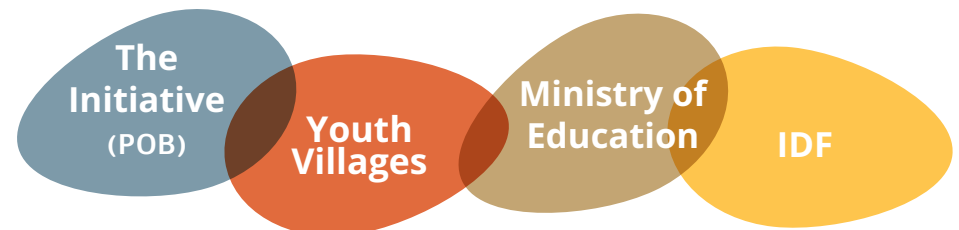
# Working assumptions

## At the national level

- ▶ In Israel there are approximately 50 youth villages. Most of the students come from disadvantaged backgrounds. Approximately 20 villages offer technical education tracks.
- ▶ Studying technical tracks in high school and a practical engineering degree creates a horizon for a first place of employment – the Israel Defense Forces (IDF) – therefore offering opportunities for socio-economic mobility.
- ▶ Mentoring all of the youth villages that offer technical tracks is a lever for national change for the benefit of a disadvantaged population alongside strengthening the IDF's capabilities.

## At the youth village level

- ▶ Systematic mentoring of students in the technical tracks from the guidance phase to the end of junior college studies: 5 years – grades 10–14.
- ▶ The program is led by the village staff and a coordinator.
- ▶ Four-way educational leadership and budgeting: The Ministry of Education, the leadership of the village, philanthropic organizations, and the IDF, based on the utilization of resources that already exist in the system alongside additional flexible resources.



## Initiative infrastructure

### Building and leading the partnership

- ▶ Management of the steering committee at the national level: Ministry of Education and philanthropic organizations.
- ▶ Management of the steering committees in each village.

### Steering committee activities.

- ▶ Specifying goals and methods.
- ▶ Coordinating expectations and divide roles between the partners.
- ▶ Management and supervision.
- ▶ Budgeting.
- ▶ Professional knowledge, connections, and reputation.
- ▶ Formative evaluation.

## Major activities vis-à-vis the target populations

### The village - operator

#### Village steering committee

- ▶ Building and managing a work plan, including holding an implementation status meeting regarding the work plan every three weeks.
- ▶ Identifying relevant programs for the benefit of the village.
- ▶ Professional mentoring of the program coordinator in the village.

#### Educational staff

- ▶ Annual plan for professional development for the technical track coordinators and teachers.
- ▶ Seminars.

### The village - activities

#### Designated activities for the benefit of the students

- ▶ Field trips and workshops.
- ▶ Practical experience.
- ▶ Tutoring in core subjects.
- ▶ Mentoring students in grades 13-14.

#### Program management

- ▶ Managing and implementing the work plan.
- ▶ Managing the relationship with Ta'asiyeda\*, the military, industry, and complementary education programs.

### Ministry of Education

#### Intervention programs for the benefit of the students

- ▶ Designating additional resources for the Initiative – tutoring hours in math and English.
- ▶ Designating existing programs for the benefit of the Initiative.
- ▶ Additional funding for equipment.
- ▶ Educational staff: Partners in building and operating the program for the professional development of the educational teams.
- ▶ Program management: Participation in the Initiative steering committee and sub-committees.

### IDF

- ▶ Implementation of the Shocharot model
- ▶ Field trips to bases
- ▶ Meetings with commanders
- ▶ Predicted placement for technical service

\* Ta'asiyeda – Industry for Advanced Education – is a non-profit organization under the umbrella of the Manufacturers Association of Israel, which, with the support of the Ministry of Education, works toward imparting values and scientific technological knowledge in industrial fields throughout the educational system, society, and community in the State of Israel.

# Results

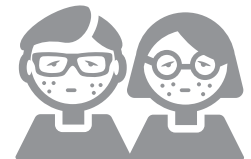
## Educational measurements

- ▶ High rate of registration for the track: number registering for grade 10.
- ▶ High rate of registration for practical engineering: number registering for grade 13.
- ▶ Attendance (preventing dropout).
- ▶ Educational achievements: math and English: grade 9 end of year, grade 10 middle and end of year, grade 12 matriculation grades.
- ▶ Rate of attaining full or technical matriculation.
- ▶ Rate of attaining a practical engineering certificate.



## Measurements regarding graduate traits

- ▶ Responsibility.
- ▶ Teamwork.
- ▶ High feelings of capability.
- ▶ Strong orientation toward the future and feelings of hopefulness.
- ▶ Motivated to continue studying.



## Long-term results

**Socio-economic mobility: children attain a higher level of education than their parents and earn more than their parents.**

# Methodology

## Basic operating principles

- ▶ The Initiative was accompanied by a steering committee consisting of the representatives of five philanthropic foundations and a representative from the Ministry of Education. The committee was authorized to oversee and approve the pilot throughout its phases. The steering committee was led by the CEO of Youth Villages for Advancement and Excellence Ltd. (PBO).
- ▶ An annual work plan defining the goals, measures of success, and budget was presented and approved by the members of the steering committee. Operation of the Initiative was implemented according to this approved plan.
- ▶ The committee met every two months according to a predetermined schedule.
- ▶ A set of criteria was determined and agreed upon by the partners for selecting villages to be included in the pilot. The criteria included:
  1. Commitment and cooperation of the village owners and management.
  2. The potential of the technical education tracks selected for the Initiative.
  3. Appropriateness of the student population for the level of the tracks and the vision of the Initiative.
- ▶ Accordingly, in the first stage the committee approved the participation of the following three youth villages:
  1. Ramat Hadassah
  2. Kfar Silver
  3. Kanot
- ▶ After a systematic call for proposals conducted during 2019, to which 14 villages responded, a fourth village was selected and added: TOM Chere La'et.
- ▶ Research and evaluation: measuring the effectiveness of the program.
- ▶ Commitment to a curriculum that leads the students to full matriculation and/or a practical engineering degree.
- ▶ Existing equipment is appropriate for the purposes of the track.
- ▶ Presentation of a program appropriate for a technical education continuum in the village.
- ▶ Recommendation of the Administration for Rural Education Supervisor.
- ▶ Ability of the village to provide additional resources.

# Intervention Models

## Model 1:

- ▶ Mentoring of an intervention class in the technical track in the village for three years (grades 10–12) and mentoring of students in grades 13–14. This model was implemented in Ramat Hadassah and Kanot (for two years) and in TOM Cherev La'et (for one year).

## Model 2:

- ▶ Mentoring of particularly talented boarding school students in junior high school, with the goal of creating a “technical reserve” for high school. This model was implemented in Kfar Silver for two years.

# Core Components of the Work Plan

Exposure to technological spaces during junior high school.	Preparatory program for those entering grade 10 in the technical track.	Tutoring in core subjects.	Exposing students to industry.
Colleges: mentoring students in grades 13-14.	Enriching village educational staff and exposing them to innovation.	Creating an educational-employment continuum for military service.	Post-military service: mentoring and providing guidance for track graduates regarding advanced studies and employment.

