

**LOUD N' CLOUD**



**FINAL  
PRESENTATION**



*Victoria*



*Laura*



*Tatiana*

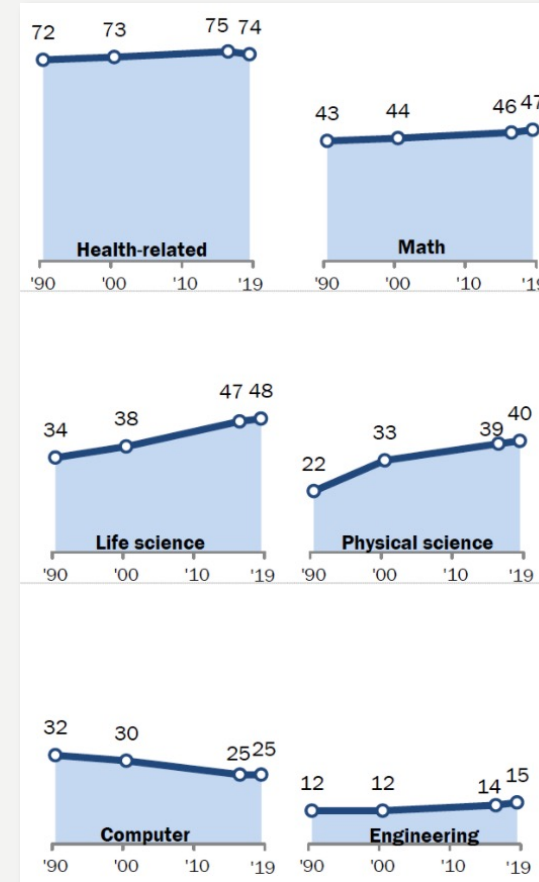
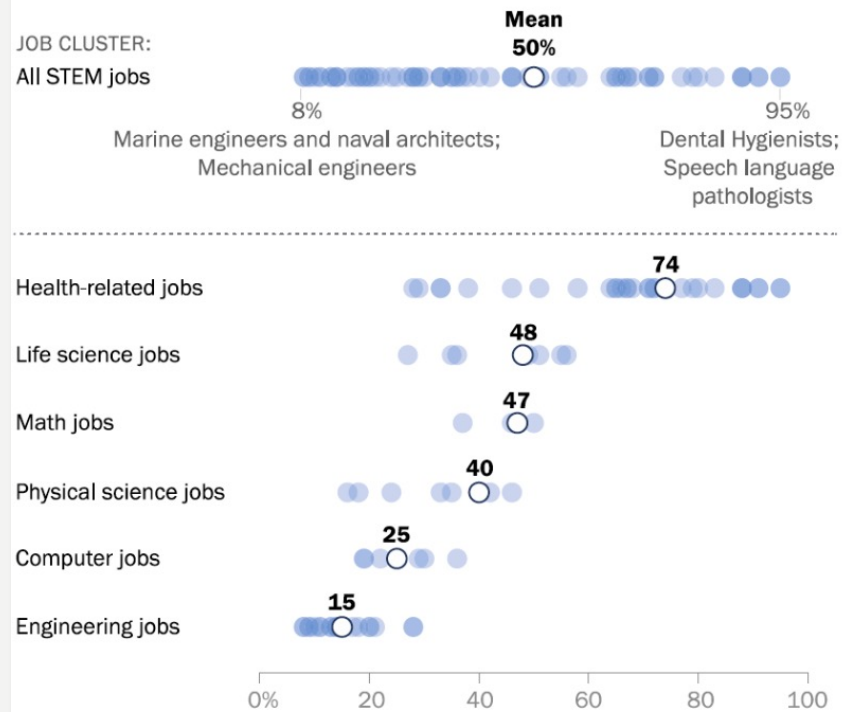


*Anais*

# THE STEM GAP IN THE U.S. WORKFORCE

## Representation of women in STEM varies across job clusters

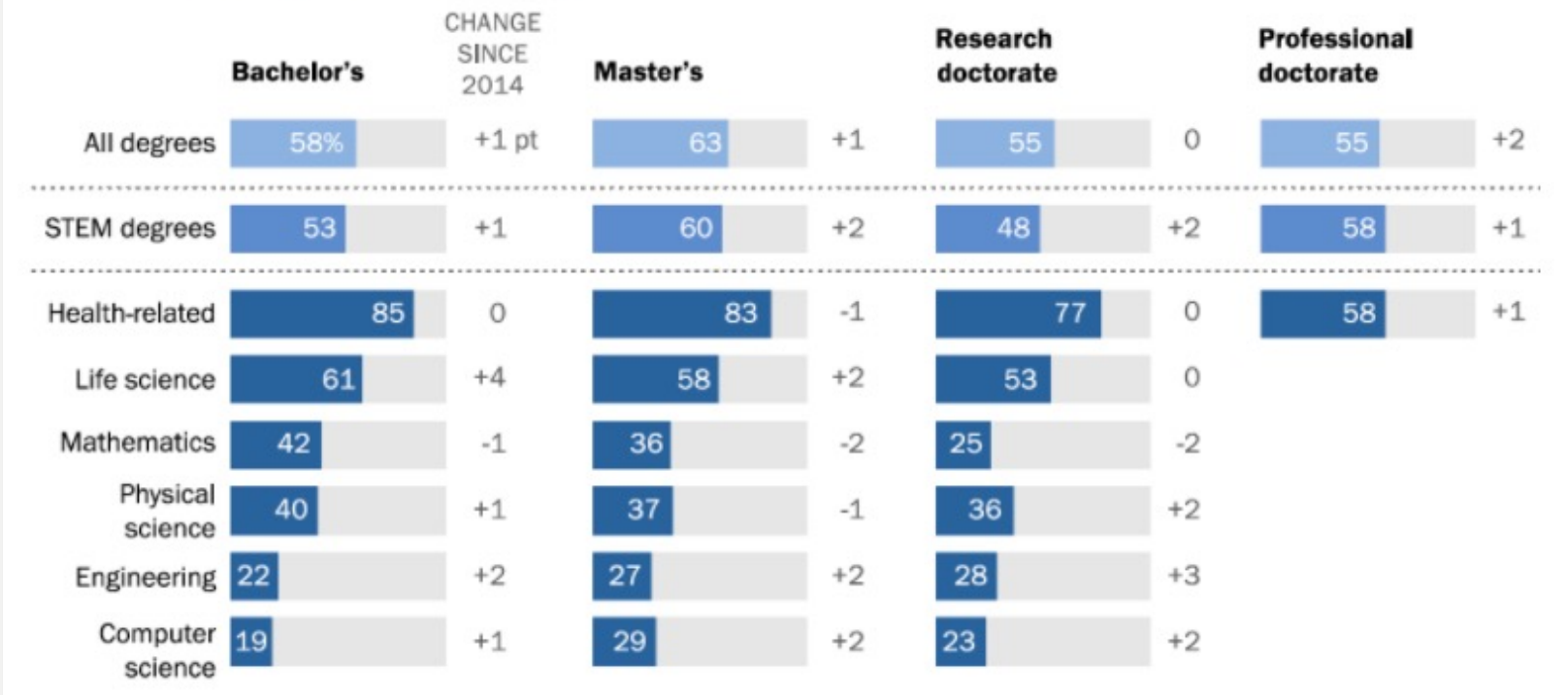
Share of women in each of the following job clusters



