

**Title:** QEP TEAM: Toward Enhanced Achievement in Mathematics  
**Institution:** North Carolina Agricultural and Technical State University  
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## **QEP Executive Summary**

The purpose of the Quality Enhancement Plan for North Carolina Agricultural and Technical State University is to improve student success, specifically student performance in general education mathematics courses. This will be evidenced by improved student goal orientation toward mathematics; improved attendance in general education math courses, decreased DFW rates and improved four-year graduation rates.

To determine the focus of the QEP, members of the SACSCOC Steering Committee visited faculty meetings in each academic college during the fall 2018 semester to learn about perceived areas of need for improvement in undergraduate education. General education mathematics emerged as the most critical area of focus for improving undergraduate education. This was validated with the university data, student focus groups and math faculty interviews. The Quality Enhancement Plan idea that emerged was titled *QEP TEAM: Toward Enhanced Achievement in Mathematics*.

The process began with an analysis of institutional data to identify student variables that predict success in general education mathematics. No persuasive findings emerged from this exploration. Focus groups were conducted in each college during the fall 2018. Results indicated that performance in mathematics was a major impediment to overall student success at the university. Next, the team reviewed the academic literature to provide the grounding for developing a survey of student experiences and performance influences in mathematics courses. Students were assessed for influences on math success during the spring 2019 semester. The results showed that regardless of major, students' primary goal was to get through their math courses, but not to truly learn the material; an issue the literature refers to as low goal orientation. Attendance was also found to be problematic in math courses.

QEP forums were held across the university to gain campus input from students and faculty to learn how to increase attendance and improve goal orientation in general education mathematics. A website was also created with a QEP overview and links through which both students and faculty could give input on the QEP development at any time. With this community input, a student success QEP was framed.

QEP TEAM: Toward Enhanced Achievement in Mathematics has 11 strategies, which were developed to effect a cultural change on campus. This cultural change is expected to increase students' perceptions of the value of learning mathematics for career and life success. Subsequently, students will increase performance in math courses and enhance their likelihood of graduating in four years. The strategies fall into one of five categories: Faculty/Advisor Enhancement, Student Support, Curricula, Policy, and Campus Education.

Six of the 11 strategies will constitute one-time changes to the institution that will be implemented in Year 1. Four of the strategies will involve providing resources and training beginning in Year 1 and then recurring each semester or academic year. Three strategies, which involve policy changes and faculty development, will require more nuanced roll-outs throughout the QEP cycle. Initial steps of implementation will begin during Year 1.

This student success QEP will involve (a) attendance rates in general education mathematics courses, (b) goal orientation toward mathematics, (c) assessment of DFW rates (students earning D's or F's or withdrawing from a course) in general education mathematics, and (d) 4-year graduation rates. Assessments will be both formative and summative.