



# INNOVATE(HER)

EXCELLENCE IN SPECIALTY ENTREPRENEURSHIP EDUCATION

The University of Texas at Dallas

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## **EXCELLENCE IN SPECIALTY ENTREPRENEURSHIP EDUCATION: INNOVATE(HER)**

### **TARGET AUDIENCE AND PROGRAM GENESIS**

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The target audience for Innovate(her) is middle school girls, typically in 6<sup>th</sup> to 8<sup>th</sup> grade and 11-14 years of age. The Institute for Innovation and Entrepreneurship at UT Dallas has had similar programs and summer camps over the years, but found the one-day conference style event to be the most effective way at giving the students an introduction to the topics and encourage them to think about entrepreneurship as a career option. The Innovate(her) curriculum was redesigned and updated in 2018 and is continually improved upon to ensure it is relevant, interesting, and effective.

The Institute believes this programming helps build a diversity pipeline for future entrepreneurs, encourages students to think about success in different ways, and teaches the students essential entrepreneurial skills.

### **PROGRAM OUTLINE AND EXPECTED OUTCOMES**

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Innovate(her) is a program for middle school girls educating them about technology, financial foundations, design thinking, personal confidence and entrepreneurial mindset. The Innovate(her) curriculum has multiple dimensions:

- a free one-day conference for middle school girls in the DFW area, held at The University of Texas at Dallas in partnership with Capital One;
- a workbook of modules on technology, design thinking, building confidence, and personal finances created by UT Dallas and Capital One;
- a network of women entrepreneurs, corporate professionals, and UTD students mentoring and guiding the students through a full-day of interactive, hands-on activities, with elective touchpoints available, year-round, on a school-by-school basis

Innovate(her) participants meet mentors from the community who work in a variety of corporate roles or have started businesses. The mentors spend the day with the girls, and work along-side them throughout the workshops. We believe this interaction is essential to inspire the girls to think about their future and introduce them to careers they may not have previously considered.

Mentors are recruited through the UT Dallas network of mentors as well as through Capital One Business Resource Groups for Women and Women in Technology and professional organizations. A wide variety of careers and interests are represented so the middle schoolers have an opportunity to meet someone who inspires them.

Each interactive module is one-hour of hands-on activity that teaches a “real-life” scenario for using what they are learning. In 2018, UT Dallas faculty and staff consulted to re-write the Innovate(her) curriculum, building in more exercises and illustrations. In 2021, the following modules were offered and students were able to choose what interested them the most:

- 1. Advanced Coding AKA “Bot Camp” – Facilitated by Capital One**  
Students learn coding fundamentals in order to create a Markov Chain Chat Bot.
- 2. Coders – Facilitated by Capital One**  
Students learn how to develop their own mobile apps using MIT App Inventor.
- 3. Logo Love – Facilitated by an Institute Mentor**  
Students explore the positive impact of self-confidence on their daily lives.
- 4. Design Thinking – Facilitated by Capital One**  
Students explore personal branding and design a logo.
- 5. Exploring Entrepreneurship – Facilitated by the Institute, UT Dallas**  
Students are introduced to activities involved in starting a new business.
- 6. The Power of Story-Telling – Facilitated by Toyota Marketing**  
Students explore storytelling as an art form and as a career development tool.
- 7. Effective Interviewing – Facilitated by the Career Management Center, UT Dallas**  
Students learn how to answer interview questions to show their skills.
- 8. Financial Foundations – Facilitated by Comet Cents, UT Dallas**  
Students learn about budgeting concepts and how to plan for their financial future.
- 9. Financial Futures – Facilitated by the Financial Leadership Association, UT Dallas**  
Students learn about Risk vs. Return, the Time Value of Money, Value Creation, and why it matters.
- 10. Robotics – Facilitated by Toyota Innovation, UT Dallas**  
Students build their own basic, 3-wheeled robot and program it to move.
- 11. College Readiness – Facilitated by the Office of Diversity, UT Dallas**  
Students learn how to choose the right college and steps for admissions.
- 12. Personal Branding – Facilitated by an Institute Mentor**  
Students answered questions to discover their personal brand and how to use it.

**Expected outcomes:**

- Increased participation by girls in entrepreneurship and STEAM
- Growth in mentor network participation by women involved in Innovate(her) as well as female UT Dallas students
- Opportunity for more women students at UT Dallas to get program-required service hours and potentially become more interested in entrepreneurship themselves
- A chance to highlight our women student-entrepreneurs as speakers as well as build more corporate/development relationships

## **UNIQUE CHARACTERISTICS**

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Many similar programs are offered only in the summer, are cost-prohibitive, not easy to travel to for students in low-income areas, or difficult to get into due to high-demand. We offer Innovate(her) during a regular school day, which allows the students to travel to their school as they normally would and then join their classmates for a field trip to the university. Some schools provide their own transportation and for those that cannot do so, UT Dallas provides busses for their students and chaperones.

