	Abstract

The ***Science Technology and Arts Exploration & Innovation Project*** (***STArts² Project***) is a five-year initiative designed to prevent minority group isolation and to improve academic achievement by providing innovative and interest-based STEAM public-school choice for students and their families across Miami-Dade County. The ***new schoolwide STArts² Project*** magnet programs will impact three school sites located in racially isolated and economically distressed neighborhoods, which are currently under-enrolled, have large percentages of minority isolation, economically disadvantaged students, Students with Disabilities (SWD), English Language Learners (ELL) and low student achievement rates.

Miami-Dade County Public Schools (M-DCPS) has identified five objectives for the ***STArts² Project*** schools' project:

1. Increase academic achievement rates of all demographic groups in the ***STArts² Project*** schools through innovative, evidence-based instructional strategies.

2. Encourage student knowledge of and interest in STEAM programs of study and STEM careers by implementing innovative STEAM curricula specific to the magnet theme in each **STArts² Project** magnet program/school.

3. Reduce minority and socioeconomic isolation, increase integration, and promote a climate of cultural competency and educational equity in each **STArts² Project** schools

4. Promote an inclusive culture for all students regardless of physical limitation, learning disability, and/or language ability; and

5. Foster participation of all stakeholders in supporting the **STArts² Project** program objectives and ensuring project integrity and sustainability.

All students, both boundary and magnet applicants, at the proposed ***STArts² Project*** schools will participate in the magnet programs without distinction. Each school will implement similar STEAM programs in Space, Sea, Land Engineering Sciences, and Arts Exploration and Innovation. A STEAM magnet focus for the ***STArts² Project*** is an effective design to cultivate 21st century skills and promote diversity in STEM careers. Additionally, the ***STArts² Project*** schools will specialize in integration of classical music during the lower academy (K-5) and scaffold into Digital Music Production in the upper academy (6-8). Instructional programs at the ***STArts² Project*** schools feature evidence-based innovative educational methods and practices that address student needs and interests and are designed to improve academic achievement for all students. One key feature includes Computer Supported Collaborative Learning (CSCL) which incorporates high-yield problem-solving strategies such as: Inquiry-Based, Problem-Based, and Design Thinking. These instructional methods engage students in acquiring knowledge and critical thinking skills through collaborative problem solving and through extended inquiry processes structured around carefully designed tasks. Additionally, ***STArts² Project*** students will participate in place-based authentic learning opportunities at partner sites to explore topics within real-world contexts focusing on preparing them for high school, college, and a career through community, industry, and higher education partnerships.

M-DCPS is committed to providing students with three new K-8 whole-school magnet programs across the District creating a K-12 STEAM continuum that will articulate with newly reimagined whole-school magnet programs, *Engineering Nexus High Schools* or into feeder Magnet Arts programs.

School Name	Program/Theme	Max Participants
Biscayne Jefferson K8	STEM: Space, Sea, Land, and Arts (Digital Music Production)	1,283
Citrus Grove K8	STEM: Space, Sea, Land, and Arts (Digital Music Production)	2,548
Bowman Doolin K8	STEM: Space, Sea, Land, and Arts (Digital Music Production)	1,690