## What does the student receive in the continuum model?

### Junior High School

- ▶ Exposure to technology
- ▶ Preparatory program for 10<sup>th</sup> grade



### High School

- ▶ Tutoring in core subjects
- ▶ Practical experience and learning
- ▶ Industrial field trips
- ▶ Preparatory program for grade 13
- ▶ Predicted placement for military service



### Grades 13-14

- ▶ Mentoring during grades 13-14
- ▶ Predicted Placement for Military service

# Initiative Content

- ▶ The Initiative operated in the youth villages in the following core technical tracks: **electricity, machinery, computers, metalwork, electronics, and IT.**
- ▶ The actual management of the Initiative was carried out by Yoav Bar Sela, on behalf of Youth Villages for Advancement and Excellence Ltd. (PBO). His role was to provide management and professional support to the villages in the Initiative.
- ▶ Evaluation research was carried out in the framework of the Initiative by “Mashav” and was budgeted for by the partners.
- ▶ In each village, an assessment was performed before the beginning of the program.
- ▶ Village steering committees were established, headed by the school principals, which met every six weeks. The role of these committees was to lead the building of a work plan, to formulate goals and objectives, to monitor the implementation of the village work plan, to apply the lessons learned from the measurement and evaluation findings, and to promote relationships between the program partners and the village.

# Uniqueness of the Initiative

- ▶ A model for a modular application in all youth villages with technical tracks.
- ▶ In each village, the Initiative works in parallel to all stages of the educational continuum: exposure in grade 9, intervention classes in high school, practical engineering studies, and guidance in preparation for military service.
- ▶ Utilization of existing resources within the system for the benefit of the Initiative and the success of the students.
- ▶ Focus on technical tracks for which there is a horizon for practical engineering studies and employment: machinery, vehicles, electricity, electronics, IT, and programming.

# Initiative Management Routines

- ▶ The Initiative steering committee met every two months to approve the work plans, monitor their implementation, and make principal decisions regarding the operation of the Initiative. Participants included the representatives of the philanthropic partners, Ministry of Education representatives, the CEO of the research company carrying out the measurement and evaluation process, and other bodies relevant to the needs as they arose.
- ▶ Initiative steering committee sub-committees – in accordance with need: a sub-committee for choosing new villages for the Initiative, a sub-committee for developing training programs for the Initiative, and others. Participants: representatives of the philanthropic partners and the Ministry of Education. Appendix 2 contains a call for proposals for choosing a supplier to build and operate professional development programs for technical track coordinators and teachers in the villages.
- ▶ Village/school steering committees: in each village. Met every six weeks. The goal is to monitor the implementation of the annual work plan and find solutions for needs and issues arising from the field, etc.

# Reports

- ▶ The Initiative Director participated in meetings of the Initiative steering committee. In this framework, he presented the work plan – status, objectives, measures of success, and the strategic plans for each one of the villages with an emphasis on cooperation as each program began. Concurrently, he translated the measurement and evaluation process and the formulation of the activities into a written model that would serve as a basis for broadening the program with the Ministry of Education in the future.
- ▶ The Director of the Initiative prepared regular reports for the partners as needed.

# Budget Principles

- ▶ The partnership saw the Initiative as an opportunity to develop a strategic plan to promote technical education in youth villages, and therefore the assumption and the intention was to commit to at least a three-year budget.
- ▶ The budget of the Initiative was managed according to a model in which each partner was responsible for transferring its share to Youth Villages for Advancement and Excellence Ltd. (PBO), creating a joint fund designated for the project.
- ▶ The PBO managed the budget according to the decisions of the Initiative steering committee.
- ▶ A legal contract was signed between the PBO and the partners, anchoring the principles of the Initiative, the purpose of the funds, and the length of the partnership.
- ▶ The Ministry of Education co-financed the work plans in the villages.
- ▶ Each youth village included in the Initiative participated in funding the work plan and paid an additional annual participation fee.



# Work Interfaces

A cornerstone of the Initiative was the creation of an infrastructure for collaboration that was integrated into the strategic thinking, work plans, and indicators of success of the Initiative.

---

## Philanthropic partners

### **The Beyachad Foundation**

The Beyachad Foundation (Israel): Established in 2015 by Stella and Yoel Carasso and their children, the foundation continues the family's longstanding tradition of giving, focusing on reestablishing technological education and practical engineering studies in the fields of machinery, electricity, and construction as a tool to strengthen the Israeli economy and local industries, as well as to enable socio-economic mobility among young adults.

<https://beyachadfoundation.org/>

### **The Tzurim Association**

The Tzurim Association, founded by industrialist Stef Wertheimer, has set a goal to promote professional and technological education and vocational training in Israel, along with additional goals, such as developing the Galilee and encouraging entrepreneurship. Tzurim initiates and promotes progress in these fields by running its own projects and by creating professional and funding partnerships with government offices and other organizations with similar objectives.

<https://zurim.org.il/>

### **The Rosalinde and Arthur Gilbert Foundation**

Building on Rosalinde and Arthur Gilbert's legacy, the foundation's work is aimed at improving communities in Southern California and Israel. In Israel the foundation is focused on education/college access as well as economic/workforce development to help disadvantaged communities improve their lives both economically and socially. To strengthen all of Israel, the foundation recognizes the need to support all populations, including secular and Orthodox Jews, Ethiopian-Israelis, Christians, Arabs, and Bedouins.

<http://www.thegilbertfoundation.org/>

## **The Daniel Jusidman Foundation**

In 2010, the Jusidman family from Mexico City established Daniel Jusidman Foundation to support philanthropic endeavors within the State of Israel, with a view of investing in the field of education both as a conduit to promote opportunity among the underprivileged and to safeguard Jewish culture and values in the community. Daniel Jusidman Foundation invests mainly in the fields of STEM education, pluralistic Judaism, at-risk youth, school principals, and teachers. Daniel Jusidman Foundation resources will be pooled into an already thriving arena where private and public institutions as well as non-governmental organizations address the ever shifting challenges faced by Israeli society. It is the belief of the Daniel Jusidman Foundation that by partnering with local initiatives we can face those challenges together and develop better and more secure conditions for Israel's population and, by extension, for all Jews around the world.

## **World ORT Kadima Mada**

World ORT Kadima Mada perceives science and technology education as a means toward an “education for life” and a bridge to reduce gaps between different populations in different regions of the country. World ORT Kadima Mada initiates, develops, and implements innovative educational programs within formal and informal education systems in Israel's social and geographic peripheries. These programs incorporate advanced educational technologies from Israel and abroad.

<https://www.wokm.org/>

---

## Main partners

### Ministry of Education

One of the strategic objectives of the Ministry is to expand technical education. It is important to create a broad dialogue and involve relevant Ministry employees, such as the staff within the Rural Education Administration, the supervisors for subject coordinators in the Science and Technology Administration, and other partners in the Initiative, such as Ta'asiyeda.

