



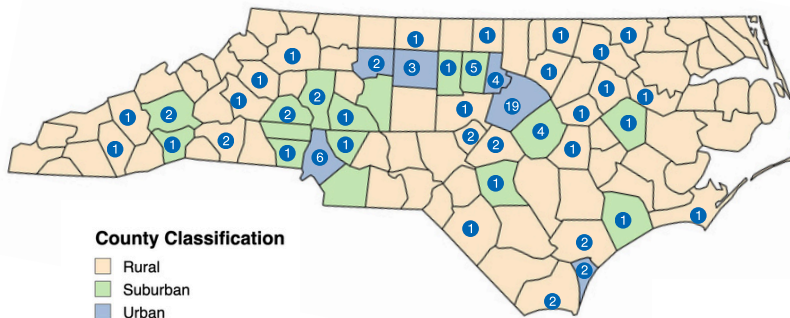
2025 Impact Report: Transforming Futures for NC Students

FIRST North Carolina is a state-wide nonprofit with a mission to provide life-changing high school robotics programs that give young people the skills, confidence, and resilience to build a better world. We want students to thrive in a high-tech world with an unbridled passion for engineering, the skilled trades, computer science, and corporate problem-solving. It is estimated that, over the next decade, 80% of jobs will require STEM skills. The hands-on approach of FIRST enables students to “test drive” a variety of skills to see where their interest and aptitudes fit.

Reaching students across North Carolina

FIRST North Carolina serves students at every starting point – from those with no STEM background to advanced coders and builders – creating inclusive pathways for growth.

All 2025 program participants:



87 Teams
42 Counties
1,945 Students

99%

plan to pursue a four-year degree

98%

plan to take advanced high school STEM electives

97%

plan to do an internship or apprenticeship

These results are more than numbers – they’re proof that FIRST North Carolina is building the future-ready workforce North Carolina needs.

Significant impact for students

In 2025, hundreds of high school students from across the state discovered new confidence, skills, and visions for their futures through the *FIRST* Robotics Competition. Survey results from 31.4% of all NC participants (611 individual student responses)—representing a wide-range of backgrounds – show remarkable and significant gains in STEM skills, identity, and aspirations.

Survey Participants:



