



STEAM PLUS

2021 - 2022 REPORT

THE
BASS

steAm+


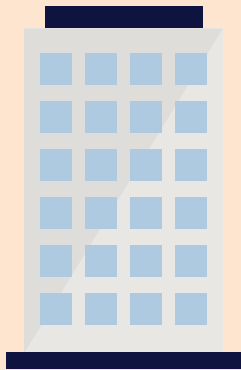


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 - › Moonlighters FabLab
 - › Wolfsonian – FIU
 - › Young Musicians Unite

FAST FACTS

(General)

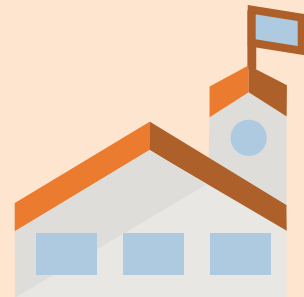


11 PARTICIPATING ORGANIZATIONS:

- The Bass Museum of Art
- Code/Art
- Miami Beach Senior High STEAM Club
- Jewish Museum of Florida – FIU
- Miami Beach Botanical Gardens
- Miami Children’s Museum
- Miami City Ballet
- Miami New Drama
- Moonlighters FabLab
- Wolfsonian – FIU
- 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 2021-2022)



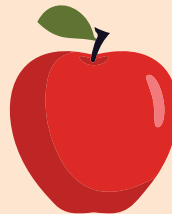
1,398
Instructional Hours



4,982
Students Reached



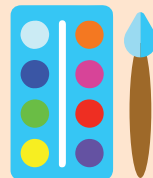
407
Unique Interactions



178
Classrooms Reached



36
Partnerships Between
Organizations and Grade
Levels/Subjects



48
Teaching Artists
Employed*

*Not including Miami Beach Senior
High STEAM Club mentors

FAST FACTS

(Participation 2021-2022)

STEAM DESIGNATIONS FOR THE 2021-2022 ACADEMIC YEAR:



GOLD

- Biscayne Beach Elementary
- Miami Beach Nautilus Middle
- Miami Beach South Pointe Elementary
- North Beach Elementary
- Treasure Island Elementary



SILVER

- Miami Beach Fienberg Fisher K-8 Center
- Miami Beach Senior High

EXECUTIVE SUMMARY

From October 2021 through June 2022, the City of Miami Beach Commission and Mayor Dan Gelber, in partnership with the Miami-Dade County Public Schools System (M-DCPS), approved funding for the STEAM Plus program, which integrates arts and culture into the core curriculum of local public schools. Engaging with the arts from an early age helps children with the development of essential skills including motor, language, social, decision-making, risk-taking and inventiveness.

For the fourth year, The Bass managed partnerships between cultural anchors and Miami Beach public schools, which alleviates pressure on school administrators and provides essential support to ensure schools can attain M-DCPS STEAM designation. The partnership between Miami's cultural institutions and public schools aims to inspire future generations of inventors, explorers, innovators, artists and leaders.



The 2021-2022 STEAM Plus program featured 11 organizations: The Bass, Code/Art, Jewish Museum of Florida-FIU, Miami Beach Botanical Garden, Miami Beach Sr. High STEAM Club, Miami Children's Museum, Miami City Ballet, Miami New Drama, Moonlighters FabLab, Wolfsonian-FIU 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 Senior High, Miami Beach Nautilus Middle, North Beach Elementary, Miami Beach South Pointe Elementary and Treasure Island Elementary.

The longevity of the COVID-19 pandemic's impact on schooling presented unique challenges for the program. Schedule uncertainty relating to testing dates and a mix of students attending in-school and at-home proved to be complicated. Educators noticed Zoom fatigue in middle and high school students, as well as short attention spans in K-2nd graders who had been at home for two years. Attendance was affected by schools or students with poor internet connections. Finally, COVID-19 exposures and infections led to teacher turnover and student absences.

