


MIAMIBEACH

OFFICE OF THE CITY MANAGER

NO. LTC #
420-2023

LETTER TO COMMISSION

To: Honorable Mayor Dan Gelber and Members of the City Commission

From: Alina T. Hudak, City Manager 

Date: September 20, 2023

Subject: STEAM Plus Program 2022-2023 Final Report

The purpose of this Letter to Commission is to update the Mayor and City Commission on the status of our STEAM Plus Program in Miami Beach public schools for the 2022-23 school year. The program, referred to as STEAM Plus, is intended to inspire students to engage and prepare in science, technology, engineering, arts, and mathematics by working with our cultural anchors to infuse theatre, visual arts, dance, and music into traditional curriculum offerings. Developing a relationship with the arts helps learners to improve creative problem-solving skills, present difficult concepts visually, and help children with the development of motor skills, language skills, social skills, decision-making, risk-taking, and inventiveness.

The program, now in its fifth year, continues to expand and positively impact our Miami Beach youth. Notable accomplishments of the program during the 2022-23 school year include the following:

- 3,425 Students Participating
- 339 Unique Interactions through 179 Classrooms
- 10 Cultural Partnerships and 7 Miami Beach Public Schools
- 33 Partnerships between organizations and grade levels/subjects
- 88 Teaching Artists

STEAM Plus continues to support the Miami-Dade County Public School STEAM designations resulting in three (3) Miami Beach schools earning gold status and four (4) earning silver status. Survey data from youth participants reflects a high level of satisfaction with the program, including feedback from students who agree or strongly agree with the following:

- 98% of students enjoyed the project they did with their partnering organization
- 96% of students said visiting teachers allowed them to think creatively/be creative.
- 99% of students had overall satisfaction with the STEAM program

Please find attached the 2022-2023 STEAM Plus Final Report for additional information. This initiative supports our strategic priority to be known for educational (PreK-12) excellence. If you have any questions, please feel free to contact me or Dr. Leslie Rosenfeld, Chief Education Officer.

Attachment: STEAM Plus 2022-23 Final Report

JG/ LDR

ANNUAL REPORT
2022 - 2023



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- > Treasure Island Elementary

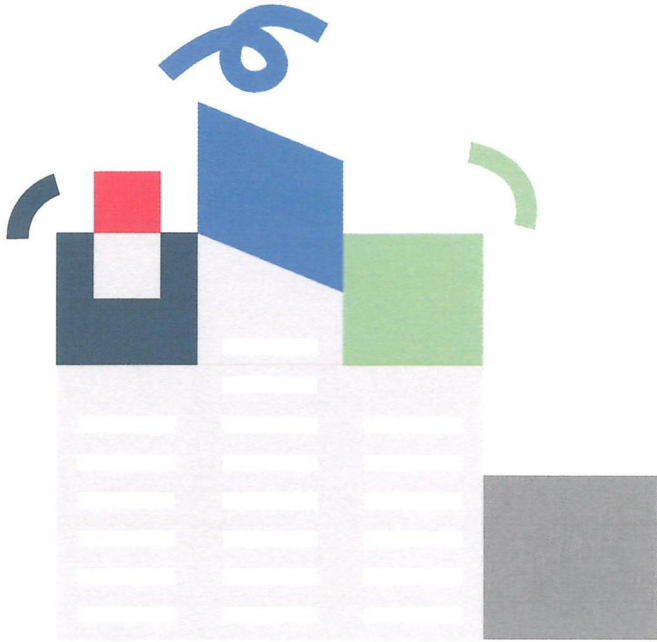
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- > Miami Beach Sr. High STEAM Club
- > FIU Miami Beach Museums -
Jewish Museum of
Florida & Wolfsonian
- > Miami Children's Museum
- > Miami City Ballet
- > Miami New Drama
- > Moonlighters FabLab
- > We the Best Foundation
- > Young Musicians Unite



FAST FACTS

General

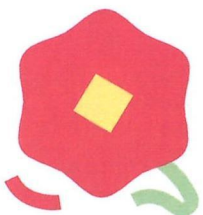
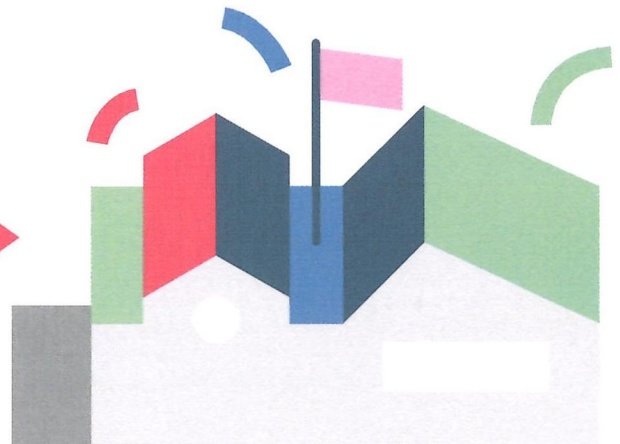


10 PARTICIPATING ORGANIZATIONS :

- The Bass Museum of Art
- FIU Miami Beach Museums - Jewish Museum of Florida & Wolfsonian
- Miami Beach Sr. High STEAM Club
- Miami Children's Museum
- Miami City Ballet
- Miami New Drama
- Moonlighters FabLab
- We the Best Foundation
- Young Musicians Unite

7 MIAMI BEACH PUBLIC SCHOOLS :

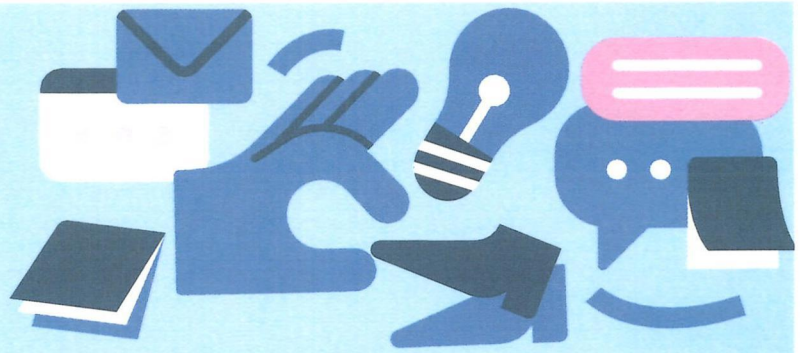
- Biscayne Beach Elementary
- Miami Beach Fienberg Fisher K-8 Center
- Miami Beach Nautilus Middle
- Miami Beach Senior High
- Miami Beach South Pointe Elementary
- North Beach Elementary
- Treasure Island Elementary



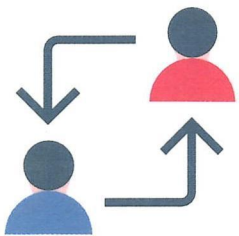
By engaging students around the subjects of Science, Technology, Engineering, Art and Math, the STEAM Plus program aims to spark an interest and life-long appreciation of the arts and sciences in children from an early age.

