

# TEACHING PORTFOLIO



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## 1.0 Teaching Philosophy and Goals

My objective in teaching is to contribute towards developing a person who appreciates knowledge in life. Individual with knowledge act as nucleus for the well-being of a society. As I chose to be an academician, I always remind myself to the important role that I have in my society. Upon my responsibility, I am to ensure that teaching and learning activities that I am involve give impact to the students. During my early time in teaching, I am describing the approach that I am adhering to is “From Heart to Heart” capturing my teaching philosophy that is; teaching should starts with sincere intention, carried out with my very best abilities to ensure that the outcome touch the heart of my students as to inspire them to become a knowledgeable person and trying with their very best to success in life. As such, I treat each of my lecture session as a small step to achieve the intended outcome. Consequently, the teaching and learning activities carried out with an intention not only to cover the subject matter but also to develop the student inner strength in facing daily life contributing to a meaningful learning process for us all. My class word of reminder is “Each of us should be a better person once we are leaving this lecture compared to the moment we enter this session”.

In trying to efficiently perform my duty, I am always updating myself with the knowledge in the subject matter of materials engineering thru carrying out effective research, producing an invention and publish academic articles. In addition, I also need to learn more about teaching and learning. Coming from an engineering background qualification, it is quite a challenge to discover knowledge on teaching and learning. Nevertheless, my passion in teaching makes me keep going to enrol on relevant teaching and learning courses. Thru the various courses that I have attended, I look forward to implement the lesson learnt during completion of various task as an academician; which covers not only conducting the lectures but also involving curriculum review and related administration job. Based on recent executive talk on learning motivation, I have discovered that what I’ve meant by teaching “From Heart to Heart” can be term as deep approach learning; where the outcome of learning is not just covering the content syllabus but involves the critical analysis of new ideas, linking them to already known concepts and principles, and leads to understanding and long-term retention of concepts so that they can be used for problem solving in unfamiliar contexts in life. In contrast; surface learning is a tacit acceptance of information, memorization and unlinked facts leading to superficial retention of material for examinations and does not promote understanding (the approach that I am avoiding from the very first time I conducted my class in 2001).

In conducting teaching and learning activities, one of the important skills that I am committed to develop in my student is communication. In order to create stimulating learning environment to cover the subject matter as well as developing communication skill, I have implemented several teaching method e.g. tutorial, case study, class presentation and industrial visit. In 2009, I put serious effort on how to effectively create meaningful learning in class. This is possible by implementing improved teaching methods e.g. Cooperative Problem Based Learning (CPBL) in class. Thru the activities, innovative assessing method had been conducted to ensure constructive alignment between learning outcome, assessment and teaching delivery. Relevant rubrics had been developed to ensure the assessments are not only assessing the cognitive domain but also assessing the psychomotor and affective domain.

## 2.0 Teaching responsibilities

| University                                 | Year      | Subject  | Credit | Semester         | No of Students |
|--|-----------|--|--------|------------------|----------------|
| Universiti Teknologi Petronas              | 2000/2001 | Engineering Materials (Tutor)                    | 3      | 1                | >90            |
|  |           | Engineering Profession and Communication (Tutor) | 3      | 2                | >90            |
|  | 2001/2002 | Engineering Materials                            | 3      | 1                | >90            |
|  |           | Engineering Profession and Communication         | 3      | 2                | >90            |
|  | 2002/2003 | Statics  | 3      | 1                | >90            |
| Universiti Teknikal Malaysia Melaka (UTeM) | 2003/2004 | Manufacturing Practice                           | 1      | 2                | 28             |
|  |           | Metrology  | 2      | 2                | 30             |
|  | 2004/2005 | Engineering Material                             | 3      |                  | 32             |
|  | 2008/2009 | BMFB 2213 Engineering Materials                  | 3      | 1                | 43             |
|  |           | BMFB 4243 Ceramic Materials                      | 3      | 2                | 45             |
|  |           | BMFB 4263 Material Selection                     | 3      | Special Semester | 75             |
|  | 2009/2010 | BMFB 4253 Engineering Ceramic                    | 3      | 1                | 38             |
|  |           | BMFP2522 Quality & Reliability                   | 2      | 2                | 50             |
|  | 2010/2011 | BMFB 4263 Materials Selection                    | 3      | 1                | 51             |
|  |           | BMFB 3323 Materials Selection                    | 3      | 2                | 50             |
|  |           | MPSW 5013/PPSW 6013 Research Methodology         | 3      | 1                | M.Sc&Ph.D      |
|  | 2011/2012 | BMFB 3303 Engineering Ceramic                    | 3      | 1                | 38             |
|  |           | BMFB 3323 Materials Selection                    | 3      | 2                | 40             |

### 3.0 Teaching Methods

#### *Class Session-Lecture and discussion*

I begin each class with a brief reflection on what have been learned during the previous class. Then, my lecture proceeds with establishing the learning outcome for the particular lecture hours. I believe this is an essential step in setting up student intention (as well as my intention) in following the lecture session with focus. With a clear objective in each lecture session, students will be motivated to get involved with the activities that have been planned in order to achieve the targeted outcome. Example of lecture presentation is attached in **Appendix A**. My lecture session will end up by each member reflecting on what had been learned today, works needed to carry out for further understanding (e.g. tutorials questions) and things to explore (pre-reading) for the next lecture session.

