

MATANEL FOUNDATION

ACTIVITY REPORT

Program: The Nitzan Matanel Science Summer Camp
Year: 2019

Please present your activity report according to the following lines. The whole report will not exceed 2 or 3 pages (as word document).

Name of the Program: The Nitzan Matanel Science Summer Camp

Year of activity: 2019

Name of the report's writer: Na'ama Gat

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Number of active participants in the program: 32

Estimated number of impacted participants: 32

Give the actually state of the program (where the program stands at the date of the activity report, no more than ten lines):

As planned, the **Nitzan Matanel Science Summer Camp** took place at the end of the school year, in June 2019. It was a full two days of science-related activities at the **Weitzman Institute** – the world-renowned science and research institute. The camp participants were 32 of the most dedicated, hard-working and excelling 9th grade girls participating in the “Cracking the Glass Ceiling” program.

The main achievements during the last year of activity (main achievements, number of events, number of participants, etc.):

This year as well, the **Nitzan Matanel Science Summer Camp** was carried out very smoothly, without any significant mishaps or problems. The team from the Weitzman Institute collaborated with the program staff and was helpful and professional.

The number of participants was 32 (full list of names is attached to the report).

The activities planned for the two-day camp were interesting and enriching for the girls, and well-planned in terms of scheduling so that the girls could make the most of their short time there.

The activities program included several laboratory workshops:

- **Matters of Wonder:** The activity both complements and adds to the contents taught in school. It included lab work and demonstrations of experiments in liquid nitrogen. The emphasis is on research skills: observations, identifying causes of a phenomenon, making deductions based on charts and data tables, formulating hypotheses, providing scientific explanations and drawing conclusions.
- **Physically Speaking:** The workshop focused on – how are sounds generated? How do they reach our ears? How does sound travel through various materials? Can we perceive sounds visually? To learn about these issues, the activity included experiments such as a bell in vacuum, “fire flute” and more. The main research skill highlighted here is questioning a phenomenon.
- **Chemical View of Cosmetics:** The workshop focused on the question of how can oil and water mix? What is an emulsion? The students learned the scientific and technological principles that underlie the making of hand cream, got to know various mixtures, learned about colloids and surfactants and prepared hand creams themselves. This activity also emphasized various research skills.
- **A Quick Look at Photography:** The questions that began this workshop was - what is the duration of a balloon bursting? Why can't we see the bursting process? What is the speed of sound and how can we measure it using simple means? The students took a series of gorgeous pictures of balloons bursting and deduced the length of time it took for the balloons to burst.

In addition to these laboratory activities, the girls participated in a fascinating lecture about glass and its qualities, including demonstration of **glass blowing**, by Danny Notman – Weitzman Institute's legendary glass blower and craftsman. Mr. Notman showed how glass jars were created in ancient times, how to create optical fibers – and explained their use in medicine, science, astronomy and the Internet, how to create a mirror, and how the watch in the cellular phone works.

The participants also heard a presentation from a successful woman chemist who had “cracked the glass ceiling.”

To end the packed two days, the girls participated in an “adventurous” tour of the Institute and of the Science Garden. The girls divided into small groups that competed in a game that took them throughout the campus. They navigated on foot between various features of scientific and historic interests and had to complete various tasks or answer riddles to move on. In addition to being educational, the tour gave the girls a lot of fun and deepened their social connections.

The feedback from the girls (as you can see in greater detail in our attached evaluation report) was very positive on all parameters asked. The program staff who

accompanies them also reported on very good morale, and that the girls showed high levels of engagement and interest in the activities.

Taking all these factors into consideration, we believe that the **Nitzan Matanel Science Summer Camp** has been a great success and hope to be able to provide the program next summer as well.

The evaluation (methodology, results, comparisons with the precedent year, conclusions for the future...):

To evaluate the program, we relied on two main tools:

1. Eliciting feedback from the participants via a specially developed questionnaire.
2. Reports from staff members who accompanied the girls at the camp.

As noted above, the results were very positive from both these sources. As can be seen in the evaluation report (attached), the participants were all but unanimous in their approval of the program's various facets.

Additionally, in assessing the syllabus of the camp, the pedagogical team feels that the program was rich and diverse, touching on important scientific fields and presenting advanced, cutting-edge knowledge.

It should also be noted that the team from the Weitzman Institute gave us very good feedback regarding the girls themselves. They commended their good behavior, enthusiasm and intellectual curiosity.

Provisional guide lines for the advancement of the program in the next year:

Based on the program's success, our goal is to conduct a similar program in the summer of 201. We are very happy with all the activities. There is a high demand for the program from the girls in Sodkot, so we would love to be able to provide an additional cycle next year.

Please join the Evaluation Report, the Financial Report and the list of the participants to the program (as PDF documents)

See attached

Please join photos – as JPG files – and any link or any other document connected to the program which will seem to you relevant – as PDF document.

See attached

Please join a 5 minutes movie which presents your institution and the particular project supported by the Matanel Foundation. The movie should be accessible to the philanthropic world and to other potential donors.