#### Members of the Steering Committee from the Rural Education Administration

Role	Name
Supervisor, Technology and Science Education	Yehoshua Tzadok
Supervisor, Educational Advancement	Orly Milo
Regional Supervisor	Reuven Leibel
Director, Division for Education and Training, Boarding Schools	Ron Preisler
Supervisor of the Development of Professional Training for Instructors	Lydia Frank

#### Members of the Steering Committee from the Science and Technology Administration

Role	Name
Supervisor, Secondary Technological Education	Asaf Menuchin
Supervisor, Mechanics Studies	Yaron Dopleit

### IDF

A critical collaboration required for development and organization. The intent is that in each village there will be a partnering technical branch that provides mentoring and holistic support for village students studying on technical tracks so that graduates of these tracks will integrate into these branches for their military service.

### Manufacturers and Employers

Collaborations between the villages, manufacturers, and technical industries are an important contribution to strengthening the technical discourse. The intent is that each village will collaborate with at least one technical/technology company and that this company will be a partner in the growth of the students within a multi-year framework.

### Platforms for Continuing Education

The goal is to enable technical track graduates to pursue higher education, such as practical engineering studies, before enlisting, as well as to facilitate a path to academic professional development upon the completion of military service. The objective is to connect the villages and appropriate institutions and colleges as part of the Initiative's programs.

### The "Mashav" Company

The CEO of the Company, Yossi Frier Dror, is a member of the steering committee and led the measurement and evaluation of the Initiative. Likewise, he was a partner in conceptualizing and designing the Initiative as it developed, while providing ongoing methodical and professional feedback regarding its successes and challenges.

---

## Potential partners and contacts

The Initiative had and developed working relationships and collaborations with a variety of suppliers and service providers in order to promote the achievement of its goals. A detailed list of the suppliers and contacts can be found in Appendix 1.

# Closing the Initiative

## The considerations and the decision

With the closing of Avi Naor's PBO at the end of 2019, we sought a professional organization that would continue to operate the Initiative. The Rashi Foundation enlisted in the mission, but most of the philanthropic partners did not want to continue in this format. This left the Beyachad and The Rosalinde and Arthur Gilbert Foundation without the broad partnership needed for operating the Initiative.

In June 2019, the Director of Youth Villages for Advancement and Excellence resigned. A new Director was hired, but after just four months, Avi Naor informed us that he was closing the PBC. Avi allowed us to make use of the organization's infrastructure while we searched for a new professional operator for the program, but the PBO's steering committee was no longer involved.

The philanthropic partners and the professional staff remaining acted to identify an alternative body. The Director of the Beyachad Foundation, at the behest of the partners, approached the Rashi Foundation in order to explore the possibility of their continuing to operate the Initiative. They were seen as an appropriate professional home due to their familiarity with the content, experience working with the Ministry of Education, experience in managing philanthropic partnerships, and their commitment to the target population.

In a strenuous process lasting over several months, in the midst of the COVID-19 crisis, the professional teams, together with several philanthropic representatives, prepared an outline for the transition, including a number of budget alternatives (which are available for all of you to view). The goal was to continue to operate the Initiative in the framework of the Rashi Foundation for the purpose of establishing an operational model and extensively expanding it in the future under the leadership of the Ministry of Education.

In a meeting at the beginning of May 2020, three of the foundations – the Tzurim Association, the Jusidman Foundation, and World ORT Kadima Mada – announced that they were not interested in continuing to operate the Initiative, leaving just two foundations.

# Initiative Summary

The number of students participating in the Initiative:

**Total**

**469**

- ▶ Junior High School Students
- ▶ High School Students
- ▶ Grade 13-14 Students

## Kanot

Junior High and High Schools, College

Number of Participants **143**

## Ramat Hadassah

Junior High and High Schools, College

Number of Participants **115**

## Kfar Silver

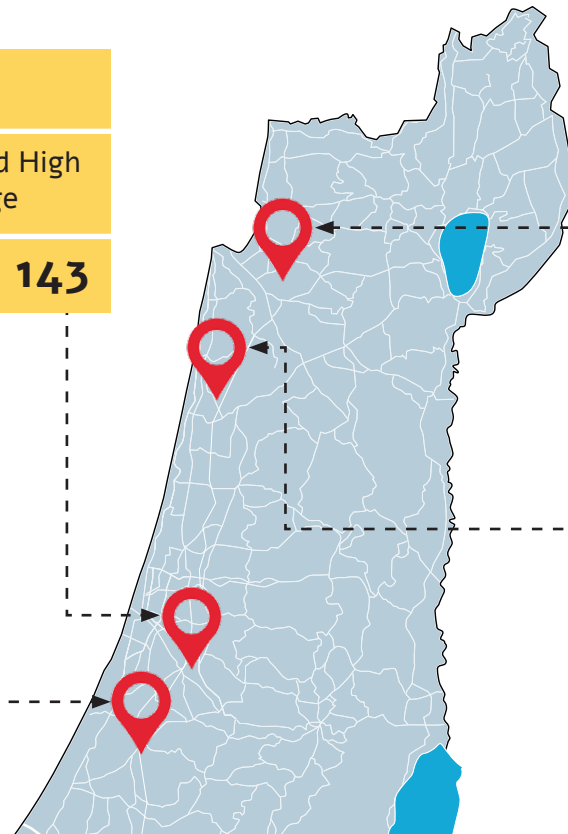
Junior High School

Number of Participants **29**

## TOM Cherev La'et

Junior High and High Schools, College

Number of Participants **182**



## GANTT for the Initiative

Topic	Year Quarter	2017				2018				2019				2020	
		1	2	3	4	1	2	3	4	1	2				
Build the Conceptual Model		----->													
Assess 6 and choose 3 villages for the Initiative			----->												
Build and implement work plans in the villages															----->
Measurement and evaluation															----->
Initiative Steering Committee															----->
Choose and add a fourth village														----->	

# Main successes

Rise in motivation to register for technical tracks in high school.

Improvement in educational achievements of program participants.

More than 80% of the participants expressed satisfaction with the tutoring in math and English.

Increase in perception of capability among the students.

Increase in the rate of those enrolling in grades 13–14 – practical engineering.

Cooperation with the IDF – Airforce and Technology and Maintenance Corps – realization of the continuum principal.

Opening of the Shocharot\* program in Kanot in the 2019–20 school year.

Opening of a new technical track at Kfar Silver.

# Summary of the Initiative in the Youth Villages

Ramat Hadassah Youth Village	24
Kanot Youth Village – summary	27
TOM Cherev La'et – summary	30
Silver Youth Village – summary	32

# Ramat Hadassah Youth Village – summary

- ▶ The Ramat Hadassah youth village joined the Technological Initiative in the 2018–19 school year.
- ▶ Intervention track – Computer-Assisted Planning – the core track in the village.
- ▶ Track infrastructure: existence of quality workshops that assist in the learning.
- ▶ The village has a college for practical engineering so that those studying on the track can continue their practical engineering studies in the village.
- ▶ During the last two years, students from the Na’ale program were integrated into the village and the Computer-Assisted Planning track was chosen as a leading track for them.
- ▶ The Initiative steering committee in the village was active and resolutely and steadily advanced the work plan.