#### *Tutorial*

Tutorial question is a scaffolding activity to help student in improving understand on the theoretical content of the subject that I am teaching. Depending on the intended outcome, tutorial questions could be discussed in a separate session or conducted along with a lecture session. A separate session is usually conducted to help students on exercises that involve analytical skills. In contrast, questions that are intended for developing assessing and evaluation skill is usually carried out during lecture session. Example of tutorial conducted in both sessions is attached in **Appendix B**.

#### *Class Presentation*

Class presentation is a must activity in my class. It is usually based upon an assigned topic of discussion. I am implementing this approach as an effort to build student's confidence, promote deep understanding in subject matter and enhanced their communication skill. Thru the activities, students are encouraged to give their very best effort in preparing a good material to be presented. Moreover, during each presentation, class discussion is conducted where this act as a medium for students to raise their concern, give comments and feedback to the presentation done. Example of class presentation by a group of students based on a given assignment is attached in **Appendix C**.

#### *Case Study*

Case study is a method that I am adopting to enhance student learning in order to achieve deeper understanding in the subject matter. The case study is design for students to be able to describe, analyze, relate and suggest suitable improvement in an issue related to the context of the subject. This promotes critical thinking among students. Example of case study conducted and student presentation note is attached in **Appendix D**.

#### *Cooperative Problem Based Learning*

CPBL model is a combination of Problem-Based Learning (PBL) and Cooperative Learning (CL) to emphasize learning and solving problems in small student teams (consisting of 3-5 students) in a medium sized class, of up to 60 students for one floating academic staff or facilitator [1]. The CPBL model is composed of three phases; viz. Phase 1 consists of the problem identification and analysis stage, Phase 2 is the learning, application and solution formulation stage and Phase 3 is the generalization, internalization and closure stage [1]. The teaching and learning activities (TLA) involved in each phase is attached in **Appendix E**. Activities involved in CPBL is based upon student centred learning (SCL) in order to achieve the learning outcome of the subject. I have implemented CPBL approach during lecturing Material Selection subject during semester 2 session 2010/2011 and semester 2 session 2011/2012.

### ***Uses of Technology***

I am also incorporating the utilization of technology in enhancing student learning in my class. An example of innovative approach is the utilization of **Cambridge Education Selector (CES) software** (which consists of a database of material and process information) **was introduced and made available for students' access in solving the CPBL problems.** The use of this software in teaching and learning activities for undergraduate study **is a pioneer approach in public higher institution in Malaysia.** Tutorial session conducted using the software is attached in **Appendix F.**

Despite the effort to incorporate technology assisted materials during learning activities, the other aspect that I am educating my students is on how to critically study the information found in the World Wide Web for learning purposes. Guidance is also been given on how to do effective information searching in the internet as well as in the university online resources.

### ***Academic Writing and Conference Presentation***

Academic writing and conference presentations are two teaching methods that I practice during my supervision of post graduate students. Thru this practices student's critical thinking, confidence, communication and networking skill are enhanced. Examples of journals and presentations co-authored with my students are:

#### ***Journals***

- Y. Yusof, J.H. Juoi, Z.M. Rosli, K.W.Loon and Z. Mahamud, Effects of Process Temperature and Time on the properties of Microwave Plasma Nitrided Ti6Al4V Alloy, *Pertanika Journal of Science and Technology*, Vol 20 (2) Jul. 2012.
- N.F. Ayoob, J.M. Juoi, Z.M. Rosli and N.R. Rosli, Characterisation and Properties of sintered Glass-Ceramics Produced from recycling Glass by using Pressure-less Method, *Key Engineering Materials*, Vols. 471-472, (2011) p933-938.
- N.R. Rosli, J.M.Juoi, A. Shaaban and N.F. Ayoob, Characterisation and Properties of sintered Recycled Glass utilizing CIP Method, *Key Engineering Materials*, Vols. 471-472 (2011), p245-250.
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#### ***Conference***