# THE STEM GAP IN U.S. HIGHER EDUCATION

## Women are underrepresented among graduates in math, physical science, engineering and computer science

*% of degree recipients at each level who are women*



# POTENTIAL CAUSES OF STEM GAP:

- Underestimation of math ability
- Heightened math and spatial anxiety
- Lack of female representation in STEM



# DATA SETS

Midfield in  
South  
Florida

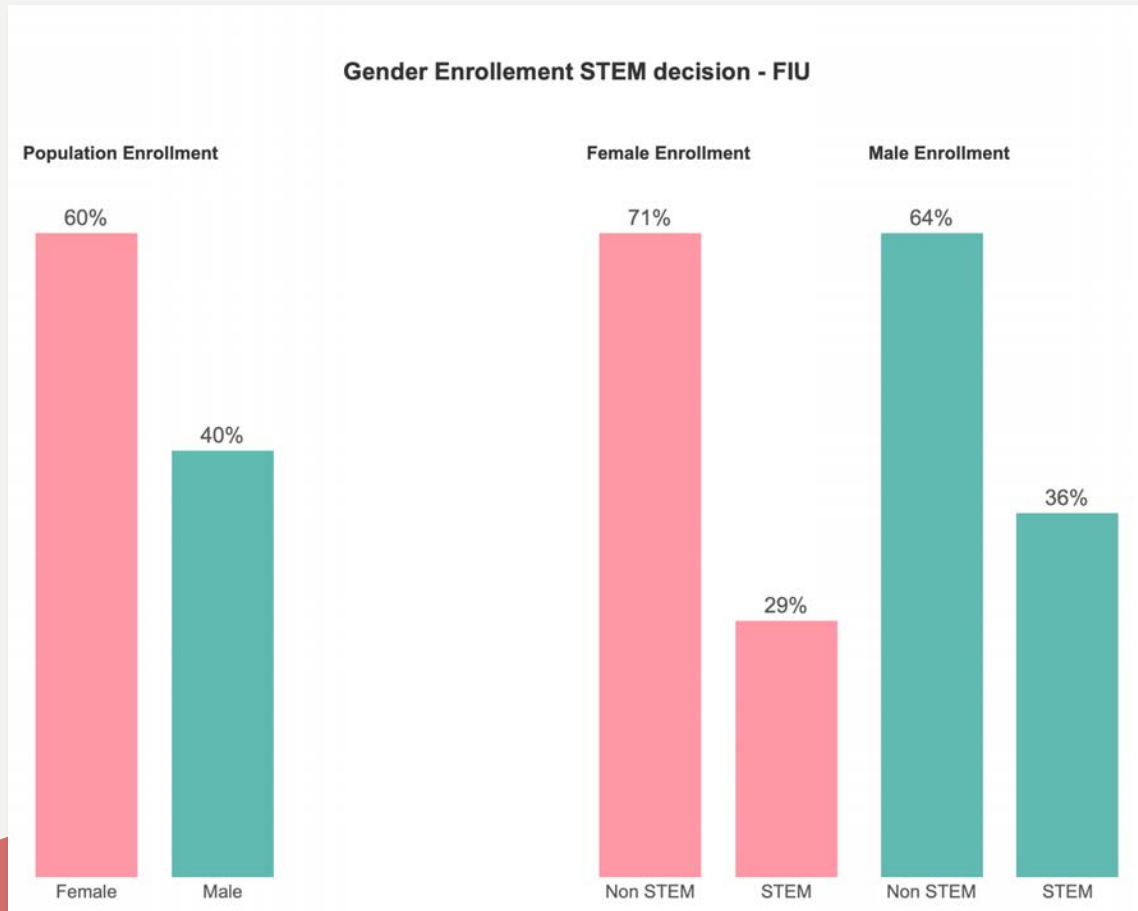
High School  
in South  
Florida

FIU

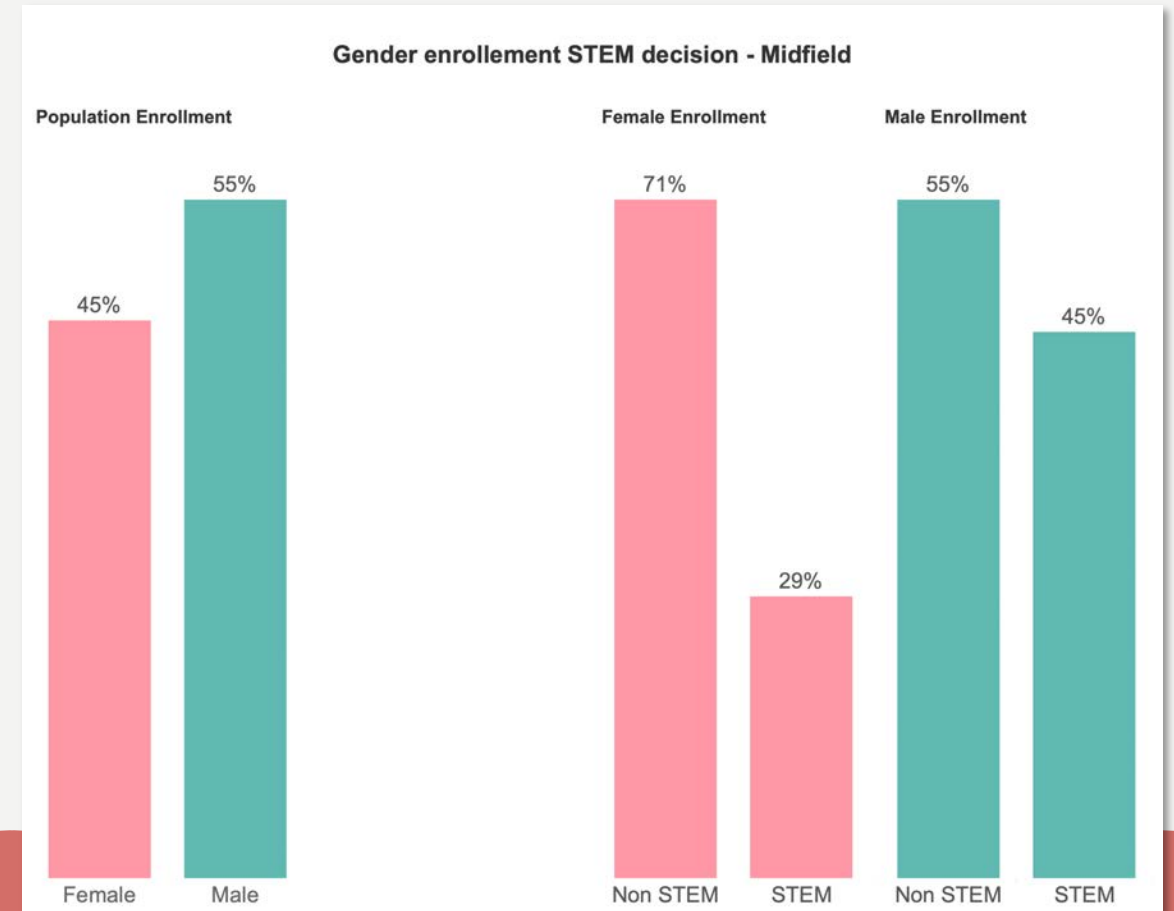
Survey

# GAP BETWEEN MEN AND WOMEN IN THE STEM FIELDS

## FIU DATA SET



## MIDFIELD DATA SET





## FINDINGS

*We extracted overlapping trends after cleaning extensive data sets. Today we want to address solutions for the following:*

- **N1:** The lack of distribution of women within the different STEM fields
- **N2:** Gap between Men and Women's scores in the standardized tests
- **N3:** Career selection stage
- **N4:** Image of 'Women in STEM'