Unique aspects of this program include:

- University and corporate sponsor partnership
- Engaging the community to serve as mentors for the day
- Engaging various schools and programs on campus to facilitate sessions
- Targeting middle school students rather than high school students
- Offered during a regular school day on the university campus
- Hands-on workshops
- Measurable outcomes through participant surveys

## **PROGRAM REPLICATION**

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Other schools could replicate this program by:

- Appointing a leader to develop and manage the initiative
- Building relationships with area schools to determine their needs
- Working across campus with different departments and schools to develop workshops
- Partnering with corporate sponsors to provide funding, guidance, and assistance in facilitating the event
- Building a network of women to serve as mentors through the university, local chapters of professional organizations, corporate partners, and entrepreneurial centers

## **SPECIFIC ACHIEVEMENTS**

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Participants are surveyed before the conference and at the end of the conference. The 2020 results are as follows:

22% increased interest in career in tech  
20% increased interest in becoming an entrepreneur  
36% increased understanding of STEM careers  
45% increased confidence in personal finance skills  
34% increased understanding of the design process

In addition, the program grew by more than 250% in middle school participants from 75 to 275 and grew in mentor participation by 200% from 2018 to 2020. The program grew in 2021 with the addition of workshops, facilitators, and volunteers as well as two additional partners, talkSTEM and Toyota.

Capital One contributes \$20,000 per year to the Innovate(her) program as part of their Future Edge initiative. In addition to their financial contribution, Capital One also recruits volunteers from their organization to help facilitate sessions and participate as mentors. Last year, Capital One provided more than 50 members from across their organization to support the program.

Innovate(her) won the 2019 Tech Titans University Level Award.

## **APPENDIX**

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### **1. PRESS**

[Inaugural Innovate\(her\) conference: Capital One, UT-Dallas partner to promote girls' interest in STEM](#), Fort Worth Business Press, 2018

[Program Earns Tech Honor](#), Discover Richardson, 2019

[UTD's Innovate\(her\) Program Gets Middle School Girls to Learn About STEM-Related Topics](#), NTX Inno, 2019

[Richardson middle schoolers participate in the annual Innovate\(her\) summit at UT Dallas](#), Community Impact Newspaper, 2019

[Photo Recap: Innovate\(her\) Conference Sparks Innovative Thinking in Middle School Girls](#), Dallas Innovates, 2019

[Students Build Robots at Capital One and University of Texas Dallas' Innovation Conference](#), Local Profile, 2020

## 2. TESTIMONIALS

Capital One and UTD have partnered on various initiatives since 2014. Together, we share a common goal to inspire and motivate girls, bridging the tech gap so that our future workforce will strengthen its skills needed to be more competitive as they prepare for jobs and colleges.

A 2017 article from Dallas Observer noted the skills gap for females in STEAM:

- Women earn only 28% of computer science degrees
- Only 7% of partners at top 100 venture capital firms are women
- After peaking in 1991 at 36%, the rate of women in computing roles has been in steady decline. Now, women hold only 25% of computing jobs
- Women hold only 11% of executive positions at Silicon Valley companies.

Innovate(Her) is another opportunity to elevate DFW as a destination for top talent, spur growth as a world-renowned technology hub and nurture the leaders of tomorrow. To date Innovate(Her) has reached more than 600 middle school girls from across the Metroplex.

It has been a joy to collaborate with UTD to bring this program to life and see such great success!

Following the 2018 program, the students showed an increase in:

- Interest in a technology career (15% increase)
- Interest in becoming an entrepreneur (33% increase)
- Confidence in their personal brand (13% increase)
- Understanding of design (27% increase)
- Confidence in their ability to handle personal finances (35% increase)

For me personally as a female executive in a technology organization, we need to develop more women in technology. That development starts with school age females - they need to see and hear from female role models to ensure they don't become disengaged with technology disciplines, as they are tomorrow's leaders. It's a proven fact that diverse teams are the most successful teams. To ensure that we have the most diverse (aka - the most successful) teams, women must have a seat at every table, and they should occupy 50% of the seats at any table. Innovate(Her) allows us to reach a greater number of students and instill a passion for higher education and careers in STEAM at an early age.

**Monica Shortino, Director, Social Innovation**

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"Innovate Her" is an interesting and popular program among my students. We have had the chance to go to this conference for the last few years. Our school 7th and 8th grade, female students look forward to going to this program, every year. This program is designed for our middle school girls to motivate them to look into STEM majors and create interest in studying science and technology.

The program is designed for all level students with different backgrounds. The students actually get to do real programming and coding, during one of their sessions. Then they are guided into planning a future business and to act as young entrepreneurs. They listen to professional accountants, engineers, lawyers, and many other interesting people as they talk about their jobs and challenges. The program is very unique and interesting. It is always well planned and informative. The volunteers do a good job of getting our students excited about going to college. UTD is a wonderful school and has a really cool and modern set up for this conference. The computer lab is amazing.

The next day, my students get to share their observations with the rest of the middle school students. Also, they get to wear cool shirts provided by the program. I think one of the best parts of the program is the fact that my students get to see and hear female professionals from many paths of technology and engineering. They also get to ask their questions from well-educated and informed people. It is also a wonderful lesson for my girls to see that these people volunteer their time and talents. Every year, my students actively work and pursuit into becoming engineers and scientists. With the help of the "Innovate Her", I can convince my young ladies that it is important for all of us to have female engineers and scientists.

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It was a rare opportunity for my students to be exposed to so many successful entrepreneurs in the metroplex and beyond. The experience helped them see that they could be part of such success in the future and that the only way to get there was by taking their education more seriously and reaching for careers in the STEM fields. Consequently, out of 25 students who attended the workshop, 15 have enrolled in the E-Tech collegiate sponsored by North Lake College.

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