Looking ahead to 2022-2023, as COVID-19 continues to evolve, a hybrid program will be offered and participating schools will select between virtual or in-person programming. The Bass is proud to serve its community and manage the STEAM Plus program for a fifth consecutive year with continued support from the City of Miami Beach and Miami-Dade County Public Schools.

EXECUTIVE SUMMARY (cont.)

The following key achievements were accomplished in 2021-2022:

Served 4,982 students (76% of the student population of Miami Beach), an increase of 12% from 2020-2021.

Continued to provide virtual learning during COVID-19 variant outbreaks with STEAM Plus Kits provided for teachers and students, curated per cultural partner containing all supplies needed to participate.

Served students K-12th grade and reached ESE and ESOL students in every school.

Hosted multiple Miami-Dade County Professional Development courses for teachers focused on incorporating the arts through STEAM, teaching skills and utilizing technology in lessons.

Facilitated 36 partnerships, serving 178 classrooms and 1,398 hours of instruction, an increase of 22% on 2020-2021.

Employed over 45 local teaching artists and/or performers.

A number of in-person interactions safely resumed for the first time since the COVID-19 outbreak in 2020. Pre-packaged materials and PPE were provided to teachers and students.

EXECUTIVE SUMMARY (cont.)

For the 2021-2022 year, the following key achievements were accomplished through the STEAM Plus program:

On-site field trips safely resumed for the first time since the COVID-19 outbreak in 2020. A first-time on a bus for some students! Students visited cultural organizations throughout Miami Beach.

The Bass, Code/Art, Miami City Ballet, The Wolfsonian-FIU and Young Musicians Unite produced innovative virtual culminating events which provided opportunities for students to showcase their work and take pride in their achievements.

Virtual field trips continued, offering students confined to homes and classrooms an opportunity to escape from the virtual classroom setting into gardens, galleries and concert halls.

Student achievements included several students being selected to display their artwork at Miami Dade College North and local galleries and ten students receiving placement in Miami City Ballet's after-school program.


Facilitated mentoring partnership between Miami Beach Senior High Robotics Club students and Miami Beach Nautilus Middle School students.

STEAM Plus participating students expressed a wish to pursue careers in the partnering cultural institutions someday.

Employed over 45 local teaching artists and/or performers.

EVALUATION

Student Survey Responses

| RESULTS  | 2021-22 | 2020-21 | 2019-20 | 2018-19 <i>pilot</i> |
|---|---------|---------|---------|-------------------------|
| % Response rate for students | 12% | 10% | 14% | 11% |
| # Surveys from students | 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. | 96% | 97% | 96% | * |
| Helped them understand topics we are learning about in other subject areas. | 92% | 95% | * | * |
| The visiting teacher allowed them to think creatively/be creative. | 93% | * | * | * |
| Partnerships allowed them to use their imagination. | * | 98% | 95% | * |
| They enjoyed attending class on the days the partner organization visited. | * | 96% | 94% | 92% |
| They would like to continue to do more lessons with our partner organization. | 94% | * | * | * |
| They wished the partner organizations would visit their class more. | * | 96% | 93% | * |
| STUDENT OVERALL SATISFACTION RATE | 97% | 98% | 94% | * |

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

EVALUATION

Family Survey Responses

| RESULTS  | 2021-22 | 2020-21 | 2019-20 | 2018-19 <i>pilot</i> |
|---|---------|---------|---------|-------------------------|
| % Response rate for families | 1% | 1% | 5% | 3% |
| # Surveys from families | 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% | 91% | 84% |
| My child liked participating in the STEAM Plus program activities. | 100% | 100% | 95% | 87% |
| Partnership programs, like S.T.E.A.M. Plus, are a valuable asset to Miami Beach's public schools. | 100% | * | * | * |
| Through this partnership program, my child was exposed to new materials and/or ways of thinking about math and science. | 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% | 96% | 95% |
| FAMILY OVERALL SATISFACTION RATE | 100% | 100% | 100% | 82% |


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

EVALUATION

School Administration and Teacher Survey Responses

| RESULTS  | 2021-22 | 2020-21 | 2019-20 | 2018-19 <i>pilot</i> |
|---|---------|---------|---------|-------------------------|
| % Response rate for Admin/Classroom Teachers | 23% | 19% | 53% | 48% |
| # Surveys from Admin/Classroom Teachers | 45 | 45 | 61 | 41 |

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

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

COMMENTS & TESTIMONIALS

Students

“

What they included when teaching us was informational in a way that broadened my perspective of the world and what happens in it.