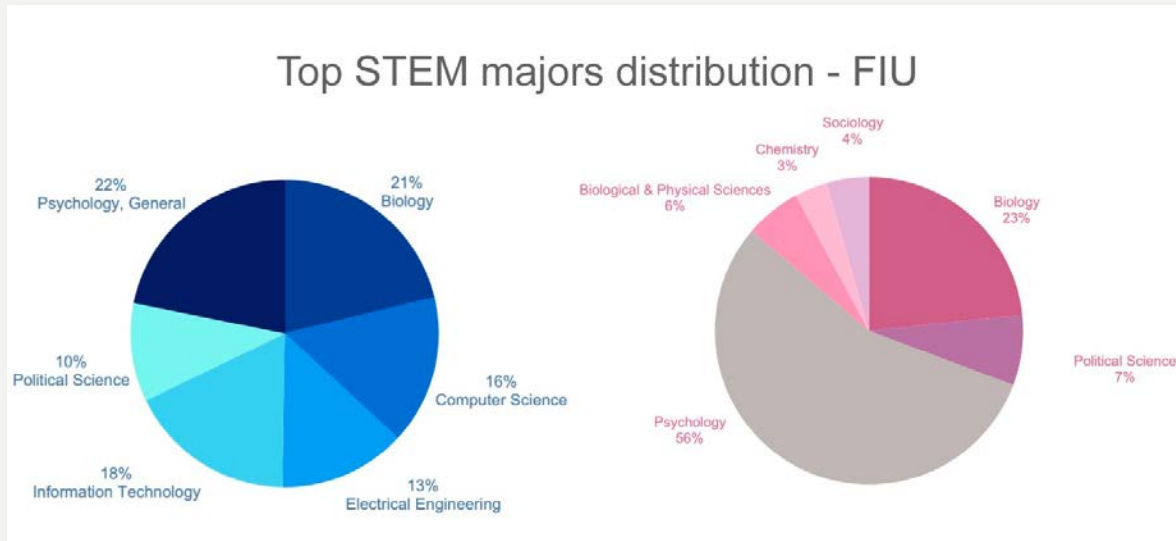




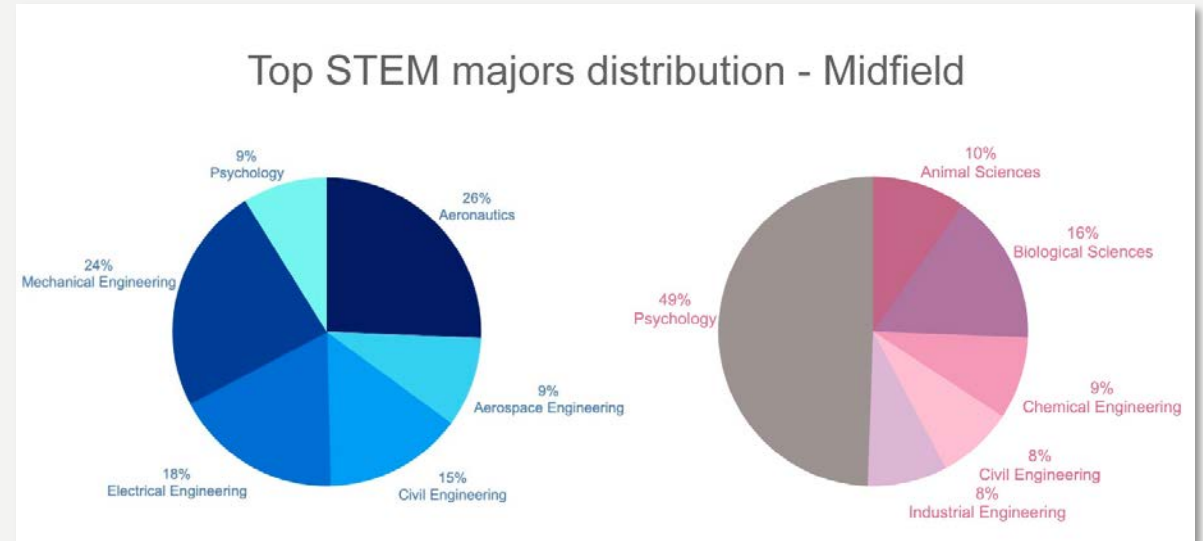
# FINDINGS N1 & N2

# N1: THE LACK OF DISTRIBUTION OF WOMEN WITHIN THE DIFFERENT STEM FIELDS

FIU DATA SET

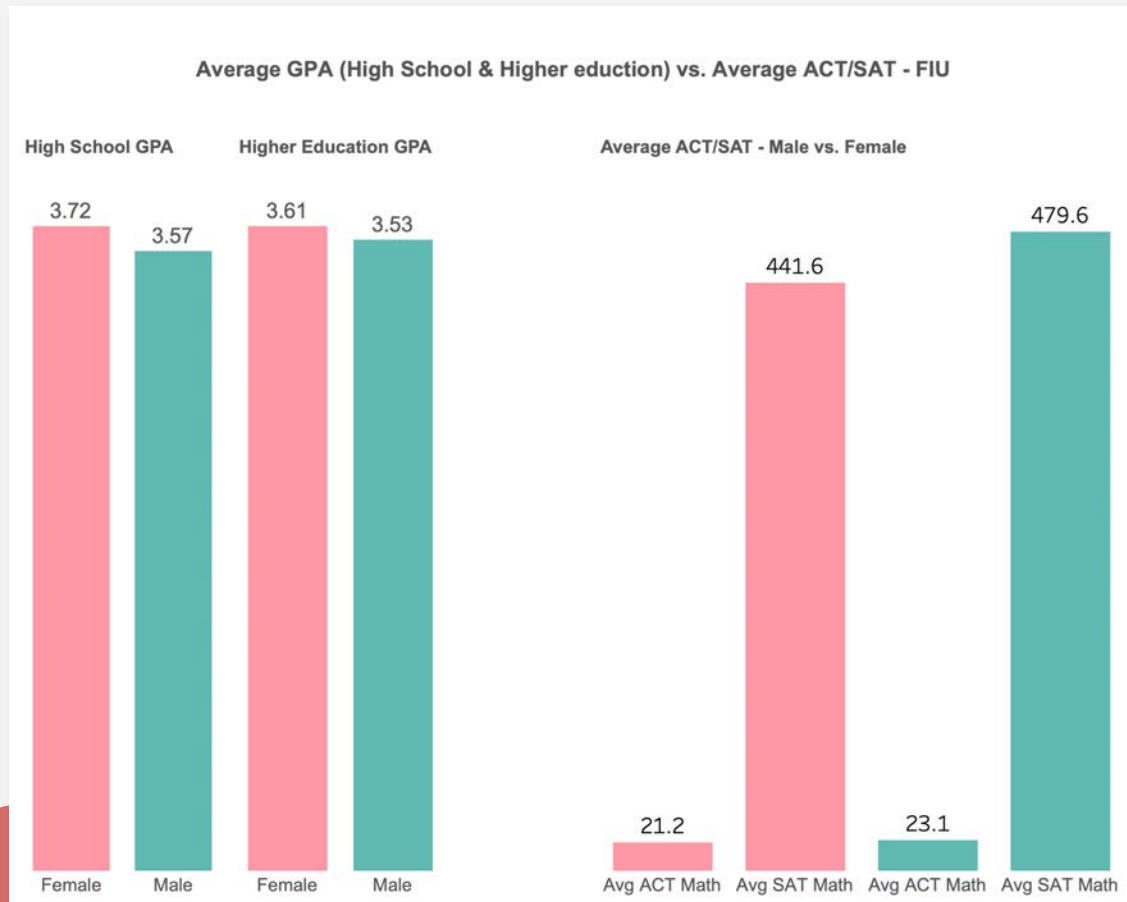


MIDFIELD DATA SET

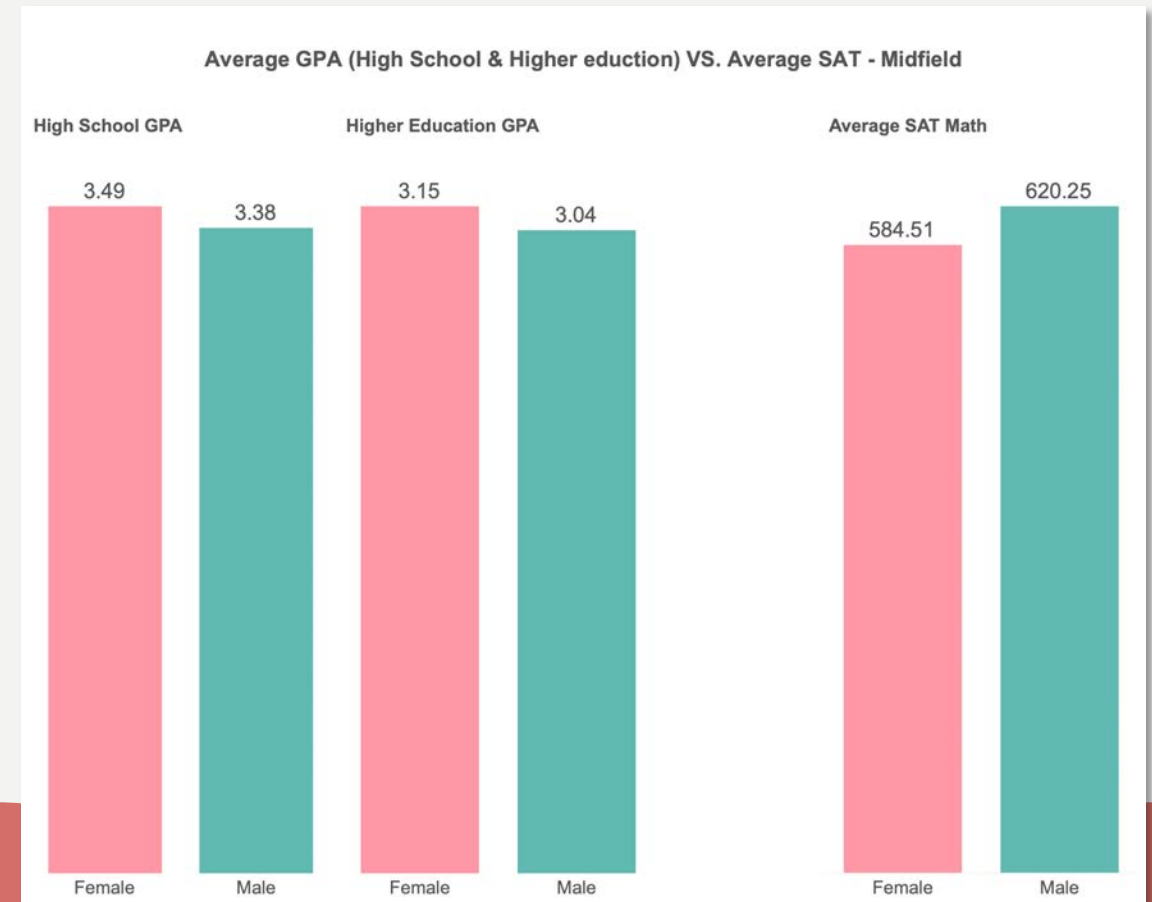


# N2: THE ACADEMIC CRITERIA THAT WOMEN FACE WHEN JOINING STEM