33

counties represented



42%

first-year participants



38%

female



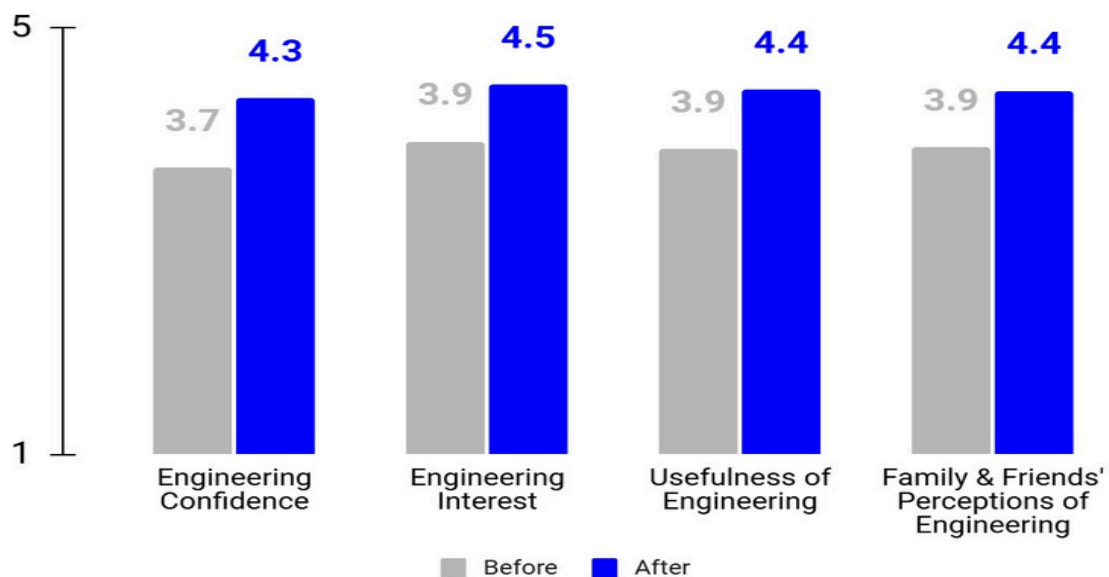
45%

Underrepresented populations*

*includes students who identified as Asian, Pacific Islander, Black or African-American, Hispanic/Latine, Indigenous, Multiracial/Biracial, or another racial identity not listed.

Students see themselves as Engineers

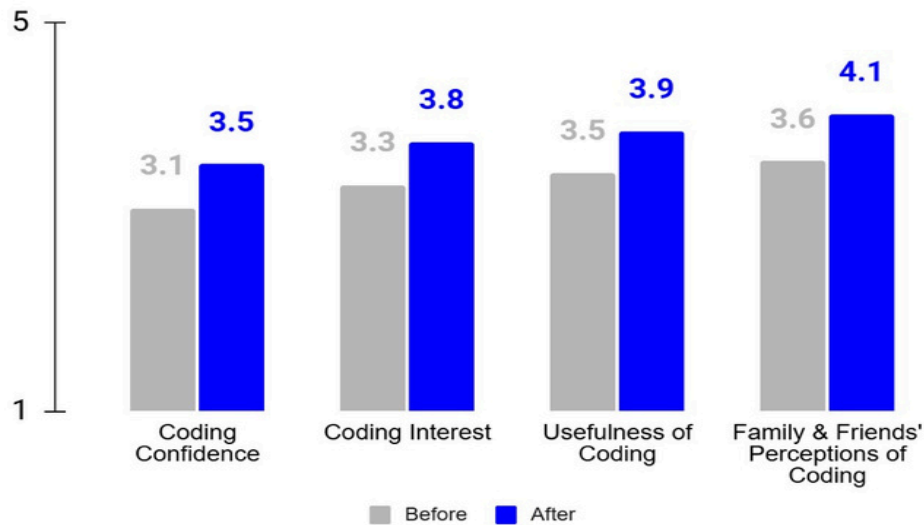
Students finished the program seeing themselves as real engineers, designers, and problem-solvers – a shift that can shape career choices for life.



Engineering Confidence saw the largest growth with an increase of +0.65 points. Each scale ranged in values from 1 (lowest) to 5 (highest). All changes were statistically significant ($p < 0.001$), and the program's effects were medium to large (Cohen's $d = 0.6-0.95$).

Students in all areas saw their coding confidence soar

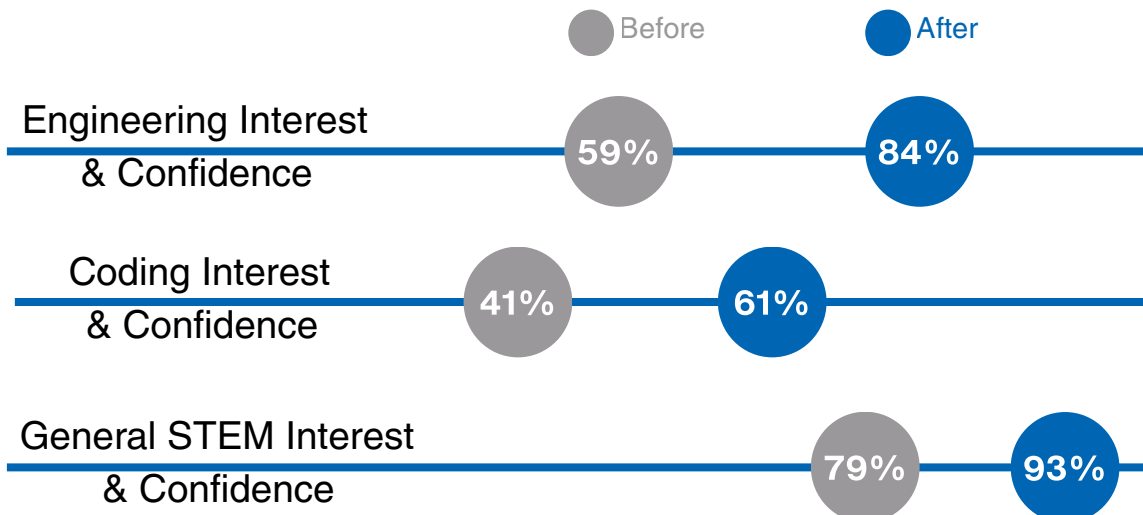
Student's overall confidence and positive beliefs about coding and problem-solving rose significantly. This measurable change in attitudes is statistically significant and educationally meaningful.



