## **Working by the Numbers**

A new evaluation tool brought to Israel by the "Israel Center for Educational Innovation" enables teachers to keep pace with each student and find out who is having a hard time, who is excelling and how all students can be advanced.

## Ravit Sherf | Shiur Hofshi Magazine, June 2014

Most schools use grades to evaluate their students; but to what extent do these grades actually reflect the student's knowledge? Can grades identify individual failures or successes of each student? Can they be used as a tool for real change and progress? At the "Israel Center for Educational Innovation" (ICEI) they believe that the systemic and accurate collection of data can allow the teachers to analyze the students from different angles and identify gaps and weaknesses of specific children. Thus, individually tailored work plans can close gaps between underachieving students and their classmates, while advancing students who excel.

The evaluation tool for implementing processes of systemic data collection was brought to Israel by ICEI from Columbia University and adapted to the Israeli education system. This tool is being implemented in 16 schools across seven municipalities; the next academic year will most likely see an increase in the number of participating schools to 20. The proportion of students of Ethiopian descent in each of the 16 schools exceeds the relative proportion of this community among the general Israeli society; however, the model is suitable to all students.

Don Futterman, CEO of ICEI, explains that the goal of the project is to develop a data-driven teaching culture. "The data are an effective tool for both teacher and principal," he says, "We see a rise in pressure in schools during the period leading up to the Ministry of Education's standardized tests, although these tests do not serve the teachers, as they are granted access to the results only during

the following academic year. This is too late to use the data from these tests to make a change".

ICEI is a non-profit organization operating this project in cooperation with the Ministry of Education and the relevant municipalities, the Moriah Fund, Fidel – the Association for the Promotion of Education and Social Integration of Ethiopian Jews in Israel, Columbia University's Teachers' College, and New York's Center for Educational Innovation.

Teachers from participating schools learn how to work with an online data website, to which they enter tests' results. A teacher can only view data regarding his\her class, while a school principal can view information regarding his\her school only. Following the entering of data to the system, ICEI's staff produces a report based on these data within 24 hours. "Entering data is a time consuming process", Futterman admits, "however the result is rich databases for the teachers. The teachers can get an extensive report and understand exactly where each of their students stands with regards to a specific test. They can also identify immediately which students have a hard time with the curriculum and then they can act accordingly".

Another tool introduced by the program is a verbal evaluation test. This is a relatively simple tool aimed at diagnosing the student's level of reading fluency and accuracy. To improve these skills, the program includes the establishment of a library in each class with 600-1,000 books ranked by level of difficulty.

The test identifies the student's verbal abilities. Among other things, it checks if the child independently corrected a mistake he/she made, if he/she read different words than those written and if he/she understood what he/she has read. "If we see that it is very easy for the child then the level of the text can be made more challenging, and vice versa. The teacher can adjust the level of the test to the student", Futterman says. "At the end of this short test the teacher knows the level of the student, according to the Ministry of Education's criteria".

The program has been adjusted to year-end objectives of Grades 1-6, however following analysis of its operation, it has been extended to higher grades.

Futterman explains that the teachers using the computerized evaluation tools learn to use the data "proportionately, and to count on their personal judgment, and their personal knowledge and relationship with the students, to monitor the students individually and to document each student's progress. It requires the teachers to followup on each student throughout the year, but prevents them from discovering only in the middle, or even at the end of the academic year, that the child has fallen behind. It also enables the teachers to reflect on their own work, 'I have tried this and that and results show it wasn't successful so I better try a different way'. They may find out that the child is having a hard time in writing, and understand that the emphasis must be put there. From the principal's perspective, the tool provides a comprehensive understanding of the school".

The literacy program is founded on the model developed by the Columbia University's Teachers College's Reading and Writing program leader, Professor Lucy Calkins. Calkins is regarded a "Guru" of reading and writing literacy in the US. In Israel, the Ministry of Education has funded the addition of a Literacy Coach position in relevant schools, to take charge of training the schools' educational staff in the model. The literacy coach also provides guidance in the processes of data collection, processing and analysis, as means of constructing an educational program. "The idea is to independent progress", advance Futterman "To refrain from frustrating elaborates. underachieving children and from stalling excelling children, so that everyone can advance in their own pace. The program includes daily independent reading and independent writing at least three times a week. The children are exposed to different genres - personal writing, documenting a science, etc. which allows them to develop meta-thinking".

The schools' principals receive professional guidance as well. "However, it is important to say that if the principal does not take a leadership role, it will be yet another failed program imposed from the outside", Futterman emphasizes. "It requires investment and implementation. Another emphasis is on working with the parents to strengthen the parent-school continuum. The parents are given the tools necessary to support their children's studies". In the current year, the program emphasized the subject of writing. In the next academic year, an online reading tool will be added to ICEI's website. "Our goal is to develop an independent student – a golden time in which the children read and write independently and the teachers are free to work with them. Our program truly enables differential teaching", Futterman concludes.