

TEACHING EVALUATIONS

PATRICK T. DAVIS
(davis1pt@cmich.edu)

You make decisions, take actions, affect the world, receive feedback from the world, incorporate it into yourself, then the updated “you” makes more decisions, and so forth, 'round and 'round.
– Douglas Hofstadter

As an instructor, I strongly feel that I must continuously adjust my teaching. I accomplish this by attending workshops and conferences, seeking advice from colleagues, and learning from formal evaluations.

From the Department

Each semester, the Department of Mathematics at Central Michigan University formally evaluates the graduate Teaching Assistants. This evaluation includes an unscheduled in-class observation. Below are some selected comments from these evaluations:

- “Related new topic to previous material – Great”
- “Great that you walk around helping – students are helping each other, too! ☺”
- “Nice job bringing in student experiences to the discussion of relations.”
- “Vocals: loud & clear, explanations clear and concise – appropriate use of mathematical terminology”
- “Asks for student ideas to solve. Patiently waits for student ideas to solve.”
- “Great job following through using student ideas – following through until solve or ‘stuck’ – showing that you can use previous knowledge.”
- “Students are engaged & asking questions – answered well.”
- “Mathematics sound and knowledgeably presented.”
- “Summarizes outcomes/implications of the exam results: importance of knowing how to apply the skills.”
- “Asks open-ended questions – involves class.”
- “Boardwork: large & legible, great flow – use of colored markers enhances clarity and understanding”
- “Students are exposed to thought processes not just steps to perform.”

From the Students

At the end of each semester, Central Michigan University issues Student Opinion Surveys (SOS) to each class. In these surveys, students are asked to submit scores for the overall instructor effectiveness (Very Good=4, Good=3, Adequate=2, Poor=1, Very Poor=0) and respond to the following statements (Strongly Agree=4, Agree=3, Agree nor Disagree=2, Disagree=1, Strongly Disagree=0):

- Instructor's teaching helped me learn
- Treated students with respect
- Accessible to students
- Organized course well
- Presented course material well
- Seemed well prepared
- Was enthusiastic about subject

Summarized in the figure below are the results of my SOS evaluations. Courses currently in progress are not included.

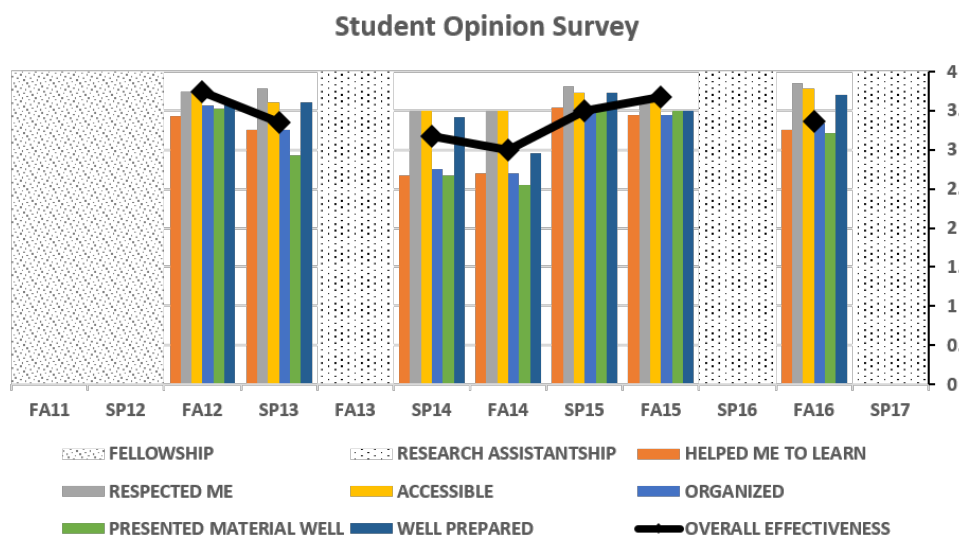


Figure 1: SOS Results. The multicolored bar graph corresponds the mean responses to the statements above. The superimposed black line corresponds to mean overall instructor effectiveness. MTH 105: College Algebra (FA11, SP12). MTH 217: Business Calculus (SP14, FA14). MTH 223: Linear Algebra (SP15). MTH 334: Differential Equations (FA15).