FAST FACTS

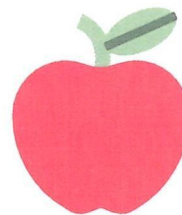
Participation
2022-2023



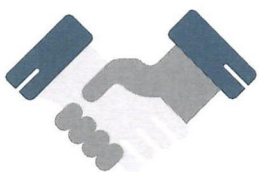
3,425
Students Reached



339
Unique Interactions



179
Classrooms Reached



33
Partnerships Between
Organizations & Grade
Levels / Subjects



88
Cultural Educators
Employed

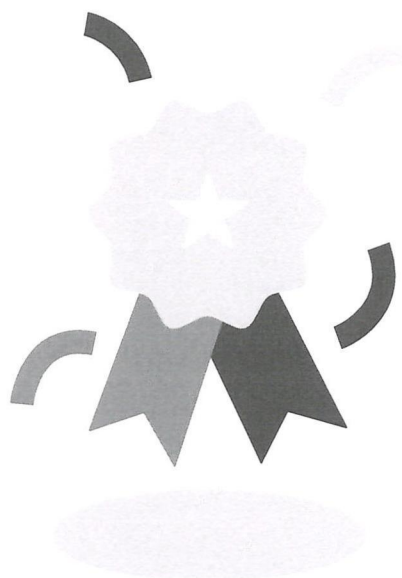
FAST FACTS

Participation
2022-2023



GOLD

- Miami Beach Nautilus Middle
- Miami Beach South Pointe Elementary
- North Beach Elementary



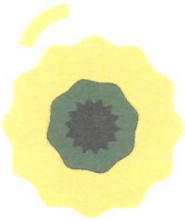
SILVER

- Biscayne Beach Elementary
- Miami Beach Fienberg Fisher K-8 Center
- Miami Beach Senior High
- Treasure Island Elementary



**STEAM DESIGNATIONS FOR THE
2022-2023 ACADEMIC YEAR**

EXECUTIVE SUMMARY



Program Overview

The Miami Beach STEAM Plus program is an exemplary model of how partnerships between cultural institutions and public schools can positively transform the educational experience of students and their families by integrating arts and culture into the core curriculum of local public schools. In a world where creativity and innovation are the currency of progress, this visionary program has taken root, program has taken root, changing the educational landscape of thousands of students and their families by integrating arts and culture into the very core of their learning experience. For the fifth year, The Bass managed partnerships between cultural anchors and Miami Beach public schools with the objective to inspire future generations of inventors, explorers, innovators, artists and leaders. Miami Beach, a vibrant cultural epicenter, provides our youth with unparalleled access to the arts and music. As they delve into these creative realms, we are cultivating a deep-seated appreciation for their city's rich tapestry of opportunities.

In the 2022-2023 academic year, the STEAM Plus program featured a cohort of 10 organizations: The Bass, FIU Miami Beach Museums - Jewish Museum of Florida and Wolfsonian Combined, Miami Beach Sr. High STEAM Club, Miami Children's Museum, Miami City Ballet, Miami New Drama, Moonlighters FabLab, We the Best Foundation and Young Musicians Unite. The organizations were paired with 7 Miami Beach public schools: Biscayne Beach Elementary, Miami Beach Fienberg Fisher K-8 Center, Miami Beach Nautilus Middle, Miami Beach Senior High, Miami Beach South Pointe Elementary, North Beach Elementary and Treasure Island Elementary.

Measuring Impact

The Miami Beach STEAM Plus program transcends the confines of conventional education. It's a journey of hands-on experiences and interdisciplinary learning that has ignited a profound passion for the arts and sciences among our students. It has equipped them with not just creativity but also essential 21st-century skills such as teamwork, adaptability, and critical thinking, the very skills that will pave their way to success in the future.



Family and Community Impact

The impact of this program extends far beyond the walls of the classrooms. It's a catalyst for creativity, inclusivity and community engagement. By reinstating in-person events within schools and other venues, it has not only enriched our students' lives but has also strengthened the bonds within families, nurturing a culture of artistic and scientific exploration within our community. Over 3,800 adults and an estimated additional 500 children have had the privilege of participating in these events, witnessing firsthand the transformative power of the program.

EXECUTIVE SUMMARY



The 2022-2023 STEAM Plus program featured 10 cultural partners:

The program brought together a diverse group of cultural institutions, each offering unique experiences.

The Bass Museum of Art: Adopting a dynamic STEAM educational approach that uses Science, Technology, Engineering, the Arts and Mathematics as access points for guiding student inquiry, dialogue, critical thinking and creativity. Through this program, students engaged with exhibitions at The Bass and expanded on what was being taught in the classroom. As a result, students created stop-motion animations illustrating how energy is transferred,



created nature mobiles and created circuit art with LED light features.

Miami Beach Senior High STEAM Club Mentorship Program: These sessions collectively enriched our students' educational experience, offering a diverse range of perspectives that will undoubtedly shape their future endeavors and contribute to their personal and professional growth.

FIU Miami Beach Museums: This standout program component engaged students from grades 3-6 in STEAM-based lessons, printmaking and immersive museum visits. Student surveys underscored the program's effectiveness in stimulating creativity and fostering a thirst for deeper exploration.

Miami Children's Museum: Providing a platform for kindergarteners and first-graders to explore sound and rhythm through body percussion, this segment resonated particularly well with younger students.

Miami City Ballet: Seamlessly integrating body movement and dance with science and mathematics, this program not only piqued students' curiosity but also demonstrated a commitment to inclusivity and diversity by successfully engaging students with special needs.

Miami New Drama: Behind the scenes of every theatrical production, there's an army of technicians, designers, and teaching artists. This program has opened the curtains for our students, offering them a comprehensive understanding of technical theater and igniting a passion for the unseen magic of the stage.

Moonlighter FabLab: In the digital age, 21st-century skills are paramount, and this program ignites students' interest in 3D modeling, engineering, and circuitry, offering a hands-on journey into the future.

We the Best Foundation: Seamlessly merging STEAM with identity development, this program empowered fourth-grade students to explore creativity and storytelling, fostering 21st-century skills that support personal growth and a sense of self.

Young Musicians Unite: Enhancing school music programs through structured weekly exercises, this program catalyzed curiosity, creativity and teamwork. Regular assessments and live showcases underline the program's positive impact.

EXECUTIVE SUMMARY



The following key achievements were accomplished in 2022-2023:

Served 3,425 students (53% of the student population of Miami Beach).