## Program Participants by Grade

Grade	Boys	Girls	Total	Comments
7–8	28	7	35	“Tasting” program: exposure to technical education for young students
11	17	4	21	Intervention class: 10 Na’ale students of whom 2 were girls
12	5	2	7	5 continued on to practical engineering studies
13	10	1	11	
14	8	1	9	
<b>Total</b>	68	15	83	

## Main Findings of the Work Plan

- ▶ **A technical “tasting” program for junior high school** was carried out in all the classes – dedicated kits were purchased that can be used by the school for other similar activities.
- ▶ **Tutoring** – Two years of tutoring improved the educational achievements of the intervention class in terms of their grades and their transition to a more difficult track that included more advanced matriculation classes.
- ▶ **Intervention program in industry** – During the 2018–19 school year a comprehensive program was operated with the assistance of Ta’asiyeda.
- ▶ **Practical workshop at “Beit El Industries”** – A series of very successful meetings that propelled and gave motivation to grade 11 students in the intervention class.
- ▶ **Marketing for practical engineering studies** – An intervention program was built based mainly on conversations with the graduates, a tour of the college, and particularly dialogue with the teachers and coordinators. The village was able to meet its objective – more than 50% of the graduates, five out of seven, are continuing to practical engineering studies.
- ▶ **Collaboration with the Technology and Maintenance Corps** was successful and managed to strengthen the ties between the village and the corps. The 2020–21 school year will be a preparatory year for the opening of the Shocharot program. The program will open in the 2021–22 school year in the school’s Computer-Assisted Planning track.
- ▶ **“Predicted Placement” in the Air Force** – In the framework of the Initiative, the first steps were taken toward implementing a program that would integrate grade 12 graduates in technical roles at the Ramat David Air Force base. Two young women were successfully integrated.



- ▶ **Joint activities with students from the Computer-Assisted Planning program from Kanot** – There was an excellent meeting which yielded new acquaintances and shared learning. Unfortunately, due to the COVID-19 crisis, the planned visit to Kanot by Ramat Hadassah students did not take place.
- ▶ **Enrichment and development of the technical studies teachers** – A program was built which was well received by the participants.
- ▶ **Preparatory program for those entering grade 10 and for those beginning their college studies in the 2020–21 school year** will operate as planned during the summer vacation.
- ▶ **Track graduates** – A topic defined in the work plan but which was not successfully advanced.

### Data on Registering for Practical Engineering

Year started studying	Potential to register for practical engineering	Registered for grade 13	Continued to grade 14	Comments
2017–18	14	8 (57%)	8	4 will receive diplomas
2018–19	10	4 (40%)		
2019–20	7	5 (71%)		Met goal of 50%
13	10	1	11	
14	8	1	9	
<b>Total</b>	68	15	83	

### Main Findings of the Measurement and Evaluation Process

Area	Findings
Intend to continue in the practical engineering track	<ul style="list-style-type: none"> <li>• 11 out of 18 (61%) are interested in pursuing practical engineering studies</li> </ul>
Quality and satisfaction from studying in the track	<ul style="list-style-type: none"> <li>• High level of satisfaction</li> <li>• More emphasis is needed on industry and identifying relevant employment</li> </ul>
Quality and satisfaction from the pathway	<ul style="list-style-type: none"> <li>• Medium to high satisfaction</li> <li>• More emphasis is needed on the practical implications, exposure to industry and finding relevant employment</li> </ul>
Grades in the intervention class	<ul style="list-style-type: none"> <li>• Considerable positive change in English grades</li> <li>• Negative change in math and machine studies grades</li> <li>• 10 out of 21 (48%) of the students changed from the 3 point to the 4-point class in math</li> <li>• 10 out of 21 (48%) of the students joined a more difficult English class. 7 went from 3 to 4 points and 3 from 4 to 5 points</li> </ul>
Taster for junior high school students – exposure lessons	<ul style="list-style-type: none"> <li>• Small sample (or participation) size</li> <li>• The lessons only partly contributed to the desire to register for the technical track</li> <li>• Very low level of satisfaction from these lessons.</li> </ul>

## Recommendations for the Village Management

- ▶ **“Tastings” in grade 9** – “Tasting” and experiencing is important. It is necessary to find the correct population, to focus on it, and to identify the right way to market the technical world to all the junior high school grades while utilizing creative and advanced tools.
- ▶ **Technical teachers and coordinators** – Consolidating the group of technical teachers is very important in terms of innovative pedagogy in their field. It is recommended to develop an annual program for holding four joint learning and experiential sessions.
- ▶ **Intervention program in grade 12 with the goal of encouraging college registration** – The vision: all of the students who finish grade 12 in the technical track will register for practical engineering studies in the college. In this light, it is recommended to market these studies to the high school students and to set appropriate objectives for registration.
- ▶ **The college for practical engineering** is a strong point for the track, and it is important because it strengthens the principle of the continuum. It is recommended that one of the objectives in the work plan be increasing the number of grade 12 graduates who pursue practical engineering in college; likewise, it is important to continue to bring students from the outside in order to ensure that the college can balance its budget.
- ▶ **Transition programs from grade 9 to high school and from grade 12 to college** – The goal is to build preparatory programs that combine educational preparation with practical technical experiences.
- ▶ **Strengthening the relationship with the Technology and Maintenance Corps and realizing the “predictive placement” concept** – The Shocharot track will advance and strengthen this relationship. “Predictive placement” integrates as a power multiplier for quality military service and is good for all.
- ▶ **Establishment of a Village Makerspace** – A tool to assist in ensuring innovative pedagogy for those studying in the track as well as for all the other tracks in the village.

## Track Graduates

- ▶ **It is recommended to survey the graduates** in order to provide the management of the village with a picture of their achievements, gaps, and the needs of those who were in the Computer-Assisted Planning track as well as all of the other village graduates.
- ▶ **It is recommended to create a village work plan** whose aim would be applying the principle of continuity for the track graduates to military service, the practical engineering college, employment, and higher education after military service.

# Kanot Youth Village – summary

- ▶ The Kanot youth village joined the Initiative in the 2018–19 school year.
- ▶ At the time of joining the Initiative, the Computer-Assisted Planning track was the default track in the village, as opposed to its flagship tracks related to police and agriculture. Today, the Computer-Assisted Planning track is the flagship track.
- ▶ Infrastructure – Recently, a new workshop was launched but there is still an infrastructure gap in terms of what is needed for students’ practical work and experience.
- ▶ The village does not have a practical engineering college. As a result, those studying on the track who want to continue their studies do so at the Na’amat College (village owners) for Practical Engineering in Rishon Letzion.
- ▶ The Initiative steering committee of the village was active and engaged. In the second year, a representative from the boarding program was added to the committee, which significantly improved the cooperation with the boarding program and the status of the track in the village and assisted in advancing the work program.

