



Applying Mathematical Principles to Everyday Decisions

Executive Summary

Mountain Empire Community College's Quality Enhancement Plan, Applying Mathematical Principles to Everyday Decisions (AMPED), is focused on the improvement of student ability to solve real-world problems by enhancing Quantitative Literacy (QL) skills. This topic is comprised of two key elements: a thorough introduction to and emphasis on academic QL skills across the curriculum, and a focus on applying QL to solve real-world problems in capstone courses. It is the College's goal for students to be able to effectively problem solve using QL for issues pertinent both inside and outside of the classroom.

This topic was identified through the College's Institutional Effectiveness and Comprehensive Planning Processes as well as through broad-based involvement of all stakeholders. The topic selection spanned several months. Although several topics emerged in consideration for AMPED, it was evident both from data and stakeholder input that students' problem-solving ability through QL was an area of need.

The Quality Enhancement Plan addresses one overarching goal and two Student Learning Outcomes.

Goal: The goal of this QEP is to improve student problem-solving skills through enhanced Quantitative Literacy skills.

Student Learning Outcomes:

1. Students will demonstrate improved Quantitative Literacy skills across the curriculum.
2. Students will demonstrate ability to address real-world problems using problem solving strategies in program-identified courses.

Although students are exposed to QL in many courses, it is not currently taught across the curriculum. It is evident from institutional research that students' QL skills are not as high as their skills in other competency areas. For this reason, the College is embedding QL in each semester of a student's degree program. Real-world application of QL occur through the teaching of problem solving, a stakeholder-demonstrated area of need, during the final semester of each degree program. MECC will assess QL and problem solving through the use of validated assessment measures such as the Schoch-Tucker Assessment of General Education and two VALUE rubrics.