On-site field trips returned, offering some students their very first bus ride.

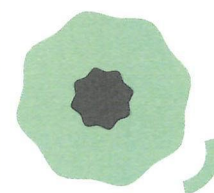
Facilitated 33 partnerships, serving 179 classrooms and 339 unique interactions.

The program played a pivotal role in the revival of in-person events within the community, bringing together over 3,800 adults and an estimated 500 additional children to experience the magic of student concerts, exhibitions and live presentations.

A holistic approach ensured that students from kindergarten to 12th grade, including ESE and ESOL students, benefited from this initiative.

Over 80 local teaching artists and performers were engaged, providing them with meaningful opportunities to share their expertise with our students. This investment not only enriched the educational experience but also infused economic vitality into our community by supporting local artists and creators.

Continued to provide STEAM Plus Kits, thoughtfully curated to complement our cultural partners' lessons, ensures equitable access to quality education.



EXECUTIVE SUMMARY



CONCLUSION



The Miami Beach STEAM Plus program embodies the transformative power of arts and sciences in enhancing the lives of students and their families. Its continued support and expansion are imperative for cultivating the next generation's creativity, critical thinking and problem-solving abilities. This program serves as a beacon of community collaboration, bridging the gap between cultural institutions and schools for the betterment of Miami Beach.


Looking ahead to 2023-2024, The Bass is proud to serve its community and manage the STEAM Plus program for a sixth consecutive year with continued support from the City of Miami Beach and Miami-Dade County Public Schools.



EVALUATION

Student Survey Responses



RESULTS 	2022-23	2021-22	2020-21	2019-20	2018-19 pre
% Response rate for students	49%	12%	10%	14%	11%
# Surveys from students	1663	588	457	415	252

% of students that agree or strongly agree (includes neutral) with the following survey prompts:


They enjoyed the project(s) they did with their partnering organization.	98%	96%	97%	96%	*
Helped them understand topics we are learning about in other subject areas.	87%	92%	95%	*	*
The visiting teacher allowed them to think creatively/be creative.	96%	93%	*	*	*
Through this partnership, I learned something new	91%	*	*	*	*
I was introduced to new materials and/or skills during partnership	92%	*	*	*	*
They would like to continue to do more lessons with our partner organization.	95%	94%	*	*	*
They wished the partner organizations would visit their class more.	*	*	96%	93%	*
STUDENT OVERALL SATISFACTION RATE	98%	97%	98%	94%	*

** Indicates measure was not tracked and/or conducted during the reporting period.*

EVALUATION

Family Survey Responses



RESULTS 	2022-23	2021-22	2020-21	2019-20	2018-19 <i>pilot</i>
% Response rate for families	1%	1%	1%	5%	3%
# Surveys from families	45	60	31	138	61

% of families that agree or strongly agree (includes neutral) with the following survey prompts:


The STEAM Plus program activities have positively influenced my child's educational performance.	100%	100%	100%	91%	84%
My child liked participating in the STEAM Plus program activities.	100%	100%	100%	95%	87%
Partnership programs, like S.T.E.A.M. Plus, are a valuable asset to Miami Beach's public schools.	100%	100%	*	*	*
Through this partnership program, my child was exposed to new materials and/or ways of thinking about math and science.	100%	100%	*	*	*
My child was comfortable with the instructor that was provided.	*	*	100%	96%	85%
I would recommend this program for other classes.	*	*	100%	96%	95%
I would like to see my child's school continue to participate in the STEAM Plus program.	100%	100%	100%	96%	95%
FAMILY OVERALL SATISFACTION RATE	95%	100%	100%	100%	82%

** Indicates measure was not tracked and/or conducted during the reporting period.*

EVALUATION

School Administration and Teacher Survey



RESULTS 	2022-23	2021-22	2020-21	2019-20	2018-19 pilot
% Response rate for ___Admin/Classroom Teachers	4%	23%	19%	53%	48%
# Surveys from ___Admin/Classroom Teachers	8	45	45	61	41

% of students that agree or strongly agree (includes neutral) with the following survey prompts:

The STEAM+ program was an extension of my classroom, assisting me and my students, to better understand topics that were being discussed in class.	100%	100%	100%	89%	*
Overall, the guest organizations assisted me with incorporating STEAM (Science, Technology, Engineering, Arts, and Math) into my curriculum.	100%	100%	100%	87%	*
Overall, my students were comfortable with the guest teacher(s).	100%	100%	100%	87%	76%
Overall, the guest teachers were effective at working with students at my site.	100%	100%	100%	89%	76%
Overall, the curriculum and activities were appropriate for the students at my site.	100%	100%	100%	87%	80%
I would recommend these interactions for other classes/schools.	100%	100%	100%	89%	78%
I would like to see my school continue to participate in the STEAM+ program in the future.	100%	100%	100%	90%	90%
The STEAM+ program supported our school in gaining a STEAM Designation for the 2019 - 2020 academic school year.	100%	100%	100%	87%	*
Overall, the program was well-organized.	88%	98%	100%	90%	*
ADMIN/CLASSROOM TEACHER'S OVERALL SATISFACTION RATE	100%	98%	100%	95%	82%

* Indicates measure was not tracked and/or conducted during the reporting period.

COMMENTS & TESTIMONIALS

Students



“

I liked how not only I was able to have creativity in choosing designs but I was able to have a hands-on learning experience creating the circuits using conductive thread. (Age 15)

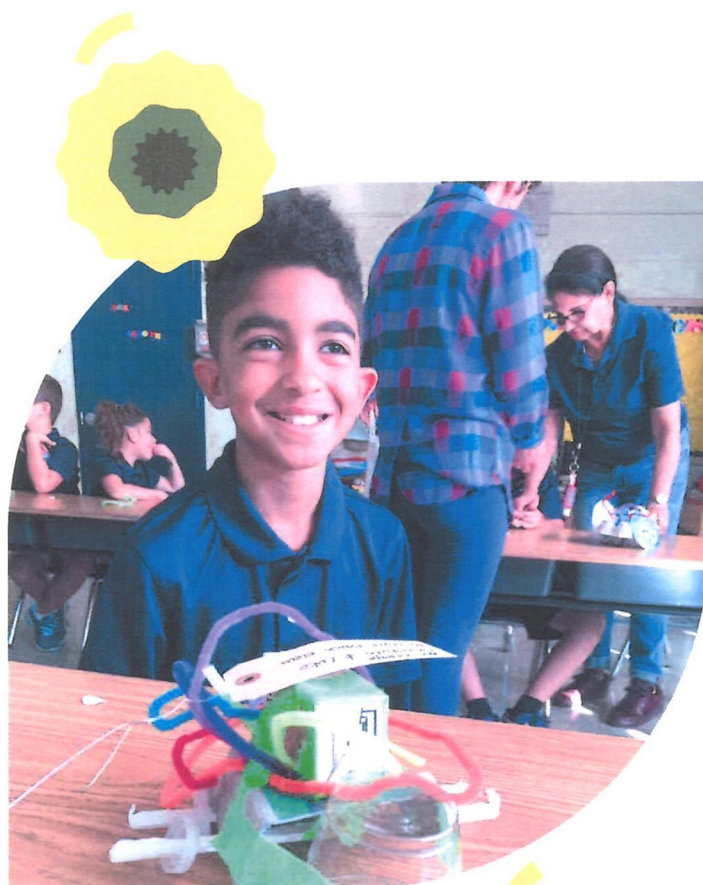
I love the effort that they put in that helped us learn new things in groups by making our own creations. (Age 17)

