

Tests and Diagnostics in Middle School

Abstract based on a review by Niza Sion

Middle school is highly measured and assessed in diverse ways. There are national and international tests, which examine knowledge and skills based on individual, school, regional and national analyses. The picture that emerges reveals a dashboard of low attainments and large gaps. Each time this dashboard is published it causes distress among decision makers and critique among the general public. Frustration leads to different reactions, starting with a call to improve the system and up to the desire to cancel the tests.

During the past year, the education system has begun to take initial steps to review its arsenal of tests and diagnostics for middle school. The MEITZAV test, which examined achievements in light of the curriculum, was cancelled. The school based "chief superintendent tests" were postponed due to the COVID-19 crisis. The National Authority for Measurement and Evaluation in Education is now working on a new set of tests and diagnostics intended to assign more weight to internal diagnostics that will be conducted by and within the schools.

The testing menu

1. **PISA.** Considered the "barometer" for education systems around the world. It is an international test conducted by the OECD once every three years in 80 countries. A sample of students takes the test (approximately 6,000 students in 174 schools) at age 15 (ninth and tenth grades), and it examines students' ability to utilize knowledge they have learned in order to contend with problems and challenges from the real world in various real-life contexts. In 2018, Israel was ranked in 31st place on the index measuring students excelling in mathematics, which was only 8.8%.
2. **TIMMS.** An assessment conducted every four years in roughly 66 countries by the International Association for the Evaluation of Educational Achievement. It tests a sample of about 5,000 eighth-grade students in 200 schools and examines students' knowledge and proficiency in their country's curriculum. In 2015, Israel was ranked 16th among all the countries - a decline from the seventh place in 2011, which was achieved following the Ministry of Education's dedicated and concentrated effort.
3. **MEITZAV.** An assessment conducted by the National Authority for Measurement and Evaluation in Education. The recently-cancelled test took place in eighth grade in every school, once every three years as an external test and in other years, as an internal test. The test took place during the final trimester (in contrast to the international tests) and its aggregated results were reported to the public. Student gains were low though improving, and the gaps were large. The past year saw the cancellation of the test following a public outcry.

A commission appointed by the Director General of the Ministry of Education recommended an alternative assessment framework to the MEITZAV, which would include surprise sample testing and diverse internal assessment and diagnostic tools. At present, the National Authority for Measurement and Evaluation in Education is developing a new testing model called ASIF, which will include internal and external assessments, climate surveys and special community indices for each school.

4. **Chief Superintendent Tests.** A test developed by the Ministry of Education's Pedagogical Secretariat and administered by the mathematics teachers as an internal test. The test takes place in ninth grade as a final test in middle school and is given on two levels: a basic level and a high level. The test questions are taken from the curriculum and from the textbooks, the teachers can choose the questions and they check the tests. It is an individual test that serves as an additional tool to assess student performance but does not presume to meet statistical rules for validity and reliability.

A dedicated chief superintendent test was developed for the **Scientific Technological Program** which runs excellence classes in more than 250 middle schools. It was administered in all age groups (seventh to ninth grades) and up until recently, schools were required to submit the scores to the Ministry of Education. The **MOFET** project, which runs about 160 excellence classes in middle schools, administers dedicated tests developed by the program's developers.

5. **HighData**. A set of brief diagnostic tasks intended for ninth grade students, developed by the Center for Educational Technology (CET). The tasks are constructed to reflect on the mathematics curriculum in a way that combines applied mathematics in real life contexts, in line with the PISA conceptual framework. The test is individual and the teachers receive a detailed picture of their students' performance and areas of difficulty. Excellence classes participating in the Trump Foundation's projects take part in implementing this assessment.