

## **POTENTIAL FOR EXCELLENCE IN THE PERIPHERY – DATA AND TRENDS**

This document brings together data from various sources in order to portray the situation and learn about the potential for excellence in the social and geographic periphery.

1. Data from Henrietta Szold Institute Report- "Mapping trends in matriculation exam in mathematics" (2014)





\*"Affirmative Action Index" is divided into three levels as defined by the Ministry of Education.

Low "Affirmative Action Index"= high socioeconomic level;

High "Affirmative Action Index"= low socioeconomic level.

(The method of calculating "Affirmative Action Index" was restructured in 2008)





2. Data from Research and Information Center of the Knesset Israel (2014)



Graduates of 5-unit mathematics and sciences, distribution by peripheral level (2012)

3. Data from 'RAMA' and '5\*2 Initiative' Report- "Study of Mathematics in Israel" (2016). \*'RAMA' -The National Authority for Measurement and Evaluation in Education

Graduates of 4 and 5-unit mathematics (2014) by MEIZAV test achievements\* and socio-economic level



\* Meizav achievement tests in 8<sup>th</sup> grade among a nationally representative sample of students. The Meizav tests are constructed in accordance with the Israeli curriculum using a complex calibration process, which ensures comparability over time.

Meitzav Quarter – examinees are divided into four equal groups. The first quarter has the lowest grades and the fourth quarter has the highest grades.



PISA -Mathematics literacy levels (Israel, OECD, Hebrew and Arabic speakers, 2012)

4. Data from OECD website- PISA 2012



**Resilient Students - PISA 2012 Mathematics** 

Resilient Students = % of Students who scored at the upper 25% of the mathematics grades, who come from the bottom 25% of socio-economic backgrounds.

5. Data from Henrietta Szold Institute Report- "5-unit mathematics teaching in Arab society" (2016).

|         | Number of examinees | Percentage of examinees |
|---------|---------------------|-------------------------|
| Jewish  | 8178                | 10.8%                   |
| Arab    | 1176                | 7.1%                    |
| Druze   | 214                 | 9.4%                    |
| Bedouin | 148                 | 3.3%                    |

## Graduates of 5-unit mathematics distribution by sub-communities (2014)





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Percentage of examinees

6. Data from Henrietta Szold Institute Report- "The Potential of Female Students to Excel in Mathematics and Science" (2016)





Social & Geographic Periphery, 2010-2014 Percentage of examinees (from total research population) & 'Excelling Students' (total 5-unit examinees) By low/high "Cultivation Index"



Examinees percent range, 2010-2014 Male Female

| Mathematics 5 Units |        |             | Physics 5 Units       |        |             | Chemistry 5 Units     |        |             |                     |
|---------------------|--------|-------------|-----------------------|--------|-------------|-----------------------|--------|-------------|---------------------|
|                     | Region | Arab Sector |                       | Region | Arab Sector |                       | Region | Arab Sector |                     |
|                     |        | Examinees   | Excelling<br>Students |        | Examinees   | Excelling<br>Students |        | Examinees   | Excellin<br>Student |
| 60%                 |        |             |                       |        |             |                       |        |             |                     |
| 40%                 |        |             |                       | North  |             |                       | North  | _           |                     |
| 20%                 | North  |             | -                     |        |             |                       |        |             |                     |
| 0%                  | South  | _           |                       | South  | _           |                       | South  |             |                     |

7. Data from Samuel Neaman Institute Report- "Developing Excellence in Ultra-Orthodox Education" (2016)



## Graduates of mathematics matriculation exams, distribution by gender (ultraorthodox society, 2014)

## Graduates of mathematics matriculation exams, ultra-orthodox society (2009-2014)