For comparison purposes, I have computed the ratio of my SOS scores with the currently available mathematics department annual averages in the same course level I was teaching. For example, during the 2014-15 academic year I taught MTH 217: Business Calculus and MTH 223: Linear Algebra. The reported ratios are the average of my SOS scores in those two courses divided by the mathematics department average for all 200-level MTH courses that school year. The results are summarized in the figure below.

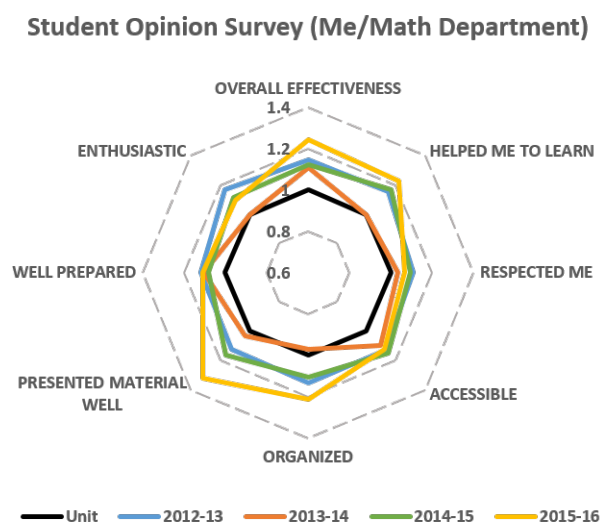


Figure 2: *SOS Annual Comparison. The black line indicates where my SOS score would match that of the mathematics department average. Lines outside of this indicate SOS scores higher than that of the department; whereas lines within this indicate lower SOS scores.*

There is also a separate form for students to submit anonymous qualitative reviews. Here are some selected comments:

- “Can you be my instructor for my other courses[?]”
- “He uses examples & word problems instead of giving just the formula. Also, Mr. Davis ALWAYS asks if we have any questions about what he had just explained.”
- “He tried to keep us up beat while learning and keep people involved”
- “Everything he does is great.”
- “He does a lot of examples and explains things in different ways for others to learn”
- “You’ve done a great job, and I’m glad to have you as my instructor ♡.”
- “Keep using your fun lingo. Makes the class lively and engaged.”
- “Reviews information well, takes time to explain material, well organized, uses color to separate ideas on the board.”
- “He is extremely personable and easy to talk to.”

- “Made asking questions in class non threatening [...] Light hearted atmosphere [...] Thanks for being so kind to us this semester especially [especially] to those who don’t understand math as easily as others.”
- “Demonstrates problems visually”
- “Best math teacher I’ve had so far. Thanks for the explanations + help. Very fair grader.”
- “Very thorough of the content, takes time to break down the examples and doesn’t rush. Very well organized! Awesome ☺”
- “He is willing to stop in the process of a math problem and explain why or how he did something. Also replies to emails quick! ☺”
- “Gives us online tools/visuals”
- “He typically did a good job of explaining concepts, was very enthusiastic, treated students with a lot of respect, encouraged participation, very fair”
- “Always willing to have one on one’s with students and will always politely respond to your email with good feedback. I always enjoyed the GBU problems”
- “Lots of practice questions = ☺ Energetic and passionate about the course. Wanted students to succeed.”
- “Continue w/ [with] your style of teaching – it was interesting & enjoyable”
- “Stay cool”
- “By giving us weekly quizzes [quizzes] it helps us to learn the necessary material and get the results back right away”
- “Would gladly answer questions in depth until satisfactorily explained”
- “Listens to suggestions (such as more concrete examples), actually understands material and can therefore explain things in several different ways, detailed (doesn’t take shortcuts), checks for understanding consistently... He’s an incredible educator”
- “He made the material very clear. It was always made known what is important and what is not. He would always go over concepts from older class[es] as much as needed”
- “Continue being enthusiastic & making awful jokes”
- “Best MTH teacher I have EVER had!!! Seriously [...] Keep it fun like you do. I love hearing mth [math] history.”
- “Great idea with the Python projects; they were very helpful for me↔keep doing that”
- “I really like the projects in the class. You presented information very well, I really enjoyed the class. Keep up the great work!”
- “He teaches very well. Stopping in between to check if students understand a previous topic [...] breaking up and explaining it helped a lot”