## Program Participation by Grade

Grade	Total # of Students	Female Students	Notes	
10	24	5 (19%)	8 (30%)	
11	23	4 (24%)	10 (48%)	Intervention class
12	22	11 (47%)	2 (8%)	Encourage registration for college – objective: 11 students
13	3			
15	5			
Total	77	22 (27%)	22 (27%)	

## Main Findings

- ▶ **Technology “tasting” for grade 9** – The whole grade 9 class (72 students) participated in the program. This activity increased the motivation to sign up for the track. 24 students registered for the track as opposed to six in the previous year.
- ▶ **Tutoring** – Tutoring over the last two years improved the grades of the students.
- ▶ **Ta’asiyeda intervention program for advancing practical experience** – There was a significant gap between the objectives of the program and the possibilities for implementation. Students in the track were unable to practice due to the lack of a relevant solution by Ta’asiyeda and the lack of infrastructure in the village school.
- ▶ **Preparation for studying practical engineering** – An intervention program was built based on conversations with the graduates, the staff, and a field trip to the college. The objective set was not met. Working assumption: in the 2020–21 school year, when the intervention class enters grade 12, there will be a change in everything related to registering for the practical engineering program.
- ▶ **Mentoring of college students** – In the first year someone was appointed to this position. In the second year of the program the Rural Education Administration decided this would be handled by the graduate coordinator. Mentoring of the students during their studies needs to be more focused and organized.
- ▶ **Technology and Maintenance Corps** – The connection with the Technology and Maintenance Corps was very successful. Beginning in the 2020–21 school year, a full Shocharot track in Computer-Assisted Planning will operate in the school.

- ▶ **Joint activities with students in the Computer-Assisted Planning track in Ramat Hadassah** – The meeting was excellent. Unfortunately, due to COVID-19, Kanot was unable to host the students from Ramat Hadassah.
- ▶ **Enrichment and development for the technical studies teachers** was partially implemented. Consolidating the group of technical studies teachers is particularly important, as they bring different perspectives to common areas of practice.
- ▶ **Preparatory program for those entering grade 10 in 2021** is in the work plan for the end of the school year.
- ▶ **Mentoring of track graduates** – A topic that was defined in the work plan, but no progress was made.

## Kanot – Insights from the Measurement and Evaluation

Area	Findings
Intention to continue to the practical engineering track in grade 11	<ul style="list-style-type: none"> <li>• Grade 11 – 21 out of 23 (91%) of the students are interested in pursuing practical engineering studies</li> <li>• Grade 11 – increase in the percentage interested in pursuing a career in this area</li> </ul>
Quality and satisfaction from track studies	<ul style="list-style-type: none"> <li>• Grade 11 – 21 out of 23 (91%) of the students are interested in pursuing practical engineering studies</li> <li>• Grade 11 – increase in the percentage interested in pursuing a career in this area</li> <li>• High level of satisfaction from track studies</li> <li>• More emphasis needed on the applied aspect</li> </ul>
Vocational learning skills	<ul style="list-style-type: none"> <li>• Based on self-evaluation, vocational learning skills are high</li> </ul>
Self-capability	<ul style="list-style-type: none"> <li>• The perception of self-capability is high</li> <li>• There is significant positive change in all areas except taking personal and group responsibility</li> </ul>
Future orientation	<ul style="list-style-type: none"> <li>• Orientation for the future is strong, particularly in the areas of value (investing), expectation and control</li> <li>• There is noticeable positive change in all areas except for positive feelings towards the future</li> </ul>
Educational achievements	<ul style="list-style-type: none"> <li>• There is noticeable positive change in educational achievements in Hebrew and English</li> <li>• There was no change in math achievements, and these remain low.</li> </ul>
Intention to continue to the practical engineering track in grade 12	<ul style="list-style-type: none"> <li>• Grade 12 – 7 out of 16 (44%) of the students are interested in pursuing practical engineering studies</li> </ul>
Robotics and pre-army technology	<ul style="list-style-type: none"> <li>• Satisfaction from the classes on robotics and pre-army technology was fair and relatively low</li> <li>• Satisfaction from the classes on robotics and pre-army technology contributed only in a very partial manner to the desire to register for the technical track</li> </ul>
Micro-bit course	<ul style="list-style-type: none"> <li>• 21 (32%) of the students attended half or more of the classes</li> <li>• The course contributed only partially to the desire to register for the track</li> <li>• Satisfaction from the course was fair and relatively low</li> </ul>

## Registration Data – Practical Engineering Kanot

Academic Year	Finished grade 12	Began grade 13	Studied grade 14	Notes
2017–18	16	5 (31%)	5	Diploma expectation – 3
2018–19	17	3 (17%)	2	
2019–20	19	6 (32%)		Despite the relative rise from the previous year, did not meet the objective of 50%
Total	52	14 (27%)	7	
College – 14	Mentoring	29		
Total		182		

## Recommendations for the Village Management

- ▶ **“Tastings” for grade 9** – Experience and “tastings” are important. It is necessary to identify the correct population and focus on them. The path to marketing the technical world to all age groups begins in junior high school.
- ▶ **Technical teaching staff** – Consolidating a group of technical teachers is particularly important from the aspect of innovative technology in these fields. It is recommended to hold a number of learning meetings throughout the course of the year.
- ▶ **Grade 12 intervention program for encouraging registration for the college** – An aspect that needs improvement. There is a need for significant involvement of the staff and the directors in order to improve this data point.
- ▶ **Practical engineering college** – It is important to consider opening a practical engineering college in order to strengthen the educational continuum.

- ▶ **Transition programs from grade 9 to high school and from grade 12 to college** – It would be beneficial to build preparatory programs that combine educational preparation with practical technical experiences.
- ▶ **Strengthening the relationship with the Technology and Maintenance Corps and realizing the “predictive placement” concept** – The Shocharot track will advance and strengthen this relationship. Predictive placement integrates as a power multiplier for quality military service and is good for all.
- ▶ **Establishment of a Village Makerspace** – A tool that will assist in ensuring innovative pedagogy for those studying in the track as well as for all the other tracks in the village.

## Track Graduates

- ▶ **It is recommended to survey the graduates** in order to provide the management of the village with a picture of the achievements, gaps, and needs of those who were in the Computer-Assisted Planning track as well as of all the other village graduates.
- ▶ **It is recommended to create a village work plan** whose aim would be applying the principle of continuity for the track graduates to military service, the practical engineering college, employment, and higher education after military service.

# TOM Cherev La'et – summary

- ▶ The village joined the Technical Initiative in the current school year – 2019–20.
- ▶ During the organizational period for the 2019–20 school year, a broad work plan was built in cooperation with the village steering committee, which gave expression to all of the elements of the Initiative for all the technical tracks in the school and college.
- ▶ The TOM Cherev La'et youth village focuses mainly on technical education; therefore, the intervention program places an emphasis on providing reinforcement and solutions to areas that were defined in the assessment as needing focus during the intervention.
- ▶ The Initiative steering committee was active in the village and tried to advance the work plan despite the many challenges faced during the course of the year.