FIELDS

## FIU DATA SET



## MIDFIELD DATA SET

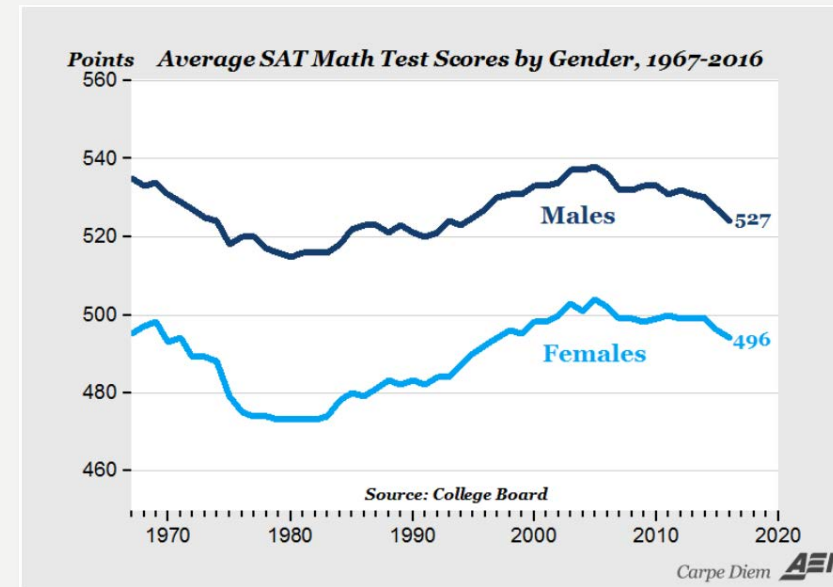


## N2: THE ACADEMIC CRITERIA THAT WOMEN FACE WHEN JOINING STEM FIELDS

According to case studies that have been done in the past, this was first reported in 1985, where researchers found a gap in both average scores.

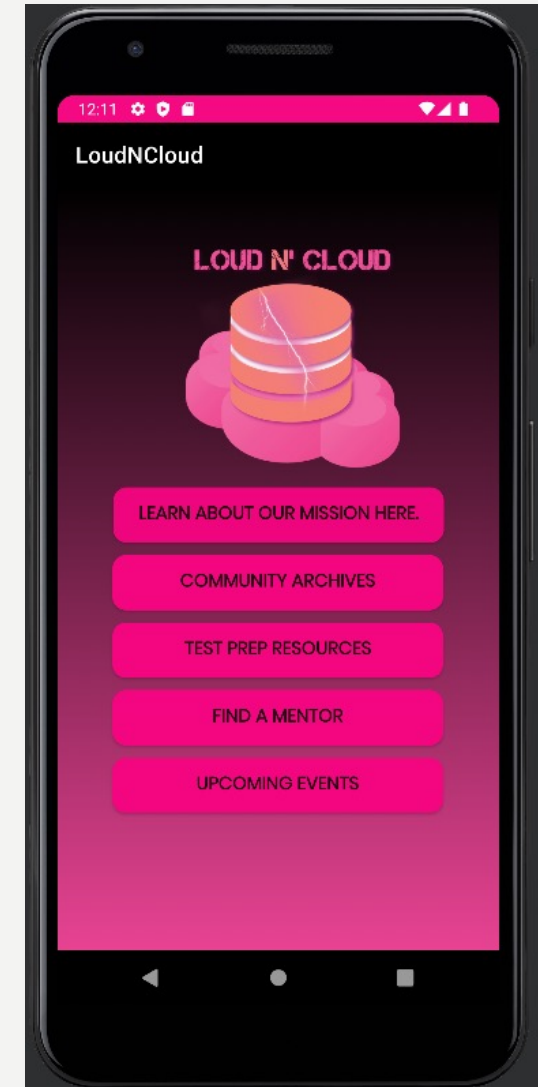
This is believed to be because of two reasons:

- The math section used to have a heavier weight and males tended to score higher than females on it.
- Most questions were worded in a male-oriented manner.



# OUR SOLUTIONS

*We decided to not only think about it... We made it happen!*



# UPCOMING FEATURES

We decided to not only think about it... We made it happen!