I like it when we would have a hands on experience learning something new. When we learned about costume design and what goes into it. The next class we learned how to sew. Which i really found really fun.

I liked how we all interacted with each other and participated as a classroom. I enjoyed the instructors and their lessons.

I liked the introduction of established professionals in the industry being able to come in and showcase their history and origins, their work and their strategies.



”

COMMENTS & TESTIMONIALS

Families

“

It was an exciting educational and interactive experience. Loved being able to see the work they did displayed at The Bass Museum.

My child was very proud of her project and enjoyed the experience. Also, had a desire to go to The Bass Museum to see her art.

It was very interesting, Innovative Allowed my child to challenge herself. Thank you.

My child was super excited to show me the stained glass he had made at school.

Ms. Jenny is still talked about in my home. Her influence has been monumental and I hope they are blessed enough to have the opportunity to have her again next year.



”

COMMENTS & TESTIMONIALS

Admin/Schools

“

I love the program. Thank you to the City of Miami Beach for making this possible. As STEAM coordinator, it makes my job so much easier. It provides quality of partners with fulfillment of the requirement of partnerships for the STEAM program at MDCPS. Thank you!!!

We had a difficult schedule this year and our STEAM partners helped make our Spring performance a success. They also provided funds to repair many of our instruments.

The students were able to understand different components of Science first grade standards such as push and pull through the use of dance and science projects

To have the support and point of view from a professional outside of the classroom broadens the kind of experiences the children are exposed to. It opens your mind to explore different ways of learning that incorporate other disciplines.

”



LETTERS OF SUPPORT



Miami Beach Senior High School

2231 Prairie Avenue

Miami Beach, Florida. 33140

August 10, 2022

Dear Miami Beach Commission,

It is with great enthusiasm that I write this letter supporting the STEAM Plus program.

The partnerships offered through this program expose our students to real life application of topics they are learning in class.

The artists that participate in the STEAM Plus program are extremely capable and create an easy way for our teachers and students to connect to the community.

The projects are engaging and always correlate to MDCPS and Florida standards.

I consider the STEAM Plus program an excellent way to support the education of our students.

For these reasons I hope that the program will continue, and I am looking forward to working together in this school year 2022-2023.

Please do not hesitate to contact me if you need further information.

Sincerely,

Dr. Rosa Amelia Lemas

drlemas@dadeschools.net

(786)720-4517



Miami Beach Nautilus Middle School

4301 N Michigan Ave, Miami Beach, FL 33140

Phone (305) 532-3481 ♦ Fax (305) 532-8906

Internet <https://www.mbnautilussharks.org/>

"Committed to Educational Excellence"

Fernando P. Diaz
Pamela Taylor
Assistant Principals

Mary V. Murphy
Principal

Dear City of Miami Beach Commission,

I am Tannis Carpenter the Biology teacher at Miami Beach Nautilus Middle School. I am writing to express my full support of the Bass Museum's Steam Plus Program. The program has successfully engaged the students in an educational and unique learning experience, assisted the teacher in ensuring art created is an expansion of the classroom, and involved the community to support the students with a Student Exhibition.

With the help of the STEAM Plus program this past year, the students at MBNMS created animations to demonstrate their knowledge of human body systems working together to maintain homeostasis. The Bass Museum provided supplies to each student to complete the task of making an animation. The personal bag provided contained clay, pipe cleaners, glue, and many other fun materials to engage the students and expand their imagination. The artist assigned to our classroom was amazing and immediately connected with the students. She had a clear vision and lesson plans to integrate science and art into the classroom. The students were provided with I-PADS to create their animations. They were so proud of their final projects and the artist made sure every student accomplished their goal.