## Program Participation by Grade

Grade	Total # of Students	Female Students	Notes
9	Pre-technology	52	
10	Intervention class	16	Began as track intervention and moved to an organic class
11	College motivation	53	
College – 13	Mentoring, Matriculation completion	32	
College – 14	Mentoring	29	
Total		182	

## Reference to the Program Components in the Village

- ▶ **Pre-technology for grade 9** – Two out of seven meetings were held. A high level of satisfaction was expressed regarding the meetings.
- ▶ **Tutoring** – In the middle of the year a significant change was made: from intervention in one specific track to intervention in an organic class. This was the correct move, but unfortunately the COVID-19 crisis halted the process.
- ▶ **Tutoring in the electricity track** began late. It was halted two months after it began due to the COVID-19 crisis.
- ▶ **The intervention program with the assistance of Ta'asiyeda** did not take place as Ta'asiyeda did not transfer their support as planned.
- ▶ **Encouragement to study practical engineering** – A successful intervention in grade 12 produced results: an increase of 40% in the number of 12<sup>th</sup> graders registering for the various college tracks in the village.
- ▶ **Collaboration with the Technology and Maintenance Corps** – Meetings were held to strengthen the relationship. The process still needs to be more orderly.
- ▶ **A technical business initiative** was planned but not implemented.
- ▶ **Enrichment and development for the technical studies teachers** – Three out of the six meetings were held. Those that were held were considered exceptional.
- ▶ **A preparatory program for those entering grade 10 in 2020–21** appears in the work plan. It is planned to be implemented before the start of the school year.

## Main Findings of the Measurement and Evaluation Process

Area	Findings
Grade 12 – intention to continue to the practical engineering course	<ul style="list-style-type: none"> <li>IT track – 21 out of 25 (84%) of the students are interested in pursuing a practical engineering certificate</li> <li>Electricity track – 10 out of 14 (71%) of the students are interested in pursuing a practical engineering certificate</li> </ul>
Grade 12 – quality and satisfaction from track studies	<ul style="list-style-type: none"> <li>High level of satisfaction from track studies</li> <li>In the electricity track there is a need for greater exposure to industry and relevant employment market</li> </ul>
Grade 10 – educational achievement	<ul style="list-style-type: none"> <li>Overall marks were low</li> </ul>

## Recommendations for the Village Management

- ▶ **Division into technical tracks** – It is recommended to make this division at the end of grade 9 and not at the beginning of the school year. In practice, it will be carried out in preparation for the 2020–21 school year.
- ▶ **Intervention program (“tastings”) in grade 9** – The program is important. It addresses the aspects of motivation and consolidation of information. It is recommended to operate an identical program next year.
- ▶ **Technical teaching staff** – The village has a large staff of technical teachers. Consolidating the group in the framework of the Initiative with an emphasis on the professionalism aspect should be preserved.
- ▶ **Intervention program for grade 12 to encourage registration for college** – The program provides a solution to the objectives defined

but needs to be improved and should be continued next year.

- ▶ **Transition preparation program for 9th graders entering high school and 12<sup>th</sup> graders entering college** – It is recommended to build preparatory programs that combine educational preparation with practical technical experience.
- ▶ **Strengthening the relationship with the Technology and Maintenance Corps and realizing the “predictive placement” concept** – The mentoring process should be focused and agreed upon with the Air Force for all the grades, particularly with an emphasis on the college students. Predictive placement can be a power multiplier.

## Track Graduates

- ▶ **Surveying the graduates is recommended** in order to provide the management of the village with a picture of the achievements, gaps, and needs of the village graduates.
- ▶ **To establish a Makerspace in the Village** in order to improve the instruction and practical experience of the students. The existing space in the village requires professional support. It is recommended to make use of the existing knowledge and experience of Kfar Galim.

# Silver Youth Village – summary

- ▶ As the village does not have technical tracks, the Initiative steering committee in the village decided on the development of a unique program – Chetz La'tzafon (Arrow to the North).
- ▶ The “Arrow to the North” program deals with developing excellence groups among junior high school students in the boarding program.
- ▶ The primary goal is to support their integration into the flagship track of the village, the Programming track, which is currently only for external students.
- ▶ The steering committee in the village was very active, promoted the program, and made changes to the program as needed in order to meet the needs of the participants.

## Program Participants 2019-20

Grade	Total # of Students	Female Students	Notes
7	5	1	
8	8	2	
9	11	2	Second year
Total	24	5 (21%)	Improvement compared to 0 girls in 2018-19

## Main Elements of the “Arrow to the North” Program

- ▶ **Educational areas** – A unique timetable was built and appropriate teachers were selected. There was good cooperation with the boarding program in the framework of “Evening School” and there was significant improvement in the educational achievements among the participants.
- ▶ **Exposure to the worlds of innovation and technology** – An active program was built for all the participants appropriate to each junior high school grade.
- ▶ **Empowerment of the participants in the program** – The program was branded as an excellence program for boarding school students who had evident potential. The branding included a program symbol, a ceremony with the parents, and meetings with industry executives.
- ▶ **Missiles course** – All of the students in the program participated. The course was held in conjunction with the Jewish Colonization Association (JCA) and was rated as very successful, experiential, educational, and empowering for the participants.
- ▶ **Collaboration with the Palmachim Base, IDF** – During the first year of operation there was excellent cooperation. During the second year, the program got off to a slow start, and COVID-19 made it difficult to achieve the objectives outlined together with the staff of the Palmachim base.



## Main Findings of the Measurement and Evaluation Process

Area	Findings
Intend to continue to the track	<ul style="list-style-type: none"> <li>• 17 out of 21 (81%) of the students are interested in pursuing studying in the track</li> </ul>
Satisfaction and motivation	<ul style="list-style-type: none"> <li>• Very high level of satisfaction from those studying in the excellence group</li> </ul>
Educational-vocational skills	<ul style="list-style-type: none"> <li>• Based on self-evaluation, educational-vocational skills are high</li> </ul>
Future orientation	<ul style="list-style-type: none"> <li>• Strong future orientation, particularly in the areas of value (to invest), expectations and control</li> </ul>
Educational achievements of 8 <sup>th</sup> and 9 <sup>th</sup> graders	<ul style="list-style-type: none"> <li>• The most significant positive changes were in English and math</li> </ul>
Grades of 7 <sup>th</sup> grade students	<ul style="list-style-type: none"> <li>• In general the educational achievements were poor</li> <li>• Most of the positive changes were in math</li> </ul>

## Recommendations for the Village Management

- ▶ **The “Arrow to the North” Program** is a unique and impressive program which provides a solution to the need as defined by the village: cultivating excellence in the junior high school among boarding school students.
- ▶ **The Initiative steering committee** in the village and the program coordinators worked diligently and were dedicated to the work.
- ▶ **The level of cooperation** between the boarding school and the junior high school was very important to the success of the program.

