



TEACHING TIPS OF THE MONTH FROM MC FACULTY



Brought to you by TIDES and PALS April 2016

The Faculty Program for Active Learning in STEM (GTSTEP/PALS) (www.montgomerycollege.edu/gtstep), the Teaching to Increase Diversity and Equity in STEM (TIDES - <http://cms.montgomerycollege.edu/TIDES/>) grant project, and ELITE (<http://cms.montgomerycollege.edu/elite/>) are happy to bring you the "Student Engagement Tips of the Month". Both PALS (with its focus on active learning in STEM) and TIDES (with its focus on active learning and culturally sensitive pedagogy) seek to incorporate highly engaging learning activities for diverse student populations into STEM courses. However, as you will see, many of these activities are not STEM-specific and can be applied to any course. **Please use the voting button at the "Vote" button at the top of this message to indicate if these tips were helpful. We also welcome your general feedback about this publication and invite you to share your teaching tips by contacting us at tides@montgomerycollege.edu.**

Tip 1: Multiple Ways of Questioning

Goal: To have students recognize different ways in which the same question can be asked



Description: Often if questions are not phrased exactly as in the book or in class, students are lost as to how to approach a problem. To help train them how to decipher a problem, give students an example question (perhaps from homework or a test). Have students brainstorm different ways they can ask the same question. In particular focus on important synonymous terms as well as casual ways one might ask the same question. Here is an easy example for Calculus I: "Given a function $f(x)$, determine when the graph is increasing." Alternative phrasing would include:

- "When (or for what x values) is the graph going up hill?"
- "When is the slope positive?"
- "When is the first derivative greater than zero?"

Time: Flexible. This activity would make a great in-class discussion in small groups. It could also be done individually, and perhaps a few shared in class or on Blackboard.

Submitted by: [Amy Shell-Gellasch](#)

Tip 2: Study Guide Use

Goal: To create a useful study guide

Description: Based on feedback from students on previous study guides, study guides have been transformed. I provide study guides at the beginning of a unit, allowing students to complete parts of the guide throughout the unit. Occasionally, a short example of a good answer to a study guide question is presented to the class.

Quizzes are used as an early warning system, and students are encouraged to use subsets of the study guide while preparing for quizzes.



Time: 5-10 minutes on occasion to provide examples or to motivate students for different parts of the guide.

Submitted by: [Mazen Zarrouk](#)