

TOP 15

TEACHERS AND TEACHING IN MIDDLE SCHOOL

A meeting with teachers and experts to discuss the quality of teaching mathematics and science in middle school

NOVEMBER 13, 2018, 12:00-13:00, DJANOGLY HALL, MISHKENOT SHA'ANANIM,

The collective profile of mathematics and science teachers in middle school differ from high school. Current data indicates that a significant teacher shortage does not exist in middle school and a wave of retirements is not expected in the near future. Middle school teachers have a lower level of academic education and the scope of their position is smaller than in high school. There is considerable variance in their knowledge and motivation for teaching. Obviously, there are excellent teachers who choose to teach in middle schools, however, not all students are privileged to benefit from their teaching.

The Trump Foundation believes in teachers and in high quality teaching. The theory of change the foundation proposes for middle schools assigns teachers the most significant role, as professionals and mentors for the students. But in light of this data, the method of operation will have to be different from high school. Emphasis will not be placed on recruiting talent, but rather on working jointly with existing teaching staff in schools.

Middle school teachers face large and heterogeneous classrooms and they are expected to cover a wide-ranging curriculum. Therefore, we assume that different teachers will need different content in their professional development programs. Sometimes, there will be a need to go more deeply into the basis of mathematical knowledge and the specializations of the different areas of science. At times, there will be a need to build motivation and channels of communication with students, parents and fellow teachers. We intend in all these areas to focus on strengthening the joint capacity of teaching staff in schools

QUESTIONS FOR DISCUSSION

1. Do the data upon which the foundation relies with respect to middle-school mathematics and science teachers describe a familiar and accurate reality? Which emphases are missing?
2. Is the foundation's working assumption correct - that is, can the basis of excellence in mathematics and science studies be strengthened through reinforcing the current professional capabilities that are common to teaching staffs?
3. If the data are correct and the working assumption valid, how can the foundation implement its intentions? If they are not, what are the possible and desirable alternatives?

As **background** to the discussion, we recommend reading the following:

- A. [Working paper for consultation with partners – Choosing Excellence in Middle School Mathematics and Science Studies – Philanthropic Roadmap 2019-2024](#) (with an emphasis on paragraphs “Need” and “Opportunity”, p. 3-4, and on Program 2 – “Ambitious Teaching”, p. 9-10) ([B&W printable version](#))
- B. [How to Smooth the Transition from Middle School to High School in Mathematics and the Sciences](#) – Hadas Brody Schroeder
- C. [How do Mathematics Teachers Jointly Build Professional Capital in School: The Perspective of Teachers and Department Heads](#) – Adva Mayzel

PARTICIPANTS

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