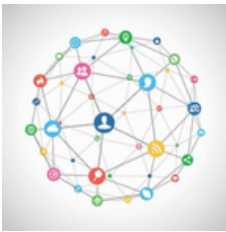
Each scale ranged in values from 1 (lowest) to 5 (highest). All changes were statistically significant ($p < 0.001$). The program's effects medium to large for confidence and social support (Cohen's $d = 0.6-0.8$), and slightly smaller for interest and perceived usefulness (Cohen's $d = 0.38-0.44$).

Rural students showed significant gains across every measure.

FIRST North Carolina is helping to close the rural gap – from engineering confidence to social-emotional skills – proving that FRC works even in areas with fewer STEM opportunities and resources.



Students reported that deeper connections made a powerful difference.

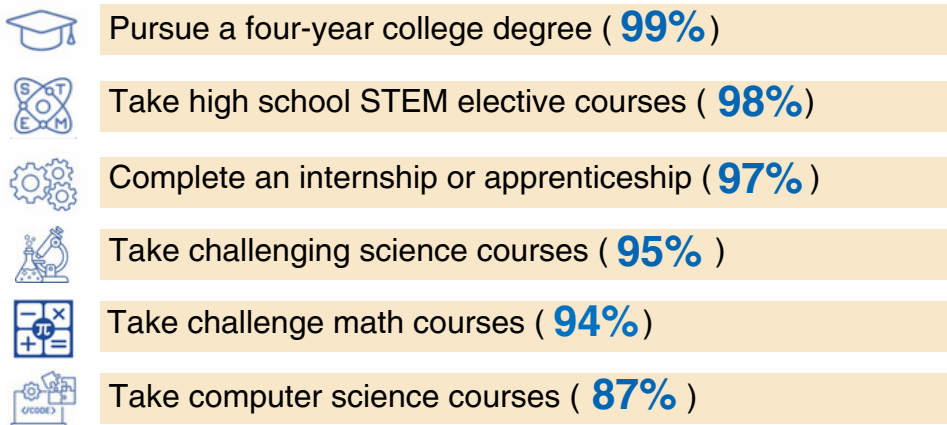


Social belonging, friendships, team support, and peer encouragement registered some of the highest positive changes – essential for retention and engagement in STEM.