The Steam Plus program assisted the teacher by incorporating art into the classroom, efficiently and effectively. The animations created were directly aligned to Florida State Science Standards and clearly demonstrated the knowledge and understanding of the Science Benchmarks. The activity supported students' proficiency of the topic.

The Steam Plus Program involved the community and parents with a Student Exhibition Family Steam Day. This was a lovely way for the students to show off all of their hard work and provided the students with a sense of pride.

Overall, MBNMS has had a wonderful experience with our partnership with the Bass Museum Steam Plus program and we look forward to working with them again this coming year.

Thank you,

Tannis Carpenter
MBNMS Biology Teacher

Mission Statement

Our goal is to empower students to reach their maximum potential and mature into responsible, self-sufficient, productive, and compassionate members of a global society.



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

Michel Hausmann
founder
artistic director

Nicholas Richberg
managing director

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June 15, 2022

Dear City of Miami Beach Commission,

Miami New Drama has participated for the past two years in the STEAM Plus program. It's been a wonderful experience and opportunity for the high school students at Miami Beach Senior High. 60 students virtually in Spring 2021 and 75 with a hybrid experience in Spring 2022!

This program has helped us expand our educational reach and generate interest in technical theater as a career path. To close out the 2022 program, we were able to bring 40 students to the Colony Theatre to give a behind-the-scenes look at The Cuban Vote, a world premiere play by Miami native Carmen Pelaez. The design team for the production presented live demos and answered questions while Miami New Drama staff pointed out the historic architecture. The oohs and awws from the students as a wall flew out and revealed a large video LED wall was thrilling. Then, delving into how artistically this all was envisioned by the playwright, designers, and director to be brought to life with technology and skilled technicians. Each student asked interesting questions and helped guide the 60 minute experience in a way that was incredibly beneficial. Programs like these rarely exist in schools locally or nationally.

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. 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,

Jessica Kaschube
General Manager



Miami-Dade County Public Schools

giving our students the world

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June 3, 2022

City of Miami Beach Commission,

The STEAM+ Program has been partnered with Miami Beach South Pointe Elementary School (MBSPE) for four years now and just gets better every year! Koren Illa is extremely helpful in communicating between the teachers and the partnership organizations. Not only does she help schedule our interactions, but she follows up with us to make sure everything went well, and the paperwork is completed correctly. All of this is an invaluable asset to STEAM liaisons at the school site.

With these partnerships, our students are getting high quality education and making positive community connections. Our first graders worked with The Miami City Ballet to conduct dances related to math and science. Many of these students have never been exposed to dance instruction and all students enjoyed the experience. Our second graders worked with The Miami Beach Botanical Garden to learn about botany and adaptations. Many of these students went to the garden for the first time through a free field trip through STEAM+. This inspired many of our students to take an interest in the school garden here at MBSPE. Our third graders worked with The Bass Museum to learn about art in addition to math and science. The students loved their free field trip to the museum and many of them made connection to what they saw there to art class in school. Our fourth graders worked with The Jewish Museum to learn about and create stained glass. These students still come to school and tell their teachers about new stained glass they saw over the weekend or in movies!

The STEAM+ program brings an element to Miami Beach South Pointe Elementary School that is unique and irreplaceable. All students at our school benefit in some way from the partnerships and the inspiration the program brought to the teachers, students, and families. Thank you for supporting our school by maintaining the STEAM+ Program!

