Peer Review of Teaching

for MECH 364: Mechanical Vibrations

Course Instructor: Srikanth Phani

Reviewer: Ryozo Nagamune

Date: March 22, 2012

About the Course: A large core course for 3rd/4th year Mechanical Engineering students. The course requires development and application of mathematical models to practical vibration problems.

Instructor: The Teaching Perspective Inventory (TPI) score indicate that *Apprenticeship* is the dominant perspective and *Nurturing* is the fall back perspectives of this instructor

Purpose of this review:

1) To provide formative feedback on the lesson plan (notes), course syllabus and learning objectives shared with the reviewer prior to attending the class.

2) To provide formative feedback on three broad aspects of the classroom practice: (a) Nature of the learning environment fostered, (b) Student engagement, (c) Content and delivery.

Specific points to consider (suggestions only):

Q1) Is the lecture well situated in the broader context of the course objectives? Are the learning objectives for this lecture communicated effectively?

- The objectives of the course and the objective of the lecture were linked appropriately at the beginning of the lecture.
- Starting the lecture with relevant movies attracted students and motivated the topic "Vibration Isolation" successfully.

Q2) Did the learning activities correspond to the learning objectives?

- It was good that the instructor asked students' experiences on vibration isolation.

- Also, it was good that the outline of the lecture was first written on the blackboard, and the instructor went through the lecture by repeatedly returning to the outline, without erasing it from the blackboard.

Q3) What type of learning environment is fostered?

- The instructor used video, handouts, and blackboard to convey the lecture topics to students.
- He asked the readability of the blackboard at the early stage of the lecture.
- The instructor asked questions repeatedly to let students think continuously.

Q4) Comment on the student engagement, and suggestions for improvement

- Students were engaged well in the lecture, by interactive communications.
- When students got time to think about examples of vibration isolation, the instructor suggested students to discuss with colleague students around.

Q5) Comment on the content and delivery methods with suggestions for improvement

- The content of the lecture was related well to previous lectures, future lectures, and other course material too.
- Using the note reduces the students' tasks to take notes, which is good because they can focus on thinking rather than taking notes. It may be better what the instructor's intension for distributing the notes is. For example, one can say that "Since most of the things that I write on the blackboard is written in the note, you do not need to take the note; however, there are some blanks in the note; when it comes to the blank, I will tell you to fill in the blank." or "Although most of the things that I write on the blackboard is written in the note, it is up to you (or I suggest you) to take notes."

Q6) Any further suggestions/thoughts/comments/observations you made during the lecture

- I felt that the lecture might be too slow.
- It would be nice if one lecture finishes at an "appropriate" place. For example, it is better not to finish one lecture on the way of proving something.
- Overall, it was a great lecture.