

Dr. Martin Karp, Member

SUBJECT: STUDENT-ORIENTED SCIENCE RESEARCH AND PARTICIPATION IN COMPETITIONS

COMMITTEE: INSTRUCTIONAL EXCELLENCE AND COMMUNITY ENGAGEMENT

LINK TO DISTRICT STRATEGIC PLAN: DEVELOP OUR STUDENTS SO THAT THEY ARE ABLE TO COMPETE IN THE GLOBAL ECONOMY

In agenda item B-14 proffered at the February 15, 2006 Board meeting, the decline in the number of Miami-Dade County Public Schools students participating in local, state, and international science, mathematics and engineering competitions was addressed and various actions were proposed.

In response, the Office of Curriculum, Instruction, and School Improvement issued a report at the August 2, 2006 Board meeting, which included staff's work to restructure its efforts and to develop new strategies. At the July 11, 2007 Board meeting, agenda item H-16 requested an update and a request for modifications or additions needed where desired results were not achieved.

When agenda item B-14 was presented in 2006, there were 108,338 senior high school students and 41 senior high schools in Miami-Dade County Public Schools. In the South Florida Science and Engineering Fair, the number of science fair entries at the senior high school level dropped from 160 students from 23 high schools in 2004-2005 to 86 students from 13 high schools in 2005-2006. Twenty-eight high schools did not submit a single entry.

The number of science fair entries at the senior high school level in the South Florida Science and Engineering Fair, which was held last week, dropped even further to only 53 students from 13 high schools. Forty-one high schools did not submit a single entry. This year, fewer students submitted research papers to the University of Florida's Science and Humanities Symposium competition, and only three high schools are participating in the U.S. FIRST Robotics competition.

**ACTION PROPOSED BY
DR. MARTIN KARP:**

That The School Board of Miami-Dade County, Florida directs the Superintendent to:

1. Reexamine the District's effort to support and provide incentives to school site personnel who encourage students to participate in local, state, and international science, mathematics and engineering competitions, and to teachers who sponsor clubs/activities that encourage students who are interested in science, mathematics, and engineering;
2. Require all middle and senior high schools to submit at least one entry in the South Florida Science and Engineering Fair; and,
3. Require senior high schools to offer a school-site research course where students are engaged in active research.