I like to be creative and I would like to do something like this more often. (Age 10)

The best part about this program is the 3D computer coding. (Age 10)

I liked that we had a touch on activity to really grasp and learn about the different arts and topics we were taught. (Age 16)

”



COMMENTS & TESTIMONIALS

Families



“

He loved the interactions at school, the free field trip, and seeing his art on display at the museum!

It was a great experience.

We loved the performance and the kids were so proud!

Great instructor and great show.

She enjoyed it so much. Really enhanced her learning and creativity.

To my mind it's amazing!

Wonderful program.

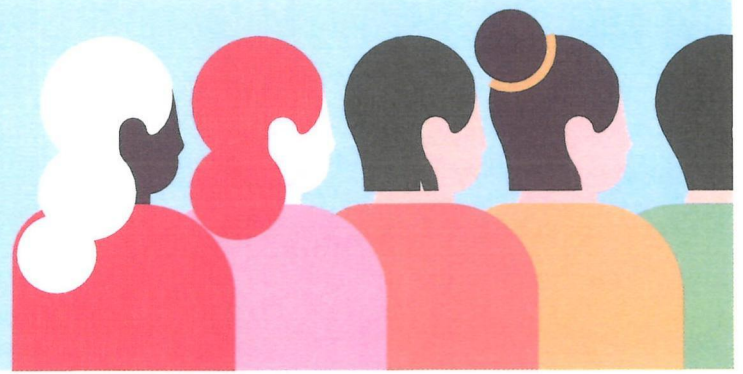
Please run it more often.

”



COMMENTS & TESTIMONIALS

Admin/Schools



“

My students loved every part of it. The staff was very good at explaining and interacting with my students.

Children that are usually reluctant to participate in class activities were engaged and enthusiastic. It was a wonderful experience.

The art teachers explained and assisted in all aspects of the activity with students.

All the students were engaged, happy, and learned a lot!



”

LETTERS OF SUPPORT





1040 Lincoln Road
Miami Beach, FL 33139
305.674.1040
miaminewdrama.org

Michel Hausmann
founder
artistic director

Nicholas Richberg
managing director

BOARD OF DIRECTORS

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chair

Charles Million
vice chair

Alexander Galsky
treasurer

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Martin Lindenfeld

Eduardo Muller

Enrique Norten

Brandi Reddick
city of miami beach
cultural affairs

Amy Scharlin

David Schrader

André L. Williams

July 27, 2023

Dear City of Miami Beach Commission,

Miami New Drama has participated for the past three years in the STEAM Plus program. It's been a wonderful growth opportunity and experience for the high school student at Miami Beach Senior High. This year we reached 60 students with our most in-depth and successful program yet. It would not be possible without the funding awarded.

We dedicate our time to furthering arts education in the community of Miami Beach and we do so with limited resources. Our partnership with STEAM has expanded our education department's impact by working with students who get a chance to connect their STEM classes with their theater classes. Furthermore, this is a great introduction to future career possibilities by showing them how STEM integrates with Art. Our STEAM program challenges students to look at their core classes differently, which invites them to explore further career opportunities in several fields. Creativity has been proven to be one of the most sought skills in any hiring pool and in an ever changing world, these skills are invaluable.

Providing not only training, but access to people working professionally in the theatrical design field is a signature aspect of the program Miami New Drama offers through the STEAM Plus program. Programs like these rarely exist in schools locally or nationally. It's not often until college that students would get this opportunity and for that, we are thankful to the City of Miami Beach Commission for continuing to provide funding support for this vital and valuable program.

Sincerely,

A handwritten signature in black ink, appearing to be "JK" or "JMK", written in a cursive style.

Jessica Kaschube
General Manager

May 5, 2023

To: City of Miami Beach Commission

I am writing this letter in support of the STEAM Plus program, to highlight the impact and importance of this program on schools and the community. I will begin by stating that the initiative to work with public school students and to provide them with access to museums and other educational institutions within their community has immeasurable value. The partnership with institutions such as The Wolfsonian-FIU and The Jewish Museum of Florida allow students to learn about history, design, and our impact as humans on the environments that surround us. Through these partnerships, students can visit for free, transportation is provided, and they receive engaging and hands on interactions right within the walls of their classrooms.

If it were not for programs like STEAM Plus, there is a chance that these students would not have an opportunity to visit these institutions and make these important connections to their community and to the knowledge held within the museum walls. As an educator, I have had the opportunity to witness many students' first time at a museum. I have also had artists and other professionals come into the classroom to share their knowledge. Both have a lasting impact on students, they open their eyes to other ways of seeing and learning through objects, environments, and new people engaging with them. They are excited to experience learning in a different way.

During classroom visits, the students engage with museum educators through hands on activities connecting back to the museum collection. The focus of this year's STEAM Plus partnership with The Wolfsonian-FIU and The Jewish Museum of Florida was on printmaking and the various tools and technologies used to create printed artworks. One of the highlights of the classroom visits are the various hands-on activities that students engage in. Printmaking is a very involved process, and it was rewarding to see students so focused on making their tools and later seeing their hard work pay off with their final prints. They had so much fun while sharing ideas and sharing materials during the printing process. They learn lessons about collaboration and teamwork, apart from the art, math, and technology applications.

I am happy to have been a part of the STEAM Plus program this year and look forward to future partnerships and the community engagement that results from these. It has been a pleasure to see the collaboration between schools, teachers, museums, and the community to make these programs happen.

Sincerely,

Lucia Morales

Education Specialist

The Wolfsonian-FIU
1001 Washington Ave, Miami Beach, FL 33139
305.535.2624 | wolfsonian.org



Lourdes Lopez
Artistic Director

—

Tania Castroverde Moskalenko
Executive Director

—

Toby Lerner Ansin
Founder

—

Edward Vilella
Founding Artistic Director

May 2, 2023

Dear City of Miami Beach Commission,

Though my arrival to Miami City Ballet in early 2023 as Executive Director has only provided me a small snapshot of the impact of STEAM+, I can say with great confidence that even that small snapshot reveals a program of tremendous impact. As an organization participating in the program since its inaugural year, please accept this letter as Miami City Ballet's full and unwavering support for the innovative STEAM+ initiative.