## Explore Degrees

Find your STEM match!  
We will assist you in this exciting journey

I am:

High School

Bachelor Degree

Master Degree

Doctorate

I love: (check all that apply)



Science  Technology  Engineering  Mathematics

Next

## Explore Degrees

Find your STEM match!

**T**echnology

Data Analysis ⊕  
Computer Forensics ⊕  
Computer Information System ⊕  
Computer Science ⊕

Computer science is a major for problem solvers who want to learn how to use computers and computational processes to build websites, program robots, mine data and more. Computer science majors may go on to master's or doctorate programs in the field, and they can work in research and industry.

[Add to my career plan](#)

Cybersecurity ⊕  
Software Engineering ⊕

Load more >>

## Explore Degrees

Find your STEM match!  
**Yay!**

Computer Science was added to your career plan

Go to your profile and check everything you need to start your journey in a STEMtastic world!

Data Analysis ⊕  
Computer Forensics ⊕  
Computer Information System ⊕  
Computer Science ⊕  
[See Career Plan](#)

Computer science is a major for problem solvers who want to learn how to use computers and computational processes to build websites, program robots, mine data and more. Computer science majors may go on to master's or doctorate programs in the field, and they can work in research and industry.

[Add to my career plan](#)

Cybersecurity ⊕  
Software Engineering ⊕

Load more >>

## Career Plan



Computer Science

### Top Universities

MIT - [Visit website](#)

Cornel - [Visit website](#)

Harvard - [Visit website](#)

Georgia Tech - [Visit website](#)

[See all universities >>](#)

### Core Courses

Machine Learning ⊕

Computer Architecture ⊕

Data Structure ⊕

Calculus ⊕

[See all courses >>](#)

### SAT/ACT Scores:

SAT QUANT ⊕

My score from 04/01/2022 AVG for Top Universities:

**1498**

**1500**

[Update my score](#)

[Update my goal](#)

[Explore SAT resources >>](#)

### Prerequisites

Computer science majors must study calculus to earn their degrees, and other relevant math courses include statistics and linear algebra. Introductory computer science classes cover topics like algorithm design, computer organization and abstract data types.

Want to explore other majors?

Find your STEM match!

We will assist you in this exciting journey

[Explore degrees >>](#)

[Remove from my career plan](#)



[Change my profile picture](#)  
[Delete my profile picture](#)

Hey Laura!

[Update my info](#)

Saved communities:

SHECODES - [Visit website](#)

Rladies - [Visit website](#)

Career plan(s):

Computer Science - [See my plan](#)

Information System - [See my plan](#)

SAT/ACT Scores:

SAT QUANT ⊕

My score from 04/01/2022 Goal:

**1498**

**1600**

[Update my score](#)

[Update my goal](#)

[Explore SAT resources >>](#)

Registered Events:



Introduction to STEM

[Learn more >>](#)

[Register >>](#)



Miami Tech Run 5K

[Learn more >>](#)

[Register >>](#)

[See all the events >>](#)



# FINDING N3

# N3: DEGREE DECISION MAKING

## SURVEY DATA SET

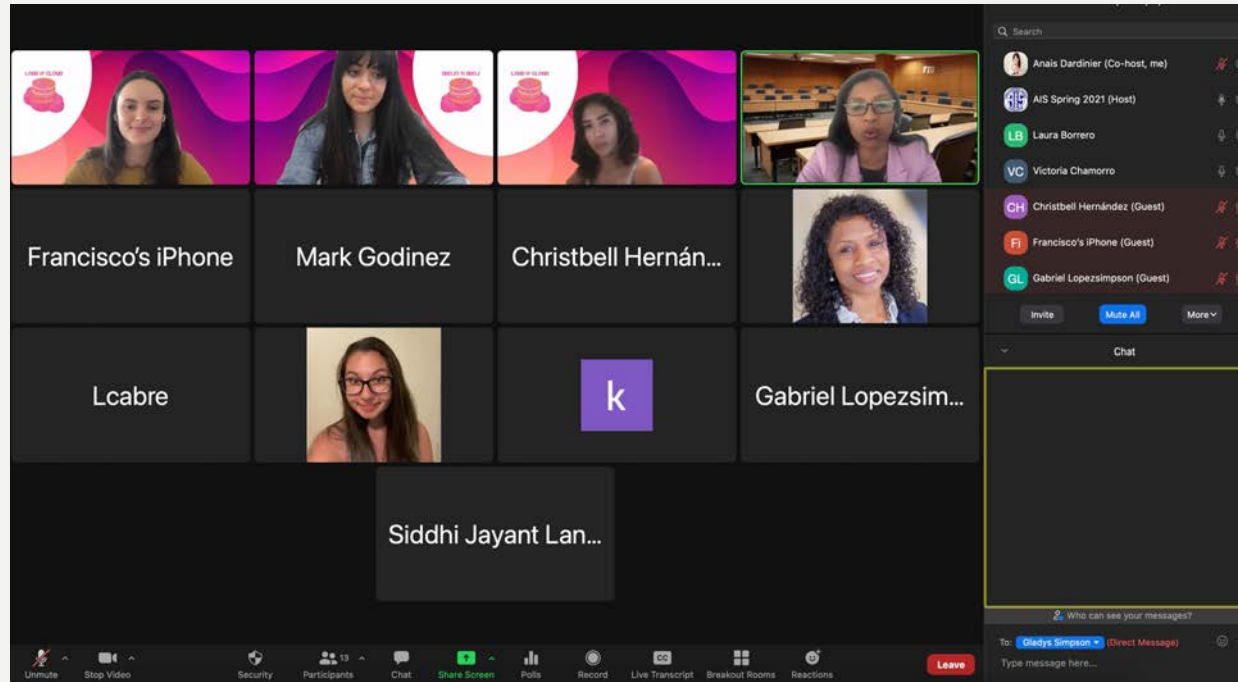
### Career Path Decison





# OUR SOLUTIONS

*We decided to not only think about it... We made it happen!*



## Introduction to STEM

Thursday, March 31, 5:00 pm - 6:00 pm

### ATOM PINK TANK

FIU Business

Are you a high school student and want to learn more about STEM majors? This online event is for you!