Sincerely,

Carolyn Greene

4th Grade Teacher,

STEAM Liaison, & Parent

PARTICIPATION INFORMATION

By School

BISCAYNE BEACH ELEMENTARY

Gold | Past STEAM Designations: 2020 - 2021 Gold,
2019 - 2020 Gold, 2018 - 2019 Silver, 2017-2018 Bronze



353
Students



125
Instructional
Hours



16
Classrooms

Partners:

- The Bass Museum of Art (K)
- Miami City Ballet (1st)
- Miami Beach Botanical Gardens (2nd)
- Wolfsonian Museum-FIU (3rd)



MIAMI BEACH FIENBERG FISHER K-8 CENTER

Silver | Past STEAM Designations: 2020-2021 Gold, 2019-2020 Silver



532
Students



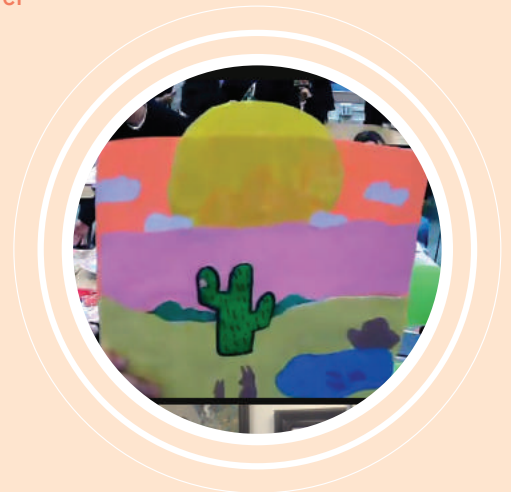
249
Instructional
Hours



21
Classrooms

Partners:

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



PARTICIPATION INFORMATION

By School

MIAMI BEACH NAUTILUS MIDDLE

Gold | Past STEAM Designations: 2020 - 2021 Silver, 2019 - 2020 Gold, 2018 - 2019 Silver



1,141
Students



127
Instructional
Hours



14
Classrooms



Partners:

- The Bass Museum of Art (6th-8th Biology)
- MBSHS STEAM Club (6th)
- Jewish Museum of Florida-FIU (6th)
- Young Musicians Unite (6th-8th Music)

MIAMI BEACH SENIOR HIGH

Silver | Past STEAM Designations: 2020 - 2021 Gold, 2019 - 2020 Silver



1,321
Students



495
Instructional
Hours



46
Classrooms



Partners:

- The Bass Museum of Art (9th-12th Biology and Art)
- Code/Art (9th-12th CTE)
- Jewish Museum of Florida-FIU (10th-12th)
- Miami New Drama (9th-12th Drama)
- Young Musicians Unite (9th-12th)

PARTICIPATION INFORMATION

By School

MIAMI BEACH SOUTH POINTE ELEMENTARY

Gold | Past STEAM Designations: 2020 - 2021 Gold, 2019 - 2020 Gold



308
Students



126
Instructional
Hours



16
Classrooms



Partners:

- The Bass Museum of Art (3rd)
- Jewish Museum of Florida-FIU (4th)
- Miami Beach Botanical Gardens (2nd)
- Miami City Ballet (1st)

NORTH BEACH ELEMENTARY

Gold | Past STEAM Designations: 2020 - 2021 Gold, 2019 - 2020 Gold



1,077
Students



199
Instructional
Hours



50
Classrooms



Partners:

- The Bass Museum of Art (5th + Cultural Arts Day 2-4th)
- Jewish Museum of Florida-FIU (3rd)
- Miami City Ballet (K, 1st)
- Young Musicians Unite (5th)

PARTICIPATION INFORMATION

By School

TREASURE ISLAND ELEMENTARY

Gold

Past STEAM Designations: 2020 - 2021 Gold, 2019-2020 Gold
2018-2019 Silver STEM Designation



250
Students



77
Instructional
Hours



16
Classrooms

Partners:

- The Bass Museum of Art (2nd, 3rd)
- Miami City Ballet (K)
- Wolfsonian-FIU (5th)



DETAILED INFORMATION

By Organization

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: 1,919
- Total Number of Classrooms Served: 76
- Total Number of Instructional Hours: 472
- 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



DETAILED INFORMATION

By Organization

CODE/ART

Code/Art Instructors guided Miami Beach Senior High students through a “Code Your Self-Portrait” lesson using JavaScript and Processing.js. Portraits were coded to incorporate the theme, titled “My Super Self”, which encouraged students to reflect and incorporate what makes them unique into their self-portrait. Once their portrait was completed, students were able to animate their portraits using variables, loops, inputs and conditional statements. Each interaction was hosted via Zoom and lasted about an hour. At the conclusion of the partnership students exhibited their art at The Bass Museum of Art, as well as the school cafeteria.

