

Aaron Institute for Economic Policy In the name of Aaron Dovrat z"

Policy to Reduce

Gaps Between Arab

And Hebrew Education

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This is a short summary, for the full paper (in Hebrew) see https://www.idc.ac.il/he/research/aiep/pages/policy-papers.aspx.

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Aaron Institute for Economic Policy

In the name of Aaron Dovrat z"l

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The main aim of the Aaron Institute for Economic Policy at the Tiomkin School of Economics is to develop policy strategies that eliminate weaknesses and empower the strengths of the Israeli economy. We propose broad reforms as well as policy changes to particular industry sectors. In this framework Israel's relative advantages in technologic innovation and advances in the public and services sectors can be maximized. At the Aaron Institute, we crucially define quantitative goals while involving some of the countries' best economists in research and policy paper discussion meetings.

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1. Summary and conclusions

In the pilot study conducted by the Center for Economic Policy for the Israeli Arab Society at the Aaron Institute, in collaboration with the Chief Economist division at the Israeli Ministry of Finance, we found that the human capital gap between the Arab and (non-Haredi) Jewish communities in Israel is the main cause of the income gaps between Arab and Jewish households (Tehawkho, 2019). The present policy paper follows up on a series of policy papers aiming to identify the barriers hindering access to human capital acquisition in Israel's Arab society, and to find the most effective ways to remove those barriers. This policy paper focuses on the gaps between Arab and Hebrew education within the Israeli education system, which is a paramount and continuous stage of human capital acquisition.

In this paper we examine the gaps in the outputs of the education system, as reflected in the skill levels of graduates, in rates of eligibility for full matriculation (henceforth, "matriculation" refers to full matriculation), and in the quality of matriculation. To identify the possible causes for outputs gaps, we examined the gaps in educational inputs – budgets allocated by the Ministry of Education and local authorities, the quality of teaching and management, and the socioeconomic backgrounds of students.

In addition to the examination of data, we participated in discussions, seminars, and roundtables, as well as visits to Arab schools, during which we met with educators, academics, and students in Arab education along with their parents. The insights and policy recommendations for gap reduction presented in this paper are based on our current research, as well as previous studies conducted by the Aaron Institute on the topic of Arab education.

Below are our key findings:

- The academic performance of students in Arab education is significantly lower than that of students in Hebrew education. These gaps are evident in their performance in internal exams conducted by the education system, such as MEITZAV and matriculation eligibility, and even more so in international exams which also assess student proficiency levels. These performance gaps can be seen as early as primary school and increase throughout high school, and their long-term impact is manifested in gaps in the rates of integration into higher education, as well as employment integration rates and the quality of employment.
- There are substantial performance gaps within Arab education between boys and girls, and among different sectors in Arab education. The achievements of girls are

remarkably higher than those of boys in all areas – in international exams as well as matriculation eligibility rates (which are manifested later in higher rates of integration into higher education). Gender gaps also persist when performance is examined according to sectors, with boys and girls in the Bedouin sector having the lowest achievements, whereas Druze students have the highest achievements.

- Performance gaps also persist when comparing students with similar socioeconomic backgrounds, and particularly in international exams which assess student proficiencies, where proficiency gaps between Arab and Jewish students can be found across all levels of socioeconomic background.
- The budget allocated by the Ministry of Education for students in arab education is low in comparison to Hebrew education (across all educational stages and all levels of socioeconomic background). Furthermore, the education budget of Arab municipalities, which tend to be weaker, is mostly lower than that of Jewish local authorities.
- The proficiency level of teachers in Arab education, as reflected in PIAAC scores, is lower than that of teachers in Hebrew education. This is due to the entry threshold for teacher preparation courses, which is lower in institutions that target Arab education; the high rate of teachers who had studied abroad; and the placement method of teachers in Arab schools, which does not take into account their abilities.

These findings suggest that the education system does not fulfil its mission to bridge the gaps in the socioeconomic backgrounds of students in Arab education, and to provide the necessary means for optimal integration in society and employment, thus requiring a comprehensive program for improving the quality of education in the Arab education system. **The overarching objective of the Arab education system is to equip its graduates with the tools, knowledge, skills, and proficiencies which would enable them to reach their full potential and to integrate in an optimal manner into academia and employment. To achieve this objective, we propose setting appropriate goals for the outputs of the education system, along with corresponding targets of educational inputs which would facilitate closing the gaps in students' performance. For example, equalizing the budget allocations between the Arab and Hebrew education systems may be a possible goal, however the attainment of this goal in itself does not ensure realization of the overarching objective, and the bridging of the funding gaps between the two systems should be assessed in light of considerations of investment effectiveness, while also assessing the effectiveness of currently existing programs, in order to evaluate the cost-effectiveness of government investment. In addition,** future programs should include an integral data collection apparatus, in order to conduct effectiveness evaluation to facilitate efficient budget allocation. The variance which exists within Arab education, between boys and girls as well as among the different sectors of Arab education, necessitates a distinct approach to each of these groups when determining goals, in order to set goals which are ambitious on the one hand, while being attainable on the other.