**BONUS: 3 PRIZES TO WIN**

**About LOUD N' CLOUD:**

We are working towards **empowering** women in STEM. We all know that tech is a fast-growing field, and, although not **unseen**, it is not yet very common to see women thriving in it. We want to change this and **be seen!** Join us in this movement and follow us to keep up with what we do!

**SCAN THE QR CODE TO JOIN THE EVENT!**

**OR GO TO:**  
[GO.FIU.EDU/LOUDNCLOUD](https://go.fiu.edu/LOUDNCLOUD)

**QUESTIONS?**  
[ADARD011@FIU.EDU](mailto:ADARD011@FIU.EDU)

Organized by:

The bottom section features three logos: LOUD N' CLOUD (a stack of pink and orange circles), ATOM PINK TANK (a pink circle with white text), and the Florida International University Student Chapter logo (a circular emblem with a globe and text).



# FINDING N4

# N4: THE NEGATIVE STEREOTYPE THAT WOMEN IN STEM HAVE

## SURVEY DATA SET

Answers describing the image of a **Women in Tech** from a non STEM individual perspective



Answers sample highlighting Negative Stereotypes from a non STEM individual perspective

Closing the gender gap

Women in stem bumper stickers

I see a nerd, with glasses, shy, not pretty

I hope more women get to be in tech so it would come to a point were you don't have to say "women in tech"

Not enough women in tech. There should be more women interested in the STEM fields. I think that society has made women lean towards communication studies rather than something they are passionate about.

powerful driven women who are breaking the norm

Yay more women A poster depicting women with science beakers

Empowering women breaking social norms Women wearing glasses

Nerdy, boss, intellectual Cut throat



201 likes

thestemdiaries the new cropped hc yours now with the l

**chloetheengineer**

625 Posts 10,3 k Followers 931 Following

Chloe | Engineer & Speaker  
Digital creator  
#StompingOutStereotypes of Women in STEM  
Professional Civil Engineer (PE)  
STEM Advocate | Real Estate | Dog Mom  
linktr.ee/Chloetheengineer  
Followed by codeartorg, naomi\_lima and 5 others

Following Message Contact +

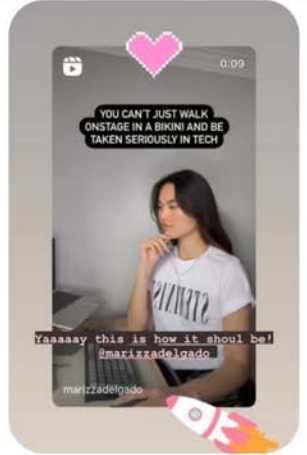
PE Journey Home Reno 2 Be Both Dog Mom #pipe



gracemacjonez "It always seems impossi... we celebrate the incredible women... g the impossible and breaking ster...



bigdataqueen Liked by nilo.siqueira and others  
First of all, don't try this at home! While it's suggested to try the gingerbread sweater and even the cookie itself, the rest is just... more



Only you can see this

THU 00:35

Hi! Yes feel free to share my story during your presentation - I will actually be out most of April due to surgery so I won't be able to be present anything, but this project sounds great! Best of luck xx!!



Mentioned you in their story

THU 10:05

You mentioned Marizza Delgado | STEMminist

Message...

# OUR SOLUTIONS

*We decided to not only think about it... We made it happen.*



**AA Ariana Alvarado** Tuesday  
To: Anaïs & 1 more... >

**Re: Stem Challenge**

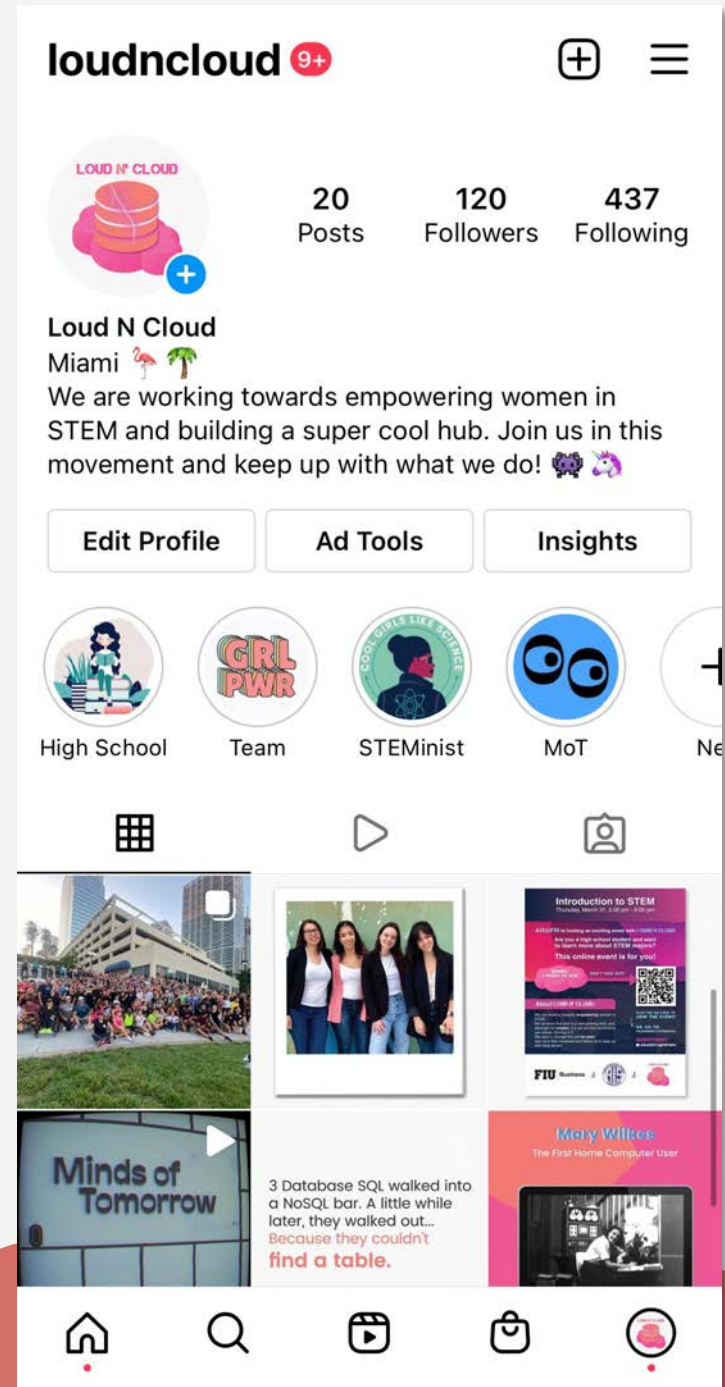
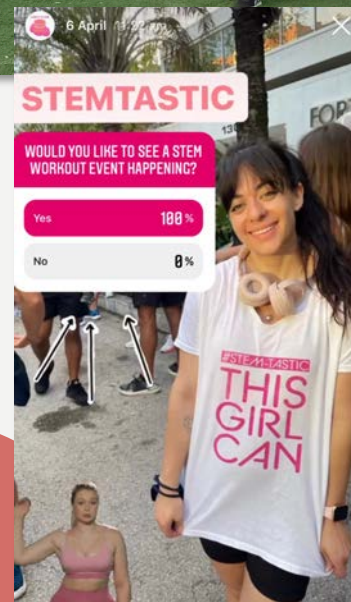
Hey Anaïs!

