Information for Video link in FEIT
Expression of Interest for Teaching

Prepared by Dr. Daniel Quek

Dated 17 December, 2023

- To Download this file in PDF: http://feit.drquek.com

- To download video on Google drive: https://drive.google.com/open?id=1zVwh2zE1ZAk7qBU8Tu4oPws-aKsxnROK&usp=drive_fs

- To watch video on Youtube: https://youtu.be/PrMg6LDsdzo

- To read about workshops conducted by Dr. Quek on Facebook: http://fb.msmam.com

The video has to answer the following questions:

Thinking about yourself as a tutor:

1. Tell us about the practices have you seen or experienced that are important for student learning. Give one rich example of something you have done or will do in your tutorial.
2. Tell us about what have you noticed about students' behaviour in classes where learning is not engaging. Give one example of where you have changed what you do in response to student feedback or what you noticed.
3. What do you bring to the faculty to improve the student learning experience? Why you? Why FEIT?

Q1a- Tell us about the practices have you seen or experienced that are important for student learning.

I am a certified trainer by the Board of Engineers Malaysia for the CPD (Continued Professional Development) program for Professional Engineers for more than 20 years.

I conduct training courses on Compliance with Drainage Design Guidelines for professional engineers in Malaysia.

I will share with you the approach I m taking in conducting my courses.

It can be summarised in 5 main points:

1. I promote active learning by applying theories to solve real problem- and not passive learning (sitting in the class for hours listening to boring lecture).
2. I avoid boring lecture by giving the students a complete set of lecture notes in pdf format which they can read before the class.
3. My role as a lecturer is to provide guidance and direction where necessary, by highlighting key topics in the class.
4. I get the students to start quickly applying what they learned to solve real problems. This can be in the form of worked examples solved using spreadsheets on their PC or laptops.
5. I create a Facebook page for the class to discuss and submit their worked examples.

Q1b- Give one rich example of something you have done or will do in your tutorial.

Based on my experience, I adopt the following 7 main approaches in my teaching:

1. I will give the students before the class a complete set of notes which incude theries and worked examples on a particular topic.
2. I will start with a brief introduction on the theories as covered in the lecture notes. This should not be more than 15 minutes if possible.
3. I will ask the students to apply the theories they just learned to solve a specific problem in a worked example (Worked Example 1). The purpose is the get the student to start thinking through active learning. If students have problems solving the worked examples, I will introduce more theories or explain new concepts and refer them to the relevent section of the notes.
4. I will repeat the above by introducing more worked examples for the students to solve (Worked Example 2, 3, 4). I will guide them by referring them to the relevant sections of the notes.
5. Finally, I will test their knowledge with more worked examples (Worked Example 5, 6, 7 ...).
6. Students are required to bring their laptops or tablets (or even smart phones) to the class.
7. If students cannot finish the worked examples in the class, they can post them after the class in the Facebook Page which is set up for discussion after the class.

Q2a- Tell us about what have you noticed about students' behaviour in classes where learning is not engaging.

1. There is no interaction between the lecturer and the students. The lecturer talk for hours on boring theories and the students are not responsive.
2. The students will stare blankly at the white board but their minds have drifted elsewhere.
3. Typically, the students sit quietly and do not ask questions. They may check their handphones from time to time.
4. The students are in passive learning mode- they are not focus on the lecture and they are not thinking critically.
5. Their minds are not challenged to think and to apply what they have learned to solve real problems.

Q2b- Give one example of where you have changed what you do in response to student feedback or what you noticed.

I adopt the following six approaches:

1. I find from my experience, a lecturer should promote active and not passive learning where the students sit in the class and listening to boring lectures.
2. Students learn better by example i.e., through solving real worked examples on their laptops.
3. The role of the lecturer is not to conduct boring lectures, but to facilitate the students' active learning process.
4. An active learning process involved asking questions. Students should be encouraged to ask questions and not spoonfed with theories.
5. I found that having a Facebook page for the class can provide continued support to the students after the class.
6. By distributing lecture notes in pdf format before the class, it will allow students to read the notes before the class and reduce the time for notes taking.

Q3. What do you bring to the faculty to improve the student learning experience? Why you? Why FEIT?

I can bring changes to the faculty through the following seven steps:

1. Promote active and not passive learning. Students are encouraged to ask questions and not spoonfed with answers.
2. Students are required to bring in their laptops, tablets or smart phones to the class.
3. Students are required to complete worked examples in the class and not just sit there and listening to boring lectures.
4. Create a Facebook page for the class. Ask the students to join the page.
5. Prepare a complete set of notes on the particular topic including theories and worked examples and distribute them 3 days before the class. The theories can be in pdf format and the worked examples can be in Excel Spreadsheets.
6. Allow students to complete the worked examples after the class by posting on the Facebook page. Students can discuss or comment on each other's work or contact the lecturer on the Facebook page.
7. Provide continued guidance after the class via the Facebook page and email.

PROFESSIONAL EXPERIENCE
- DR. DANIEL QUEK KENG HONG

1. Dr. Daniel Quek is an experienced professional engineer who has been in consultancy for more than 25 years and is a professional engineer registered with the Board of Engineers Malaysia (BEM). He is also a Certified Erosion and Sediment Control Professional (CPESC)- a professional certification recognized by the US EPA.

2. Dr. Quek received his B.E., M.Eng.Sc and PhD degree in 1991 from the University of NSW, Sydney, Australia.

3. Dr. Quek has been conducting regular workshops and seminars on MSMA (Malaysian Guideline on Drainage Design- the Urban Stormwater Management Manual) since 2000, and has published more than 30 papers in his fields of specialisation.

4. He has close to three decades of experience in the fields of water resources including drainage, hydrology, hydraulics and environmental management and has involved himself in many major infrastructural projects from around the country.

5. His fields of specialisation:

    - Hydrology and hydraulic studies
    - Computer modelling in water quantity and quality control
    - Urban drainage design
    - Flood investigations and mitigation
    - Environmental Management and Control including Erosion and Sediment Control Plan (ESCP)
    - Water resources.

- Design of On-Site Detention (OSD), detention basins, bridges, culverts and other drainage structures.

- Computer programming including PHP programming language.

6. Dr. Quek has developed an online tool for drainage design for engineers in Malaysia:

He has developed MSMAware- an online software for MSMA, which is an online software on the Drainage Design Guideline MSMA (Manual Saliran Mesra Alam Malaysia) or the Urban Stormwater Management Manual for Malaysia. It is written in PHP server side programming language.

MSMAware includes the entire storm databases from the following JPS publications:

1. MSMA2 (2011),
2. Hydrological Procedure HP1 (2021) for West Malaysia
3. Hydrological Procedure HP26 (2018)- for East Malaysia

You can preview the software by watching the video at:

http://WelcomeVideo.msmaware.com

Or if you prefer to read the PDF file click: http://welcome.msmaware.com.

7. Read About Workshops Conducted by Dr. Quek on Facebook

http://fb.msmam.com