Best Practices:
Tier 4-Designing a Controlled Experiment

Effects of Miracle grow on Bean Plants
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The Expectations

- Students are to design a controlled experiment
- Students identify: constants and variables
- Students make quantitative and qualitative data analysis
- Students present their findings (powerpoint, posters, video)
The Outcome

- Students observe real research
- Students compare results and formulate a theory
- Students learn to work in collaborative teams
- Students experience errors in their procedures or results and evaluate the reasons for error.
The Benefits

• Students
  – self teaching (use of prior knowledge)
  – Investigating
  – Researching
  – Collaborating

• Teachers
  – reinforcing concepts already taught
  – Not teaching but reflecting