STEM
Action Plan for
West Oak Middle School
Renee Brooks, John Cole, Kristy Crompton and Randy Reed

Overall Goals and Targets
• Help students become creative, critical and independent thinkers
• Create and implement two interdisciplinary STEM design challenges per grade this year
• Each grade level will work with a local business to design one of the challenges
• Involve parents, community businesses, organizations and media

Assessments
• Rubric for grade level challenge
  o Does the challenge focus on the SC State Standards and Indicators?
  o Is it interdisciplinary?
    o Is the end product inventive or innovative?
• Grade levels will create rubrics with specific requirements for their grade’s challenge.

Learning Experiences
• Students will
  o think critically and creatively
  o learn to work collaboratively
  o begin to use and develop critical reading and thinking skills when researching and presenting information
  o begin to see technology as a vital resource
  o see the relevance and connections of the curriculum to real-world problems and solutions

Timeline
• STEM group will present our ideas to the faculty (beginning of school)
• Grade levels will create one design challenge per semester (during team meetings)
• Submit design challenge plan to grade level chairs for evaluation (due fourth week of semester)
• Implement design challenges in the classroom (one per semester)
• Each grade level will complete one design challenge per semester. This unit should take between 2-3 weeks to complete.
Resources

- Clemson University Engineering Department
- STEMS books, CD’s and information handouts
- Skills USA
- Project Lead the Way
- [www.sctsa.org](http://www.sctsa.org) and [www.tsaweb.org](http://www.tsaweb.org)
- Technology support staff and career counselor
- Instructional Technology Department
- Google documents