**Assignment 3 MPPM 1103 (20%)**

Models in Teaching and Learning Mathematics

Due date: Week 14

In pairs

Eric Mazur is the pioneer for Peer Instruction (PI). The theoretical framework for Peer Instruction is Social Constructivism where the more knowledgeable other or peer can guide their friends in understanding the concepts being taught. It is hoped that with PI, the mathematics class can shift from learning to repeat and memorize a set of procedures to understanding the true mathematical concepts behind each mathematics procedure. Your task is to:

1. Read up on Eric Mazur’s Peer Instruction and social constructivism

2. Write a report about Peer Instruction. Your report should include:

* What is peer instruction? Describe the foundations of peer instruction
* Outline of PI activities in a classroom
* The strengths and weaknesses of Peer Instruction
* Discuss on the reasons for teachers to hinder from applying PI in school

(10 marks)

3. Prepare a teaching and learning module for primary, secondary school or polytechnic for one mathematics lesson/ course. Your module should have the following

* An explanation of the mathematics content/ concept you aim to teach
* Prior to the class concept question
* Three mathematics concept questions
* The mathematics peer discussion you aim your students to undergo

(10 marks)

Example of concept questions