Through STEAM+, Miami City Ballet serves more than 400 students each year, using the arts to make learning abstract concepts easier and more interesting. Take, for example, how the movement principles of energy, space, and time help ground the scientific concepts of 'states of matter,' or how understanding dancer bodies and dancer movements so perfectly illustrate human anatomy and physiology.

STEAM+ also reveals exciting new career pathways in the arts for young people that extend beyond the traditional definition of artist. Career pathways such as that of projection designer Wendall K. Harrington, her technologically sophisticated approach to stage effects forever changing the live performing arts, including Miami City Ballet's very own production of *George Balanchine's* *The Nutcracker* and, more recently, of *Firebird*.

An investment of any sort in programs like STEAM+ – human, financial, or otherwise – is undeniably an investment in the future of Miami Beach.

On a personal note, I am honored to be a part of a city that so clearly acknowledges and values the role the arts play in enhancing academic cognition and student learning, particularly when paired with and integrated into traditional STEM curriculum such as is the case with STEAM+. I am also proud to be a part of an arts community within that city so willing to rise to the call to action, with cultural institutions like the Bass, New World Symphony, Miami City Ballet, and so many others providing their own perspectives and cultural expertise to meet the moment.

I look forward to the ways in which STEAM+ evolves in the years to come, and I am excited by Miami City Ballet's role in that endeavor. Please let me know how I can elaborate on my enthusiasm for STEAM+ and its ripple effect throughout our Miami Beach community.

Sincerely,

A handwritten signature in black ink, appearing to read "Juan José Escalante".

Juan José Escalante
Executive Director

Tel. 305.929.7000

—

Ophelia & Juan Js. Roca Center
2200 Liberty Avenue
Miami Beach, FL 33139

—

miamicityballet.org

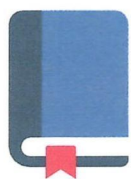
PARTICIPATION INFORMATION

By School

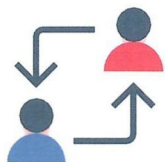


BISCAYNE BEACH ELEMENTARY

SILVER | 2022 - 2023 STEAM Designation



343 - 59%
Student
Population



32
Unique
Interactions



19
Classrooms



Partners:

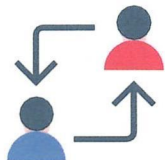
- The Bass Museum of Art (3rd)
- Miami City Ballet (1st)
- Miami Children's Museum (K)
- We the Best Foundation (4th)

MIAMI BEACH FIENBERG FISHER K-8 CENTER

SILVER | 2022 - 2023 STEAM Designation



385 - 45%
Student
Population



66
Unique
Interactions



18
Classrooms



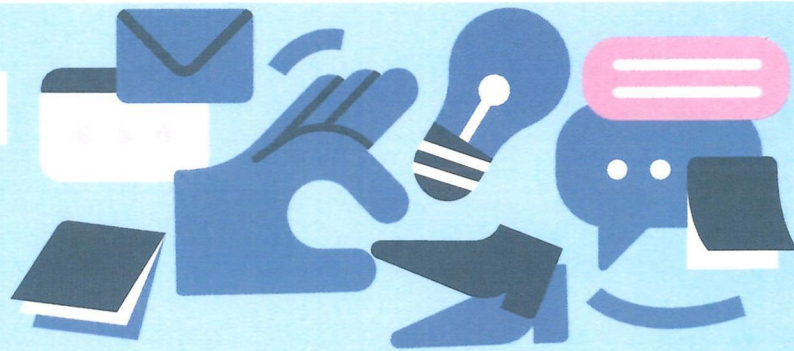
Partners:

- The Bass Museum of Art (2nd)
- Miami City Ballet (K)
- FIU-Jewish Museum of Florida & Wolfsonian (6th)
- Miami Children's Museum (4th)
- Young Musicians Unite (5th-7th)
- Moonlighter Fablab (5th)

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PARTICIPATION INFORMATION

By School

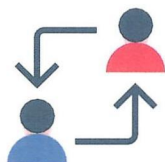


MIAMI BEACH NAUTILUS MIDDLE

GOLD | 2022- 2023 STEAM Designation



263 - 28%
School's
Population



72
Unique
Interactions



9
Classrooms

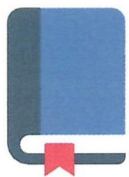
Partners:

- The Bass Museum of Art (6th-8th Biology)
- MBSHS STEAM Club (CTE Robotics)
- Young Musicians Unite (6th-8th Music)

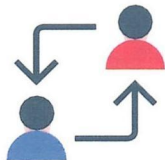


MIAMI BEACH SENIOR HIGH

SILVER | 2022 - 2023 STEAM Designation



1,108 - 50%
School's
Population



89
Unique
Interactions



32
Classrooms

Partners:

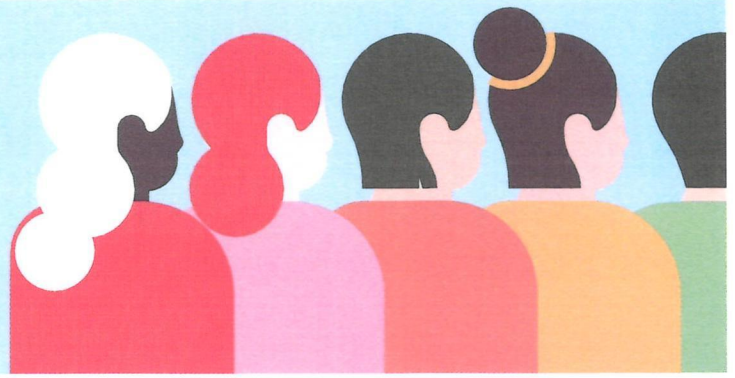
- The Bass Museum of Art (9th-12th Biology and Art)
- MBSHS STEAM Club (CTE Robotics)
- Miami New Drama (9th-12th Drama)
- Young Musicians Unite (9th-12th)



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PARTICIPATION INFORMATION

By School

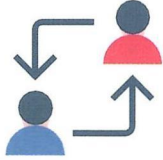


MIAMI BEACH SOUTHPOINTE ELEMENTARY

GOLD | 2022- 2023 STEAM Designation



304 - 62%
School's
Population



25
Unique
Interactions



16
Classrooms

Partners:

