

Solve It! Say It! Problem-Solving with an Emphasis on Communication
Wake Technical Community College
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EXECUTIVE SUMMARY

Wake Technical Community College (Wake Tech) will fulfill the strategies prescribed in its *Reach 'n Rally Strategic Plan* by implementing a Quality Enhancement Plan (QEP) focused on improving students' problem-solving skills. A faculty discovery team arrived at this topic by reviewing data, collaborating with peers, departments, and divisions, and researching literature to discover an area of learning most in need of improvement. A faculty survey ranking four proposed topics led to *Problem-Solving with an Emphasis on Communication* as the area of learning that most needed to be addressed. The data showed a significant portion of general education courses that directly assess learning outcomes aligned with problem-solving did not meet the standards, and courses where problem-solving is taught did not meet performance targets for all demographic groups. Problem-solving is one of the top skills sought by employers in Wake County (Lightcast, 2024; Wake County Economic Development, 2024), and surveys of Wake Tech students (CCCSE, Spring 2022), graduates (Wake Tech, 2023), and employers (Wake Tech, 2023b) indicate we could do better at teaching problem-solving.

The faculty-led development team then reviewed the literature, defined, and refined the topic and created a problem-solving process that emphasized the importance of communication, leading to our QEP title: *Solve It, Say It! Problem-Solving With an Emphasis on Communication*. The literature showed that the most effective way to improve problem-solving skill is to teach a process and to provide the students with an opportunity to apply what they have learned (Stice, 2007). Accordingly, the team developed strategies that will enhance, extend, and accentuate the faculty's ability to teach a standardized problem-solving process to help students learn and apply problem-solving skills and develop solutions. Well-defined terms and student-friendly language will also help students learn the problem-solving in welcoming learning environments that reach across racial, ethnic, gender and ability differences. The application of the problem-solving process will be incentivized by providing students with a means of sharing their newly gained problem-solving competencies through a digital badging program.

The aim of this QEP is to accomplish the following summative outcomes:

1. Students will demonstrate the problem-solving process in their courses through graded learning assignments/assessments. a. Target: 75% of students will demonstrate the problem-solving process through graded learning assignments/assessments by Spring 2030.
2. Students' problem-solving skills will improve because of their education at Wake Tech. a. Target: 75% of students will indicate that their level of proficiency in problem-solving strongly improved by Spring 2030.
3. Employers will indicate that Wake Tech students are able to implement problem-solving skills in jobs and careers. a. Target: 3.75 overall mean (between Very Good and Outstanding) for items in the Problem-Solving and Decision-Making category as indicated by Wake Tech employers by Spring 2030.