DATA

- Total Students Served: 106
- Total Number of Classrooms Served: 2
- Total Number of Instructional Hours: 35
- Grades Served: 9-12 CTE/Robotics

Partnered Schools (1)

- Miami Beach Senior High School



DETAILED INFORMATION

By Organization

MIAMI BEACH SENIOR HIGH STEAM CLUB

(Helping Hands/
Miami Beach Bots)

Miami Beach Sr. High STEAM Club members mentored groups at Miami Beach Nautilus Middle School. During their partnership students interacted with six speakers that work in STEAM driven careers. Interactions took place twice a week from January through February of 2022. Speakers included individuals from the engineering team at NASA, Miami's first Bitcoin Center (Timelock), application designers and event engineers that have worked with Cirque De Soleil and the Olympics. This partnership encouraged middle school students to enroll in STEAM curriculum and consider a STEAM career path as they progress in their schooling.

DATA

- Total Students Served: 67
- Total Number of Classrooms Served: 2
- Total Number of Instructional Hours: 22
- Grades Served: 6th

Partnered Schools (1)

- Miami Beach Nautilus Middle



DETAILED INFORMATION

By Organization

JEWISH MUSEUM OF SOUTH FLORIDA-FIU

As part of the STEAM+ program, the Jewish Museum of Florida-FIU created grade appropriate lesson plans incorporating STEAM and curricular standards around the Museum's Art Deco building and 80 historic stained-glass windows. Broken down into four sessions, the partnership included an interactive presentation around the history of the Museum - housed in two interconnected historic buildings that once served as Congregation Beth Jacob - and its stained-glass, a virtual field trip to the Museum, a hands-on visual arts activity, and a student showcase.

Students engaged with topics including the architecture of the building, geometry, symmetry, patterns, and design in stained glass, as well as the science and technology used to create this historic art form. During the second part of the partnership, students attended an in-person field trip, where they learned about the history of the Museum's building, its unique architectural style marrying elements found in Art Deco and Jewish symbolism, as well as the imagery and narratives embedded within its historic stained-glass windows. During the final interactions, students created projects around stained glass and storytelling using different grade-appropriate techniques including mosaic-stained glass tiles, cellophane and tissue paper collages. The program concluded with a showcase of student works, where students had the opportunity to share feedback and critique one another's work.

DATA

- Total Students Served: 406
- Total Number of Classrooms Served: 18
- Total Number of Instructional Hours: 72
- Grades Served: 3th, 4th, 6th, 7th, 8th, 10th, 11th, 12th

Partnered Schools (5)

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



DETAILED INFORMATION

By Organization

MIAMI BEACH BOTANICAL GARDENS

The Miami Beach Botanical Garden's STEAM curriculum provided students with a hands-on introduction to the glorious world of plants and wildlife. The 2nd graders learned components of soil and the living communities within them, how to create a good soil to grow flowers and vegetables, basic needs of plants and compared them to their own, importance of pollinators and natural habitats. Students got to make their own soil and plant seeds to take home and grow themselves. They planted herbs and wildflowers into a class garden bed at school. Lastly, they got to explore different areas of the Miami Beach Botanical Garden including the native garden, Japanese garden, and the compost hub. They got to see the connection between plants, people and wildlife and what we are doing to help benefit all.

Many students had never gardened or have had the opportunity to visit a botanical garden. These activities opened students to new perspectives of their world by exposing them to nature and a deeper understanding of the natural world. Getting young children exposed to these topics can help them learn their interests and influence future generations to become the next decision makers.

