

Ms. Maria Teresa Rojas, Board Member

SUBJECT: AUTHORIZE THE SUPERINTENDENT OF SCHOOLS TO EXPLORE AND INITIATE COLLABORATIONS AND EXECUTE NEGOTIATIONS, AS APPROPRIATE, WITH FLORIDA INTERNATIONAL UNIVERSITY (FIU) FOR THE DEVELOPMENT AND IMPLEMENTATION OF TEACHING ACADEMIES WITH AN EMPHASIS ON STEM IN MIAMI-DADE COUNTY PUBLIC SCHOOLS (M-DCPS)

COMMITTEE: ACADEMICS, EVALUATION, AND TECHNOLOGY

**LINK TO STRATEGIC
BLUEPRINT: RELEVANT, RIGOROUS, AND INNOVATIVE ACADEMICS**

Research suggests that effective teachers are prepared with the content knowledge equivalent to a college major or minor in the field, yet currently, less than half of all physics students in the United States are taught by teachers with a degree in the subject. Furthermore, a national teacher shortage of STEM teachers has challenged school districts and institutions of higher learning to collaborate to ensure that a high quality STEM education program will spur interest in STEM fields and provide an active teacher pipeline in these subject areas.

Given the teacher shortage issues currently facing school districts, Teaching Academies with an emphasis on STEM provide an organized mechanism to identify and prepare education professionals more likely to be recruited and retained for years to follow. This agenda item seeks authorization for the Superintendent of Schools to explore and initiate collaborations and execute negotiations, as appropriate, with Florida International University (FIU) for the development and implementation of Teaching Academies with an emphasis on STEM throughout Miami-Dade County Public Schools. If finalized, this collaborative agreement should offer a long-term systematic channel for the organic development of future STEM educators at the elementary, middle, and high school levels for M-DCPS.

Teaching Academies with an emphasis on STEM provide students with unique opportunities to explore and develop education oriented college and career pathway experiences. Through this collaborative effort, these academies will prepare future educators for college and their future profession by exposing and engaging high school students to college-like academic and social experiences. These experiences, along with a strong curriculum, mentoring, opportunities to conduct research, participation in internships, and a variety of other academic and practical activities will impact student success and achievement positively. Further, the proposed collaborative model with FIU may include a financial component in the form of full undergraduate financial scholarships for participating students who successfully graduate and complete the agreed upon Teaching Academy requirements.

Research supports growing your own teachers as a means of creating a supply of quality candidates who understand the needs of our local community. Providing students with opportunities to participate in Teaching Academies at the high school level while increasing expertise in STEM courses will create a greater number of undergraduate students who may consider careers in education and ultimately become teachers in Miami-Dade County Public Schools.

One recommendation which has been made, if feasible, is that the proposed teaching academies may be rolled out over two academic school years, 2018-2019 and 2019-2020. During the first year, five Teaching Academies with an emphasis on STEM may be established and during the second year an additional four academies may be added. Another recommendation proposed is for these academies to be located in each of the School Board Members districts in a high school designated by the Superintendent of Schools in consultation with school principals, School Operations, Academics and Transformation, and each of the Board members affected.

This item has been reviewed and approved by the School Board Attorney's office as to form and legal sufficiency.

ACTION PROPOSED BY

MS. MARIA TERESA ROJAS:

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

1. explore and initiate collaborations and execute negotiations, as appropriate, with Florida International University for the development and implementation of Teaching Academies with an emphasis on STEM; and
2. report back to the School Board by February 21, 2018.