At the same time, the effectiveness of currently existing programs should be assessed, in order to evaluate the cost-effectiveness of government investment. In addition, future programs should include an integral data collection apparatus, in order to conduct effectiveness evaluation to facilitate efficient budget allocation.

These are the recommendations made by the researchers for reducing gaps in the education system:

- 1. Setting measutrable targets for students' achievements upon finishing high school:
 - Determining performance targets with regard to the entire 18-year-old cohort, rather than just those who are enrolled in the education system – presenting data of matriculation eligibility and dropout rates with regard to the entire age group does not discount those dropping out of the education system, thus providing a fuller picture of the situation of a particular cohort at age 18, as well as a clearer, more accurate comparison between various population groups.
 - Setting goals according to gender and sector within Arab education taking into account the variance among sectors and genders in Arab education, in order to achieve a lateral reduction of gaps across the board.
 - Setting performance targets for all levels beyond matriculation targets, setting targets for lower attainment levels, such as certification which allows access to further non-academic studies, including dropout rates.
 - Pursuant to previous recommendations, key targets for the year 2030 would be reducing dropout rates to the current levels in Hebrew education, i.e. close to 0% for girls and 4% for boys; raising the average matriculation eligibility rate, and the eligibility rate for matriculation which allows access to academic studies, so that they are at least as high as the corresponding rates in Hebrew education 85% and 78% for girls (currently 65% and 56%), 75% and 67% for boys (currently 41% and 33%), respectively while matching the rate of progression to the specific sector within Arab

education; halving the gaps in eligibility rates for matriculation with distinction; while half of the remaining students will be eligible for certification which allows access to tertiary studies.

- Ensuring exam integrity raising the proportion of schools where the rate of disqualified exam notebooks does not exceed 3%, from 70% to at least 90%, by 2026.
- 2. Improving basic proficiencies:
 - Hebrew language proficiency the level of proficiency in Hebrew language is crucially important for high-quality integration of Arab society in Israeli economy and society. We reiterate our recommendations from a previous study (Tehawkho, Kalisher, & Moskalev, 2020; see there for more detailed targets and recommendations in regard to Hebrew proficiency) to adapt the structure of the Hebrew language matriculation exam, so that the basic level of 3 study units would provide graduates with basic Hebrew proficiency as required for minor-level positions in the labor market, whereas the expanded level of 5 study units would provide graduates with the higher level of Hebrew proficiency which is necessary to gain entry into, and successfully complete, higher education in Israel; and to increase the share of Arab education graduates who take a Hebrew matriculation exam to 90%, with at least half of them expanding their studies to 5 units.
 - Digital literacy given the aspiration of the education system to prepare its graduates for the labor market and higher education, it must prepare them for a rapidly progressing world where digital proficiencies have a central role. In a corollary study conducted by the Aaron Institute, on the topic of the digital challenge in Arab education, we recommend improving the level of digital literacy acquired in Arab education through the development and improvement of teachers' ICT proficiencies; imparting basic proficiencies as early as primary school; combining online tuition alongside frontal tuition; and increasing the exposure of students in Arab education to technological and digital subjects through informal education schemes.
- 3. Improving the quality of teaching and management:
 - Optimizing teacher placement schemes to support the onboarding of highly proficient teachers – taking into account the quality of prospective teachers when assigning them to schools, using a standardized, external assessment which includes evaluation

of subject matter knowledge, as well as teaching proficiencies such as classroom management.

- Establishing quality metrics for the professional development of teachers determining measurable targets for the quality of training courses, along with observations and feedback procedures, to facilitate assessment of their contribution to the improvement of teaching quality, and consequently develop an efficient, highquality training operation; establishing a link between the attainment of targets following training and professional development activities on the one hand, and eligibility for vocational training remuneration on the other.
- Incentivizing teachers and principals to improve the quality of teaching and management – by means of increasing appointment percentages and offering bonuses, similarly to the programs operated by the YEHOLOT Association, which utilize the existing teaching and management personnel in schools toward improvement in the quality of teaching and school operation.
- 4. Investment in weaker students achieving the aforementioned goals requires special attention to the lowest-achieving students. We recommend considering the implementation of dedicated intervention programs targeting weaker students, such as the Start program operated by the YEHOLOT Association in the Druze sector, which has led to improved rates of matriculation eligibility and reduced dropout rates in participating schools.
- 5. Diagnosis, information, and guidance raising awareness to the importance of high quality matriculation among students and their parents, assistance in the selection of study courses leading to high quality matriculation, and guiding underperforming students toward vocational training, with the aim of increasing the quality of integration in tertiary education and employment.

The milestones for narrowing the gaps, in terms of student performance as well as the quality of teaching and management, could be determined by a committee comprising expert educators in conjunction with stakeholders from industry and academia.