DATA

- Total Students Served: 174
- Total Number of Classrooms Served: 8
- Total Number of Instructional Hours: 66
- Grades Served: 2nd

Partnered Schools (2)

- Biscayne Beach Elementary
- Miami Beach South Pointe Elementary



DETAILED INFORMATION

By Organization

MIAMI CHILDREN'S MUSEUM

The Miami Children's Museum brought their theater troupe to Fienberg Fisher K-8 Center to perform Building Noise. The performance follows an ordinary workday of three construction workers who don't build walls or towers but instead build noise. Through body percussion, everyday objects and boom whackers, the builders build rhythm and songs to get through their day. This interactive piece concludes with the students building one giant soundscape. To keep in line with the building theme, the set is created out of Imagination Playground. The construction workers worked with students to facilitate a gigantic building experience.

DATA

- Total Students Served: 88
- Total Number of Classrooms Served: 4
- Total Number of Instructional Hours: 4
- Grades Served: 4th

Partnered Schools (1)

- Miami Beach Fienberg Fisher K-8



DETAILED INFORMATION

By Organization

MIAMI CITY BALLET

This year, Miami City Ballet's Explore Dance program was inspired by classical ballets, Swan Lake, Jewels and the Nutcracker which were performed by Miami City Ballet's professional dance company during the 2021-2022 season. Through creative movement, Miami City Ballet Community Engagement dance teaching artists used the works as a point of entry to enhance academic content through dance. The residency helped build culture, support social-emotional competencies, affirm arts learning through interdisciplinary practice. STEAM subjects specifically in Science, Math, and Dance are the content alignment for our dance residency programs.

Partnered teachers and teaching artists combined content with dance to create lessons that engage kinesthetic retention of key concepts and developed the opportunity to learn through movement in space individually and as a classroom team. Arts integration resulted in refinement of critical thinking skills, historical and global connections, and capacities for imaginative thinking and innovation. Both story ballets hold rich content and make natural connections not only in their literacy but in nature, geographical location, music, and culture.

Through dance and movement, students were able to explore state standards with an end goal of creating a dance or creative reflection providing evidence of their successful learning.

DATA

- Total Students Served: 598
- Total Number of Classrooms Served: 25
- Total Number of Instructional Hours: 250
- Grades Served: Kindergarten, 1st

Partnered Schools (5)

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



DETAILED INFORMATION

By Organization

MIAMI NEW DRAMA

Miami New Drama offered the MasterMiND Youth: Technical Theater & Design Intensive for Miami Beach Sr. High students. Interactions were led by professional theater technicians and educators to cover topics such as light board programming, computer-simulated 3-D visualization, computer-aided drafting for costumes, lighting, and sets, projection mapping and media servers, and sound design and engineering. Students participated in a “tech fair” and a field trip to the Colony Theatre where students were able to see how all of these pieces work into a real-life theater and event setting. Students learned how technology assists the artistic design process as well as see direct real-world applications for learning science, technology, and mathematics within a creative and inspiring environment.

DATA

- Total Students Served: 75
- Total Number of Classrooms Served: 2
- Total Number of Instructional Hours: 40
- Grades Served: 9th-12th

Partnered Schools (1)

- Miami Beach Senior High



DETAILED INFORMATION

By Organization

MOONLIGHTERS FABLAB

Students were introduced to the Design Thinking Process. This process has a 5-step approach to solving problems. It encourages the designer to think of the person that they're creating the product for - and consider many factors as they determine how to create the object. The 5 steps are: empathize with your client, define the problem, sketch out many ideations, prototype the best solution, and test to see if it actually solved the problem. Students design a series of projects for their fictitious clients using the design thinking method during our 8 weekly program interactions. They designed a series of wearables such as sportswear outfits, wearable communication devices, and protective gear for their clients. Each of these designs had to have an element that was inspired by their client and an electronic component. Students learned about the basics of circuitry. We introduced the students to two types of circuits: series and parallel series. They had to incorporate one of these types into each of their designs. Students were excited to do various examples of circuits which allowed them to understand and explore different ways that electricity works and flows. Additionally, the students were able to take home their projects and share with their families what they had learned and created in the program. We noticed that the students were thrilled about taking home their creations.