- ▶ **It is recommended that this special program be preserved.** At the same time, after two years of operation, it is time to rethink all of the content while emphasizing building a modular program that provides solutions for the grade levels in junior high school and later in high school.
- ▶ **It is recommended to continue encouraging the integration of female students** into the program and to set quantitative objectives.
- ▶ **Preserving the relationship with JCA and participation in the “Missiles” program** is recommended for next year.
- ▶ **Technical education tracks** – The program currently has no natural continuation. It would be beneficial to open a dedicated track, to consider opening the Mechatronics track, and later to consider establishing a practical engineering college in the village.
- ▶ **Preserving the relationship with the Air Force** – It is recommended that the relationship with the Palmachim Base is preserved and, assuming that a technical track is developed, it is advisable to examine cooperation with the Air Force for guidance (or, alternatively, the Shocharot path).
- ▶ **Establishment of a Village Makerspace** – It is recommended to discuss and study the subject. This could provide another solution for the technical dialogue in the village and the development of innovative pedagogy. (It is recommended to visit and meet the staff at Kfar Galim).
- ▶ **It is recommended to promote the program** and to present it to decision makers in the Ministry of Education as a model for other schools in everything related to developing excellence and technical experiences for junior high schoolers.

# Financial Summary

## Total Income in NIS

Partners	Income in NIS
Beyachad Foundation	350,000
The Rosalinde and Arthur Gilbert Foundation	656,509
World ORT Kadima Mada	150,000
Tzurim Association	250,000
Participating villages	60,000
<b>Total</b>	<b>1,466,509</b>

## Total Expenses in NIS

Expenses	Planned	Implemented	Implementation %
Ramat Hadassah	230,000	230,000	100%
Kanot	212,000	194,416	92%
TOM Cherev La'et	80,000	49,295	62%
Kfar Silver	205,000	109,792	54%
Professional development	40,000	27,881	70%
Measurement and evaluation	142,604	95,173	67%
Project director	353,660	317,534	90%
Management/supervision/ administration	156,390	156,390	100%
Unexpected costs	65,023	27,908	43%
<b>Total</b>	<b>1,495,677</b>	<b>1,219,389</b>	<b>82%</b>

## Income - Expense Gap

- ▶ **Balance of 247,120 NIS.**

The balance was returned to the philanthropic partners according to the relative share of their contribution.

## Systemic recommendations for implementation for the management of the Ministry of Education and other partners

### Leadership and management of the Initiative

- ▶ A leading point of contact should be appointed by the Rural Education Administration and by the Science and Technology Administration, who will be considered part of the leadership staff of the Initiative.
- ▶ Conversations regarding the budgets and commitments of the Ministry of Education have to be in place at the start of the project.
- ▶ Contracts with philanthropic partners have to be in place at the start and in accordance with the contractual commitment of the Ministry of Education.
- ▶ Investment is needed in strengthening the relationship between the partners and in creating a positive and constructive dynamic based on the assumption that the process taking place is as important as the final product.
- ▶ Meetings and/or discussions of a limited board of directors with the director of the program and the professional referent of the Ministry of Education should take place monthly.
- ▶ Meetings and/or discussions of the steering committee consisting of the philanthropic partners and representatives from the Ministry of Education should take place once a quarter.
- ▶ Continuous work is needed with all of the village coordinators and educational staff, including investing in their professional development and providing them with guidance.
- ▶ Investment is needed in the professional development of the educational staff with an emphasis on learning oriented to 21st-century skills.
- ▶ Investment is needed in formation, evaluation, and measurement, alongside managing the data generated from the operation of the programs, in order to provide the villages with feedback and promote peer learning among them.
- ▶ It is worth investing in branding the Initiative with a unique name in order to create a common identity among the vision, objectives, and

goals of the activities in the field.

- ▶ The bureaucratic aspect of managing the Initiative should be limited due to the fact that it is managed by parties external to the system.

### Selecting youth villages for the Initiative

- ▶ Selecting a youth village with management committed to the subject and committed role holders who will lead the program in the village.
- ▶ Selecting a youth village with a college that includes grades 13–14.
- ▶ Selecting a village that has the potential of increasing the number of female students studying in technical tracks.

### Content of the Initiative for the purpose of implementing the continuum model

- ▶ Creation of a modular structure that allows for specific adaptation of the content for each village, while maintaining the continuity principles.
- ▶ Implementation of the “talent model” in junior high schools, in accordance with villages that have this need.
- ▶ Different “tastings” in each junior high school grade – grades 7–9.
- ▶ Organizing and holding a summary preparatory program for those going into grade 10 in technical tracks, and similarly for those beginning grade 13 studies in order to reduce educational gaps.
- ▶ Implementation of “predictive placement” in preparation for military service for graduates of technical tracks who enlist at the end of grade 12, enabling the preservation of the continuum model.
- ▶ Continuing studies (grades 13 and 14) should take place in the village itself or in a designated place reserved for the village. This allows for the preservation of the continuum model.

# Thank you(s) and Summary

Finished but not complete.

The Initiative operated in 4 youth villages. It did not realize its full potential, but during the short period it operated, it gained significant experience, established a clear structure connecting the “tasting” stage in junior high school, through high school, to practical engineering studies and military service.

Thank you to the directors of the villages, the school principals, and to the teachers and coordinators in each village. They opened their homes to us, allowed us to enter with new concepts and ways of working, dedicated themselves to the process and made it their own.

Thank you to the philanthropic partners who conceived the entire Initiative and supported it with their knowledge, experience, funds and passion.

Thank you to our partners in the Ministry of Education, who soon came to adopt the Initiative in a heartwarming manner, and now that it has ended, will explore ways in which to give continued life to the principles that have emerged from it.

Thank you to our IDF partners who were with us all the way, who made changes and were changed as we were.

Finally, all of this would not have been possible without the professional leadership and dedication of the staff of Youth Villages for Advancement and Excellence, and primarily Yoav Bar Sela, the director of the initiative.

A big thank you to everyone.

This summary document is yours and for you.

We all hope that the principles and knowledge accumulated will continue to serve others after us.

## Appendix 1 – Potential partners and contacts

Supplier/Association	Specialty	Contact	Notes
Yeholot	English, Math	Nissim Cohen	
Heznek for Industry	Math, English, Teacher training	Sharon Hezkiya	
GOOL	מתמטיקה, אנגלית, הכשרת מורים	Ofer Levi	
Education Cities	Online learning	Yakov Hecht	
Methodica – Effective Learning	Program for Innovative Pedagogy	Ofer Lahak	
Teach First Israel	Effective learning, content development, digital learning, and services		
Mabatim – Faculty for Education, Science, and Technology, Technion	למידה אפקטיבית, פיתוח תוכן ולמידה ושירותי דיגיטל	Tamar Miller – Secretary	
Moona	Teacher training	Assaf Brimer	Magdal Crum
ORT Network	Teacher training	Yoel Rothchild	
Weizmann Institute	Drones and technology, Makerspaces, escape rooms, mentoring	Yael Groverman	“Tasting” program for youth
Science Oriented Youth	Makerspaces רחפניים וטכנולוגיות, חדרי בריחה, ליווי		
Madatech – Israel National Museum of Science, Technology, and Space	Technical learning program		
Carasso Science Park	Technical learning program	Yossi Ron, CEO Beit Yatziv	
Shiur Acher (A Different Lesson)	After-school programs around the country	Dafa Dor	
Havaya v'tochan	Haifa and Netanya		
Kol Yachol	Technology Museum, Beersheva	Moshe Elroi	
Atid Plus	Connections to industry, teacher training	Revital Elbaz Duek	פעילים בנווה הדסה, כנות, עיינות
Rashi Foundation	Makerspaces	Yael Bala Avni	
Moshe Elroi	Learning through escape rooms	Kol Yachol	
Revital Elbaz Duek	NGO for the advancement of math studies and technical training	Atid Plus	
	Collaborations for the benefit of the Initiative	Rashi Foundation	