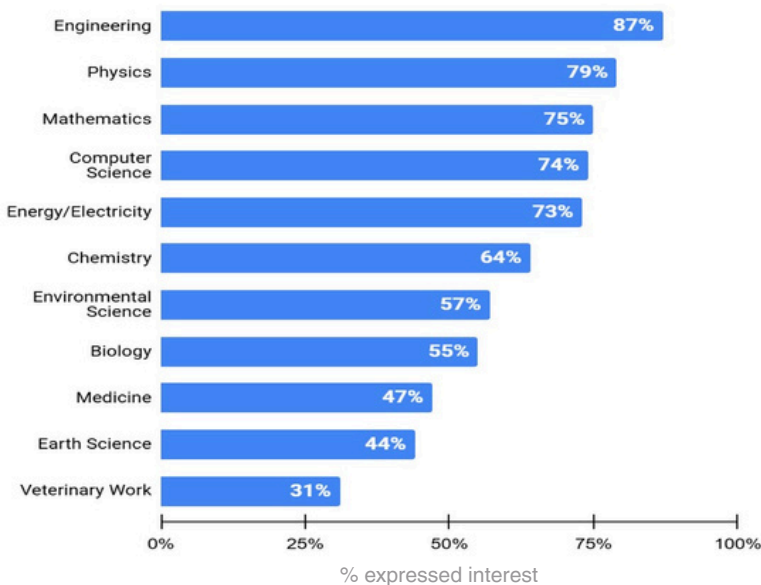
78%
reported growth

FIRST NC is growing the STEM pipeline

FIRST Robotics Competition students said they plan to...



Students expanded their future ambitions with FRC – showing strong interest in a variety of STEM aspirations



“It opened up my interest in STEM careers. It also allowed me to get my hands on experience and made me realize that it’s not impossible for me to do things like coding or engineering.” – Student Quote



The vast majority of students had positive experiences in FRC and described the program as ...

Welcoming



“People are always very welcoming and kind. There’s no fear or shame in asking for help. Everybody understands that the success of the team relies on the success of individuals and team morale.”

“I like how accepting of everyone it is. It feels like everyone is welcome and that it’s a safe place to be.”

Inspiring



“It has undoubtedly been the most transformative and empowering experience of my life so far, and I will continue to be extremely grateful for how it has helped me develop exceptionally strong STEM skills, gain confidence in my abilities, and have a clearer view of my future aspirations.”

Fun



“It was really fun working on the robot and spending time with my teammates.”

Collaborative



“I like the collaboration between tons of people to build a robot.”

“The overall collaboration between my team and others at competitions was amazing.”

Life-Changing



“FRC is the best thing that’s ever happened to me in high school, hands down.”

“Being on an FRC team was one of the most rewarding experiences I’ve ever had.”

“FRC has irreversibly changed me for the better and shaped a large part of who I am.”

Opportunities for Growth

We take student feedback seriously and are turning it into action.



Students recognize that FRC requires a serious investment of time and effort. They value the discipline it builds, but see opportunities for better balance with school and personal life.

ACTION: *FIRST NC will continue to provide workshops and resources focused on time-management and teamwork. These include peer-to-peer workshops, in-person and virtual webinars with industry partners.*



FRC's pace encourages students to perform under pressure, strengthening focus, adaptability, and teamwork. Students are looking for strategies to reduce burnout and keep performance sustainable.

ACTION: *FIRST NC will develop and curate resources and ideas for building resilience both individually and as a team. By partnering with professionals, a robust platform will be developed and shared with teams.*



Students noted disparities in resources between teams. Several suggested expanding funding opportunities and shared resources so that all teams can compete on a level playing field.

ACTION: *FIRST NC will expand partnerships and collaboration with industry leaders to provide resources to teams across the state.*

CALL TO ACTION!

Whether you are a funder, educator, university partner, corporate partner, or policymaker – investing in *FIRST* North Carolina is investing in North Carolina's next generation of **innovators, problem-solvers and STEM leaders**. *FIRST* North Carolina creates opportunities for every student in the state to gain **real-world STEM skills**.

North Carolina – like much of the world – faces an urgent demand for skilled STEM talent. By fostering **technical skills, problem-solving ability, leadership, and industry-ready confidence**, *FIRST* North Carolina is not only preparing students for the future – **it's shaping the future itself**.

Contact us to get involved:

info@firstnorthcarolina.org www.firstnorthcarolina.org 866-347-7801



For the full impact data appendix, please reach out to Marie Hopper at marie@firstnorthcarolina.org