This is definitely something that we would love to host at CrossFit Wynwood. I just need a little more info logistics wise

Do you have a date in mind that would work?  
How long will the event run?

We look forward to working with you on such an amazing cause

Best in Health and Better in Life  
Ariana Lina Alvarado



# SOLUTIONS



Our scale



Higher scale

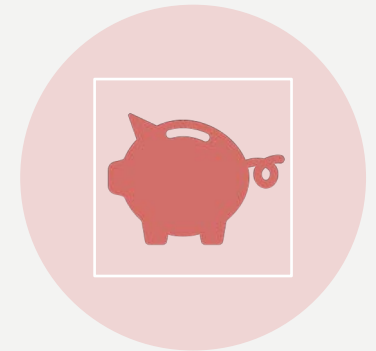
# LACK OF AWARENESS AND CAREER SELECTION



The Board of Education should create a program that is implemented during senior year of high school which encourages the discovery of micro internships or shadowing opportunities (encouraging STEM fields)



Companies should create more STEM rotational programs.  
Companies should partner with high schools on STEM discovery micro internship for high school students.  
Companies such as BankUnited, create STEM challenges with local high school and universities.

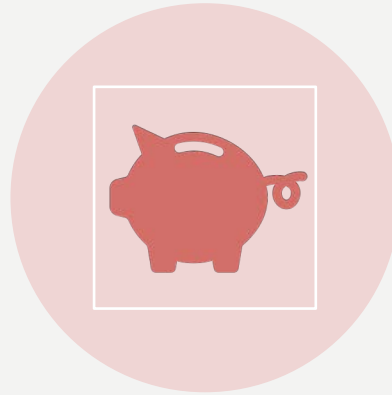


Tuition fee incentives and/or scholarships for women in STEM fields with a focus on merit scholarships

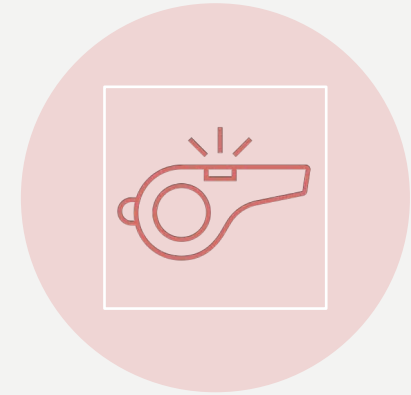
# THE ACADEMIC CRITERIA THAT WOMEN FACE WHEN JOINING STEM FIELDS



Rework the standardized tests and questions to reduce the gap between male and women



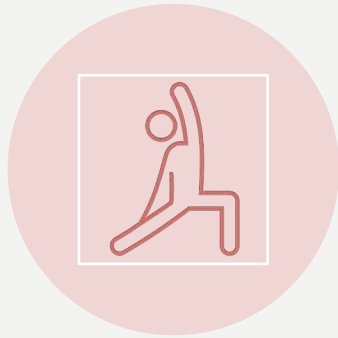
Government funding to support low income students, specifically grants that cover SAT/ACT exam cost.



Funding for ACT/SAT coaching in high school



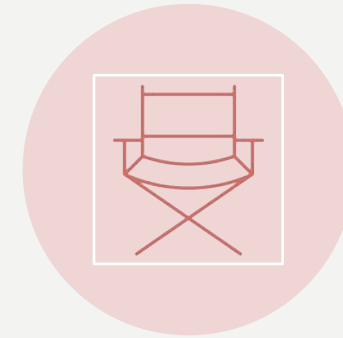
# THE NEGATIVE STEREOTYPE THAT WOMEN IN STEM HAVE



Organize social events to show women in STEM as multifaceted and elsewhere than behind a computer or in a lab



CEO should acknowledge successful women in STEM within their company and highlight them.



Incentivize publishing and production companies to feature more women that specialize and thrive in STEM fields

Dr. Dandrielle Lewis, mathematic professor, hopes “Hidden Figures” will help convince more women and people from underrepresented populations that they can find success in the STEM fields

“Women in STEM is a movement, and this movie inspires people, not just women, to become advocates of change in STEM whether they are in STEM or not. It’s bigger than women only.” *Dr. Dandrielle Lewis*



# RECAP

## OUR SCALE

Created a website whose purpose is to provide women with resources, networking, and advising they need to pursue a career in STEM.

Created a mobile application whose purpose is to complete the website and have access to the resources at any time.

Created a Instagram for our hub to discourage stereotypes and enlighten women in stem.

Hosted events, to bring together women in STEM

## HIGHER SCALE


Board of Education should create more STEM programs and scholarships

Companies should acknowledge and create awareness around women in STEM

Standardized tests should be reworked, and Government should unlock funding to support low income students and develops coaching programs with the Board of Education

Made recommendations to companies to host more social events and awareness around successful women in STEM to change the negative stereotypes

# SOURCES

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**LOUD N' CLOUD**



**THANK YOU!**

# Q&A