DATA

- Total Students Served: 85
- Total Number of Classrooms Served: 3
- Total Number of Instructional Hours: 40
- Grades Served: 5th

Partnered Schools (1)

- Miami Beach Fienberg Fisher K-8 Center



DETAILED INFORMATION

By Organization

WOLFSONIAN - FIU

Each student received a STEAM zine-making supply kit, shipped to the school for distribution. All STEAM Zine work was conducted during the classroom sessions, although students were asked to make topic- related observations as they go about their day-to-day life. STEAM Zine students first identified and researched a topic related to environmental responsibility. They then designed and created a zine that presented the students' research and solutions. Students were introduced to zine-making techniques and the innovative discipline of "illustrated research" (scientific communication that combines images and design with research findings in a visually engaging and accessible form).

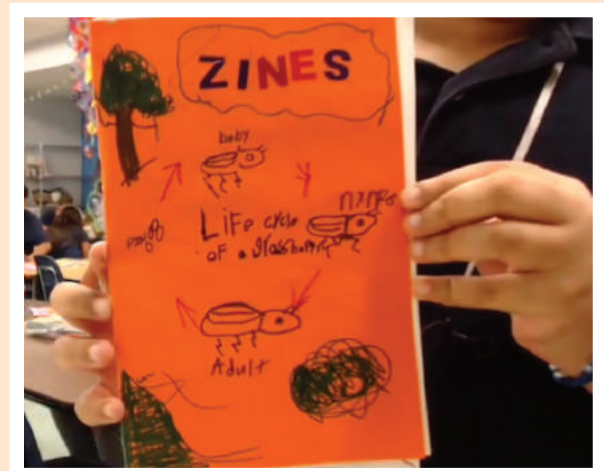
Through STEAM Zine students learned how to find and interpret scientific research (about greenhouse gas emissions, for example, looking at current emissions data and the impacts of mass transportation), how to apply that research to their own lived experiences, how to express research findings in relatable stories, and how to storyboard, design, and create a zine using found and original artwork that aligns with the climate-related story they're telling. Students gained an understanding of how scientific research connects to their lives, and gain the capacity to address urgent matters as problem-solvers.

DATA

- Total Students Served: 171
- Total Number of Classrooms Served: 8
- Total Number of Instructional Hours: 37
- Grades Served: 3rd, 5th

Partnered Schools (2)

- Biscayne Beach Elementary
- Treasure Island Elementary



DETAILED INFORMATION

By Organization

YOUNG MUSICIANS UNITE

The Young Musicians Unite (YMU) program consisted of four different approaches to music (Modern Band, Beginning Band, Strings, Guitar) depending on grade level, schedule, and number of students and a curriculum that ranged from virtual masterclasses inspired by The Beatles to direct activities with students in the classroom. With Modern Band students had a closer approach to music through courses that provided basic skills for the learning of guitar, bass, keyboard and drums. In Beginning Band students learned to read music, ran through technical exercises, and experienced working as a unit in preparation for end of semester performances. And in the Strings and Guitar program students developed technical and personal skills (i.e., patience, discipline, persistence) needed to set up for a good practice session.

The YMU curriculum contributed to the music program in different schools through exercises organized by week. The curriculum includes repertoire, music literacy, and technique exercises and has become a great tool in measuring the program's success through bi-weekly observation and live presentations in Winter and Spring shows.

Young Musicians Unite STEAM+ program helped provide students the technology that allowed for interactive and proactive learning. Our collaboration promoted the well being of the student community by providing students with activities, masterclass and technology based interactions designed to guarantee access to music education where it otherwise would not exist. Additionally, the program helped to bring back in-person activities in schools where families were able to share student concerts and live presentations in both open and closed spaces.

DATA

- Total Students Served: 1,293
- Total Number of Classrooms Served: 30
- Total Number of Instructional Hours: 360
- Grades Served: 5th - 12th

Partnered Schools (4)

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



MORE ABOUT STEAM PLUS



Aim your phone's camera at the QR code here for more information on STEAM Plus.



Aim your phone's camera at the QR code here for a slide show of pictures from the program.