- The Bass Museum of Art (3rd)
- FIU-Jewish Museum of Florida & Wolfsonian (4th)
- Miami Children's Museum (K)
- Miami City Ballet (1st)

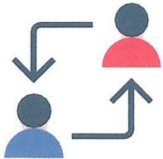


NORTH BEACH ELEMENTARY

GOLD | 2022 - 2023 STEAM Designation



688 - 73%
School's
Population



24
Unique
Interactions



32
Classrooms

Partners:

- The Bass Museum of Art (4th + Cultural Arts Day 2-4th)
- FIU-Jewish Museum of Florida & Wolfsonian (3rd)
- Miami City Ballet (K)
- Young Musicians Unite (5th)



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PARTICIPATION INFORMATION

By School

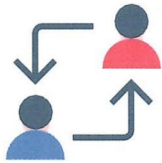


TREASURE ISLAND ELEMENTARY

SILVER | 2022- 2023 STEAM Designation



334 - 81%
School's
Population



31
Unique
Interactions



16
Classrooms

Partners:

- The Bass Museum of Art (2nd, 3rd)
- Miami City Ballet (K)
- Miami Children's Museum (1st)
- Moonlighters FabLab (4th)



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THE BASS MUSEUM OF ART

The Bass takes STEAM as an educational approach to learning that uses Science, Technology, Engineering, the Arts, and Mathematics as access points for guiding student inquiry, dialogue, critical thinking, and creativity. Through this program, students engaged with exhibitions at The Bass and expanded on what was being taught in the classroom. As a result, students created stop-motion animations illustrating how energy is transferred, created nature mobiles, and created circuit art with LED light features.

Students were guided to take thoughtful risks, engage in experiential learning, persist in problem-solving, embrace collaboration, and work through the creative process. Students also participated in a STEAM Lab at The Bass/virtually, exploring topics like environmental change, and the effects humans have on earth during specialized learning days like Cultural Arts Day and Career Day.

All work that was created through the STEAM Plus program was featured at the Bass Museum of Art during our FREE STEAM Family Celebration days in February and May.

DATA

Total Students Served: 1,664

Total Number of Classrooms Served: 68

Total Number of Unique Interactions: 62

Grades Served: Kindergarten, 2nd, 3rd, 4th, 6th, 7th, 8th, 9th, 10th, 11th, 12th

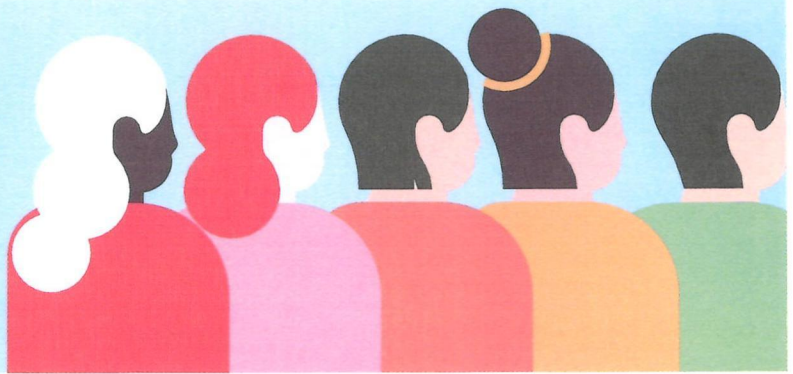
Partnered Schools (7):

- Biscayne Beach Elementary
- Miami Beach Fienberg Fisher K-8
- Miami Beach Nautilus Middle
- Miami Beach Senior High
- Miami Beach South Pointe Elementary
- North Beach Elementary
- Treasure Island Elementary



DETAILED INFORMATION

By Organization



MBSH STEAM CLUB MENTORSHIP

The culmination of the grant-supported initiative brought together a diverse array of accomplished speakers who shared invaluable insights with our students.

Brandon Lazano, Senior Manager at Nue Life Health, inspired students by sharing his journey from Miami to the forefront of innovative mental health solutions.

Abigail Dillen, an Environment Lawyer and senior director of Earthjustice, underscored the significance of environmental protection and courtroom advocacy.

Adolpho Restani, Software Development Technical Lead Architect, illuminated the dynamic landscape of software development, emphasizing the necessity of continuous learning.

Patrick Kaimrajh, Senior Engineer and Director at Chen Moore, delivered a comprehensive exploration of engineering's pervasive influence across daily life.

Andrew Geller, Senior Science Advisor at the EPA, emphasized the importance of pursuing one's passions and addressing critical environmental issues for a sustainable future.

These sessions collectively broadened horizons, fostering understanding and motivation for future endeavors.

DATA

Total Students Served: 50

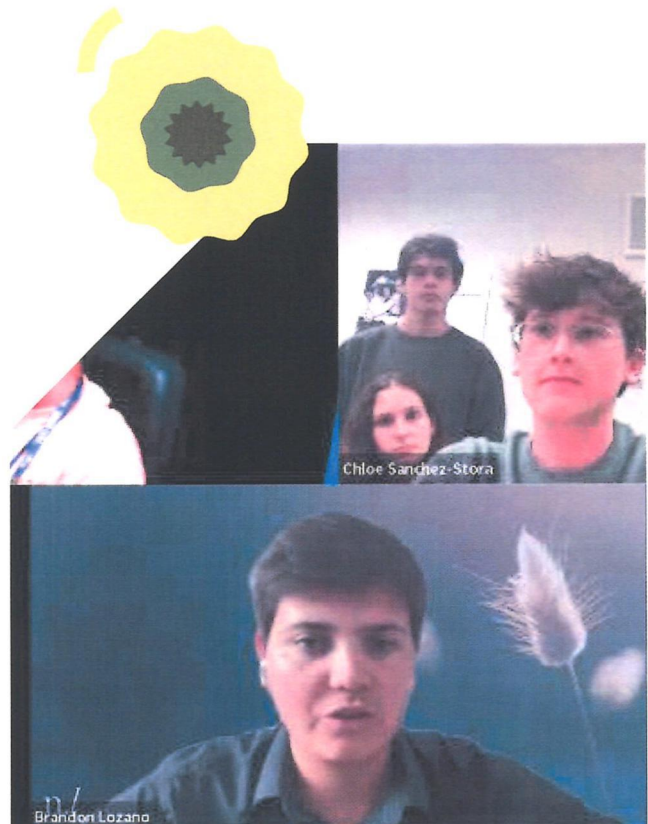
Total Number of Classrooms Served: 2

Total Number of Unique Interactions: 5

Grades Served: 7th, 8th, 9th, 10th, 11th, 12th

Partnered Schools (2):

- Miami Beach Senior High School
- Miami Beach Nautilus Middle



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FIU - JEWISH MUSEUM OF FLORIDA & WOLFSONIAN

As part of the STEAM+ program, the Jewish Museum of Florida and The Wolfsonian education team collaborated to design and execute grade-appropriate lesson plans that integrated STEAM principles and curricular standards for students in grades 3–6. This multi-session project encompassed an engaging introduction to the history of printmaking and stenciling, followed by a field trip to either the Jewish Museum of Florida or The Wolfsonian, providing exposure to rare prints and diverse printmaking techniques. The students then embarked on printmaking projects, inspired by museum collections' shapes, patterns, and symmetry, employing techniques like stenciling, self-designed stamps, and relief.