## Appendix 2

A tender for choosing a supplier for building and operating a professional development program for technical teachers and coordinators in the villages

# The Initiative for Promoting Technical Education in Youth Villages

Re: An invitation to present proposals for a professional development program for technical track coordinators who teach technical vocations in schools located in youth villages in Israel

## Background

- ▶ In recent years technical education has been in a process of renewal. At the center is the recognition and understanding that graduates of the education system should set out after their studies with a “toolbox” that will allow them to integrate and succeed in their military service and in the job market.
- ▶ Youth villages serve as a platform for combining science and technical studies because this path allows for an educational continuum and the opportunity to pursue studies in grades 13–14 in order to attain a technician’s certificate and/or a practical engineering degree. This path allows students to integrate into relevant fields during their military service and continue on to higher education and participation in the work force.
- ▶ During 2016, an initiative emerged from the “Public Forum for Youth Villages in Israel” to promote quality technical education in youth villages which culminates in a practical engineering degree as a complementary channel to academic matriculation studies. The Naor Foundation, the Beyachad Foundation, World ORT Kadima Mada, the Daniel Jusidman Foundation, The Rosalinde and Arthur Gilbert Foundation, and the Tzurim Foundation started the Initiative together with the Ministry of Education and other partners, including the Technological and Logistics Directorate (IDF), Ta’asiyeda, and others.

## Vision of the Initiative

Development and expansion of technical education subjects in youth villages while creating and leveraging strategic collaborations at a national level that will provide youth village students with the tools and skills to allow them to optimally integrate into Israeli society.

Today, the Initiative operates in four youth villages and is managed by **Youth Villages for Advancement and Excellence (PBO)** in collaboration with philanthropic bodies and the Ministry of Education. During the next academic year, it is expected that five villages will participate in the Initiative. The activities take place together with the Ministry of Education, with the goal being that the model will be adapted by the Ministry if the results of the Initiative are successful..

### **Invitation to present a proposal for a professional development program for technical track coordinators**

**We invite you to present a proposal for the development and implementation of an annual professional development program for technical track coordinators who teach technical tracks in schools located in youth villages in Israel.**

### **Goals of the program**

- ▶ Acquisition of applied knowledge in innovative pedagogy for technical education among the program participants: coordinators of technical tracks who teach professional technical subjects in schools in youth villages in Israel.
- ▶ Application of the knowledge acquired by participants in the program as part of their work routine in schools in youth villages in a manner which promotes the attainment of the matriculation certificates, technical certificates, skills, and competencies relevant to a changing job market among technical track students in the villages.

### **Indicators of the success of the program**

- ▶ Each of the participants in the program will present a practical final project to be integrated as part of their coordinating the track.
- ▶ The level of satisfaction of the participants from the program in terms of both content and process..

### **Components of the requested program**

1. The program is intended for 15–20 technical track coordinators in schools located in youth villages in Israel.
2. The program will begin in December 2019 and finish in June 2020.
3. Number of sessions in the program: 8–10, once every three weeks.
4. Place: varies according to the purpose of the session.
5. The program will combine the acquisition of innovative applied pedagogy for technical education, learning through experience, distance learning, field trips to schools utilizing innovative pedagogy, and meetings with entrepreneurs in the field.
6. Final project of the program: each participant will develop and submit a pedagogical project to be implemented in the technical track in the village. The program will mentor and guide the participants in the development of these projects.
7. The program will assist each participant in establishing and operating a community of teachers in the youth village built around the subject of innovative pedagogy, through which a discourse around, and the language of, innovative pedagogy will be implemented.

8. The program will be accompanied by a measurement and evaluation process of the effectiveness of the program as part of the service to be provided by the program operator.
9. The program will include the establishment of a “mini-site” to which all of the products of the process will be uploaded (lectures, written materials, etc.) for the benefit of the participants in the program as well as for teachers who are not participating in the program.
10. Program participants will receive payment for work hours funded by the Ministry of Education.

### **Required characteristics of the requested program**

1. The program will be adapted by the technical track coordinators from among a wide variety of technical tracks with an emphasis on civil engineering, machinery, electricity, electronics, design, and IT.
2. The program will be named “Innovation Patrol” and will provide participants with applied pedagogical knowledge appropriate to the teaching challenges in a changing world, familiarity and experience with different innovative teaching methods, tools for optimal utilization of the learning environment, and more.
3. The program will include an element of exposure and experience in industrial technologies as well as visits to institutions and organizations advancing innovative pedagogy.
4. In the framework of the program, participants will become familiar with innovative pedagogic methods from around the world.
5. Participants will develop unique programs in technical education for the technical tracks they coordinate and will define milestones for their implementation.
6. The program will be built on the working assumption that there is a possibility that it will be operated again in the next few years, if the evaluation study confirms its success.
7. Leadership of the selection process and choosing the participants who will participate in the program will be done in full cooperation with the staff of the Technical Education Initiative and other partners.



## Criteria for choosing the supplier for developing and implementing the program

Criteria	Weight in the decision
Proposed methodology is in accordance with the components of the program	20%
Cost	50%
Experience of the leading staff in similar organizations and projects	25%
Flexibility of the supplier and willingness to make non-significant changes in the structure of the work	5%
Total	100%

### Timetable

- ▶ Proposal submission: Proposals should be submitted by 15.8.19 by email to: [info@youthvillages.org.il](mailto:info@youthvillages.org.il)
- ▶ Selection committee: Bodies whose proposals meet the criteria will be invited to an interview by the selection committee, which will take place on 27.8.19, between the hours of 15:30-18:30, at the Ministry of Education in Tel Aviv. Each invitee will have 20 minutes to present their program to the committee. If you wish to use a digital presentation in addition to the proposal and requested documents, the digital presentation should be sent by 22.8.19 by email to: [info@youthvillages.org.il](mailto:info@youthvillages.org.il)

### Requested documents

1. The proposal, which includes methodology, timetable, costs, and a plan for evaluating and measuring the effectiveness of the program.
2. A document which details the experience of the applicant and the staff intended to lead the program.
3. Recommendations by three organizations for whom the applicant has provided similar services.

Only applications which include all of the required documents will be considered.

### Questions

For clarifications, emails can be submitted to [info@youthvillages.org.il](mailto:info@youthvillages.org.il) by 5.8.19.

Sincerely,

**Tali Zaka'el Peer**  
CEO  
Youth Villages for Advancement and Excellence  
(PBO)

**Yoav Bar Sela**  
Director, Initiative for the Promotion  
of Technical Education in Youth  
Villages