Throughout the Spring term, each student participated in four educational sessions that emphasized hands-on learning and engagement with museum educators. Central to this year's STEAM Plus partnership was the exploration of printmaking, including the intricate process of tool design and technology employed in creating printed artworks.

Through iterative repetitions of the printmaking process, students developed skills in measurement, positive/negative space comprehension, mathematical application, and artistic execution. The printmaking journey also integrated essential elements of art and design, fostering collaborative and teamwork-oriented learning experiences.

This culminated in a community printmaking celebration and student showcase, underscoring the program's success in merging art, math, technology, and teamwork within a dynamic educational framework.

DATA

Total Students Served: 248

Total Number of Classrooms Served: 14

Total Number of Unique Interactions: 12

Grades Served: 3rd, 4th, 6th

Partnered Schools (3)

- Miami Beach Fienberg Fisher K-8 Center
- Miami Beach South Pointe Elementary
- North Beach Elementary



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MIAMI CHILDREN'S MUSEUM

"Building Noise," an innovative interactive performance project presented by the Miami Children's Museum, offered a captivating avenue for participant scholars to explore the dynamic convergence of rhythm and mathematics. Through a series of five engaging interactions, guided by the dedicated Theater Troupe, students discovered the intriguing interplay between performance and math, crafting a collective soundscape that kindled their creativity and artistic expression.

By integrating rhythm, artistic processes, and math, participants not only developed a profound understanding of musical dynamics but also gained confidence in their performance abilities, fostering a sense of collaboration as they coalesced to compose something truly unique with their peers.

Throughout the program, scholars delved into the fundamental elements of counting rhythms, music, and performance, skillfully guided by the Theater Troupe. As they progressed, they built their own rhythmic performances, a process supported by mentors and culminating in the triumphant reveal of their collaborative composition to their classmates.

Enriching the experience further, participants engaged in field trips to the Miami Children's Museum, immersing themselves in a vibrant soundscape that merged science, math, and art. This holistic approach not only inspired youthful minds to explore creative avenues of music but also unveiled the seamless integration of math and science into diverse career pathways, broadening horizons and sparking curiosity.

The program's impact was far-reaching, fostering critical and creative thinking while providing valuable exposure to theater performances and hands-on experiential learning, ultimately leaving an indelible mark on all 286 participants.

DATA

Total Students Served: 286

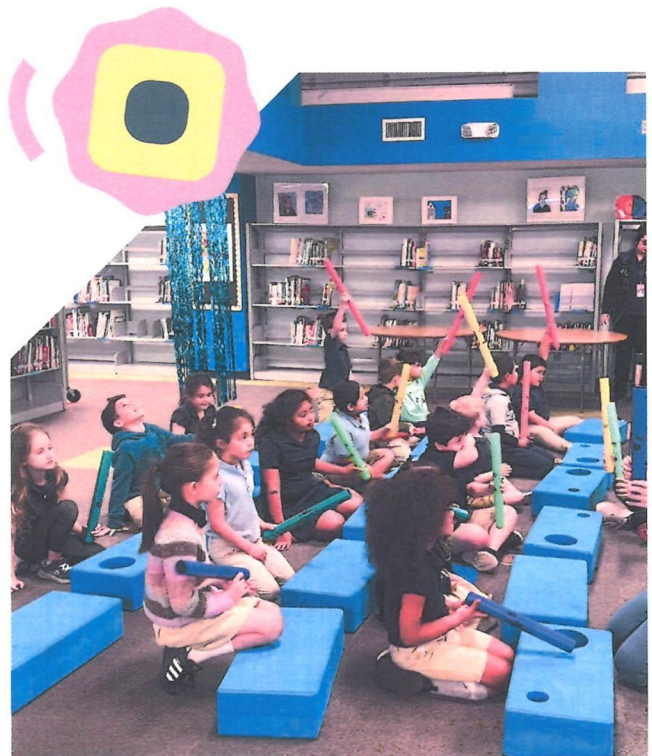
Total Number of Classrooms Served: 15

Total Number of Unique Interactions: 20

Grades Served: Kinder, 1st, 4th

Partnered Schools (4):

- Biscayne Beach Elementary
- Miami Beach Fienberg Fisher K-8 Center
- Miami Beach South Pointe Elementary
- Treasure Island Elementary



DETAILED INFORMATION

By Organization



MIAMI CITY BALLET

The STEAM+ MCB program proved to be a resounding success, leaving a lasting impact on students, teachers, and parents alike. Kindergarten students embarked on an engaging journey of locomotor movements while counting forwards and backwards to 8. Exploring the three distinct states of matter, students harnessed creative movements to delve into the realms of science, further amplified by dance exercises and activities for first-grade students. This unique fusion of art and STEAM principles extended beyond the classroom, enriching their understanding of matter, mass, volume, and atom interactions, as well as properties like sorting, attributes, and motion.

The profound significance of art's omnipresence became evident to the students as they grasped the diverse connections between art, science, and mathematics. Through dance, they deepened their comprehension of these subjects, witnessing firsthand how artistic expression can enhance cognitive skills, teamwork, and problem-solving abilities.

A notable highlight was the inclusion of 10 students with distinct special needs, who thrived under the guidance of a licensed Dance Therapist. Adaptations to the STEAM+ Program allowed them to shine on stage, supported by both classroom assistants and trained teachers.

This powerful amalgamation of art and STEAM principles ignited curiosity, nurtured creativity, and fostered a profound appreciation for learning, culminating in impactful events where families celebrated students' presentations of curricular concepts through the arts.

DATA

Total Students Served: 410

Total Number of Classrooms Served: 27

Total Number of Unique Interactions: 45

Grades Served: Kinder, 1st

Partnered Schools (5):

- Biscayne Beach Elementary
- Miami Beach Fienberg Fisher K-8 Center
- Miami Beach South Pointe Elementary
- North Beach Elementary
- Treasure Island Elementary



DETAILED INFORMATION

By Organization



MIAMI NEW DRAMA

In a unique collaboration with Miami New Drama, students were immersed in an enriching STEAM experience that seamlessly blended theater and technical expertise.

Theater technicians, designers, and teaching artists converged to deliver illuminating STEAM classes to two separate groups: one consisting of 39 students and the other of 21. Over eight sessions, students engaged with the nuances of scenic design, exploring concepts such as scale models, marble, and scenic painting. Their active involvement extended to creating props and constructing the set for their school's production, alongside fulfilling vital roles as the tech crew during rehearsals and performances.

Noteworthy accomplishments included crafting towering 8-foot coroplast sheets onto wooden frames and constructing an impressive throne, showcasing their developing technical skills.

This initiative marked a significant achievement, emerging as a highly successful STEAM project. The collaboration with the residency program seamlessly integrated classroom learning with practical application during the set and technical element design process.

This hands-on approach enabled students to gain a deeper understanding of costumes and scenery in theater, expanding beyond the program's initial overview. As a result, participants not only acquired essential technical theater skills but also gained insights into potential careers within these fields.

The program effectively met its objectives, imparting comprehensive knowledge and fostering curiosity, creativity, and a promising future within the arts and STEAM-related domains.

DATA

Total Students Served: 60

Total Number of Classrooms Served: 2

Total Number of Unique Interactions: 12

Grades Served: 9th - 12th

Partnered Schools (1)

- Miami Beach Senior High



DETAILED INFORMATION

By Organization



MOONLIGHTER FABLAB

Throughout a 10-week program, students delved into the transformative world of the Design Thinking Process, introduced to them through a 5-step approach to problem-solving. Guided by the principles of empathy, definition, ideation, prototyping, and testing, they embarked on a journey of creative discovery.

Within this framework, they embarked on crafting intricate designs for fictitious clients, crafting a series of models - from a concentric LEGO representation to a final wooden model and a detailed 3D rendering of their client's home.

Notably, each design bore an element inspired by the client and seamlessly incorporated an electronic component. The exploration extended to circuitry fundamentals and solar energy, with students harnessing the power of the sun to illuminate their creations.

The program culminated in a showcase where students proudly unveiled their ingenious creations, engaging with peers, teachers, and parents. Beyond technical achievements, this initiative catalyzed multifaceted growth. Students honed skills in iterative design, engineering, and observation, while also cultivating an understanding of circuits and the principles of balance. Engaging in projects such as the Circuit Bot, students brought their concepts to life, mastering the intricacies of engineering, circuits, and scientific methodology.

They expanded their horizons to wearable technology, designing electronic bracelets with sewn conductive thread, thereby fusing creative expression with technical ingenuity.

Overall, the program unfurled a tapestry of exploration, encouraging iterative thinking, fostering scientific inquiry, and kindling a lasting passion for design, circuits, and innovation.

DATA

Total Students Served: 236

Total Number of Classrooms Served: 9

Total Number of Unique Interactions: 16

Grades Served: 3rd, 4th, 5th, 10th, 11th, 12th

Partnered Schools (3) :

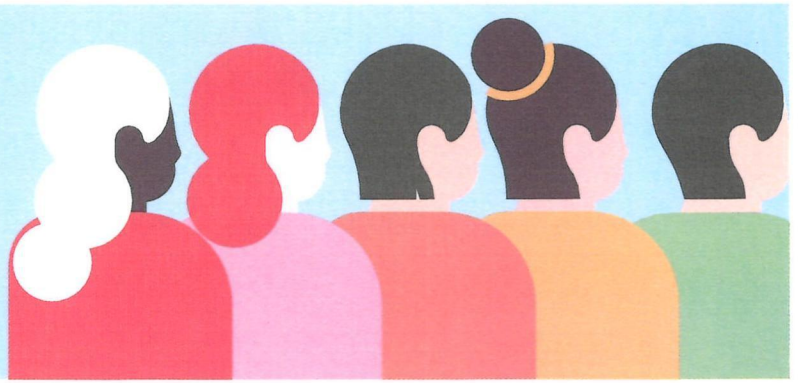
- Miami Beach Fienberg Fisher K-8 Center
- Miami Beach Senior High
- Treasure Island Elementary



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WE THE BEST FOUNDATION

The WTB x STEAM program drove significant personal and group development, fostering a positive self-identity for students, both individually and collectively. Guided by a structured series of engaging sessions, participants undertook a journey of self-discovery and creative exploration.

The program kicked off at Biscayne Beach Elementary with the renowned marshmallow challenge, where students collaborated to build the tallest freestanding structure using limited materials.

Throughout the program, students delved into diverse forms of self-expression and cultural understanding. From crafting individual cultural trees and composing introspective "I Am" poems to analyzing the lyrics of Marvin Gaye's "Mercy, Mercy Me" to discuss environmental challenges, each session deepened their connection to self and society. The act of personalizing water bottles to symbolize their dedication to earth preservation merged practicality with artistry.

Culminating in a collective group mantra, the program culminated in a presentation and exhibition that resonated with peers, parents, and the broader community. The enduring impact of the WTB x STEAM program is evident in the enhanced self-confidence, cultural awareness, and shared triumph of its participants.

DATA

Total Students Served: 77

Total Number of Classrooms Served: 4

Total Number of Unique Interactions: 10

Grades Served: 4th

Partnered Schools (1) :

- Biscayne Beach Elementary



DETAILED INFORMATION

By Organization



YOUNG MUSICIANS UNITE

The Young Musicians Unite (YMU) program encompassed a diverse array of musical experiences, tailored to grade levels, schedules, and student numbers. Its curriculum spanned a spectrum of engaging activities, ranging from masterclasses inspired by The Beatles to direct, in-class interactions with students.

Under the Modern Band component, students engaged intimately with music through courses designed to instill fundamental skills in guitar, bass, keyboard, and drums.

The Beginning Band segment focused on music literacy, encompassing the mastery of reading musical notation, technical exercises, and collaborative teamwork in preparation for captivating end-of-semester performances. Meanwhile, the Strings and Guitar program facilitated the cultivation of both technical prowess and valuable personal attributes such as patience, discipline, and persistence – all of which are essential for establishing a productive and rewarding practice routine.

The Young Musicians Unite STEAM+ program significantly enhanced student learning through the integration of technology, fostering interactive and engaging educational experiences.

Our partnership prioritized the well-being of our student community by curating activities, masterclasses, and technology-driven interactions, ensuring equitable access to music education even in underserved areas.

Furthermore, the program played a pivotal role in reinstating in-person events within schools, enabling families to partake in student concerts and live presentations across various settings, both open-air and enclosed.

DATA

Total Students Served: 394

Total Number of Classrooms Served: 24

Total Number of Unique Interactions: 152

Grades Served: 5th-12th

Partnered Schools (4) :

- Miami Beach Fienberg Fisher K-8 Center
- Miami Beach Nautilus Middle
- Miami Beach Senior High
- North Beach Elementary