- Y.Yusuf, J.M. Juoi and Z.M.Rosli, *Plasma Diffusion techniques on Ti-6Al-4V substrate for surface modifications. International Design and Concurrent Conference (iDECON), Sept 2010.*
- N.F. Ayoob, J.M. Juoi, Z.M. Rosli and N.R. Rosli, , *Preparation and characterization of glass ceramic tile from waste glass by using pressure-less method, ASEAN-Australian Engineering Congress, Sarawak, July 2011.*
- N.R. Rosli, J.M.Juoi, A. Shaaban and N.F. Ayoob, *Optimisation of sintered waste glass ceramic for tiles production with SLS glass admixture utilizing CIP method. ASEAN-Australian Engineering Congress, Sarawak, July 2011.*

### ***Innovative Product Competition Participation***

Participation in innovative product competition is a medium where I utilise to enhanced students creativity and critical thinking during conducting related research in the Final Year Student Project and M.Sc. research. List of student participation and winning award in innovative product competition are:

- Nur Farizan bt Ayoob, Nur Rifhan bt Rosli and Nurul Ain bt NorAzizi, Gold Medal Award, ITEX 2011.
- Nur Farizan bt Ayoob, Nur Rifhan bt Rosli and Nurul Ain bt NorAzizi, 5th Place, Pertandingan Rekabentuk Inovasi 3R, UPM-AEON 2011.

#### 4.0 Innovation in Teaching and Learning

In order to achieve the learning outcomes, the subject delivery involves implementing Cooperative Problem-Based Learning (CPBL) activities as a part of teaching and learning process. Generally, the summative assessment involves cognitive domain and soft skill. This is an improved approach in teaching and learning process as compared to the common practice. For each learning outcome, a specific learning domain and taxonomy level were defined and rubrics for assessment were developed accordingly. **Constructive alignment among the learning outcomes, delivery methods, assessment and evaluation gives an overall reflection on the students' learning outcomes attainment.** The overall mapping of CPBL activities and assessment carried out is not only reflecting student's performance in cognitive domain but also in psychomotor (communication) and affective domain (lifelong learning). As such, stimulating learning environment is created for meaningful learning experience.

Later, students' achievement is evaluated based on Key Performance Index set by the Faculty. Students' reflection in the subject matters and teaching and learning process provides essential inputs in outlining a few strategies for Continuous Quality Improvement purpose. The overall effort conducted is presented in an academic article (**Appendix G**) at the National conference on active Learning (NCAL), organized by Centre of Teaching and Learning UTeM in 2011 and awarded Best Paper Award (**Appendix H**).

#### Teaching Assessment

Typically, the assessment conducted in the subject is to determine the attainment of pre-established learning outcomes among the students. For that purpose, a particular learning domain in Bloom's taxonomy or soft skill element to be assessed is specified for each learning outcome; defined by the subject coordinator and the team and referred to the overall curriculum design of the program of Bachelor of Engineering in Manufacturing Engineering. The mapping of learning domains in Bloom's taxonomy or soft skill elements to the learning outcome and its respective assessment methods are clearly outline. CPBL activities are utilized to assess the attainment of LO1, LO2, LO4 and LO5 which contribute to 30% of the total marks for the subject. For each assessment method, specific rubrics are developed based on a set of relevant criteria indicating the achievement of the learning outcome and the desired taxonomy level(**Appendix I**). The rubrics are also utilized to delineate consistent criteria of grading to all students involved since the subject was taught by a team of five lecturers.

#### Continuous Quality Improvement

Reflection note is used to reflect the progress of the CPBL accomplishment on the subject matters and the T&L process; outlining strengths, weaknesses and improvement action to be taken by either lecturers or students. Thus, the reflection notes submitted by the students in CPBL Phase 3 has been discussed in class and provides essential insights for improvement from all parties involved, which are the students, lecturers and subject delivery itself. In other words, it helps in ensuring continuous quality improvement (CQI) of the subject. Based on the students' feedback, a few improvement strategies are being delineated for enhancing learning process.

## 5.0 Evaluation on Teaching & Supervision

I appreciate feedback from students on the impact of my teaching and supervision. At the end of each teaching semester, I always ask students to give feedback on the strength and things that need to be improved from both sides (themselves and me) based on the current teaching and learning experience. Students' comments are always in consideration in improving my way of teaching as well as building up my charisma as an academician. The reflection is not just on the subject matter but including the learning process itself. As such, the action plan will not just applicable to the learning of my subject but encompass the overall learning process and each individuals' personal development.

### *Teaching Evaluation*

Evaluation on teaching conducted by university for the subject that I thought for the previous two semesters is attached in **Appendix J**. The mark score is > 4 for each semester.

### *Samples of comments by colleague, undergraduate students and postgraduate students*

#### Comments by Colleague

“For me, the CPBL class run for this time is better compared to the previous one due to experience conducting the class previous semester. Learning approach that has been used for CPBL was a realistic problem which is easy for students to understand compared to the one that we used before. However it is quite difficult to monitor the commitment of the students during the discussion time because we cannot ensure the commitment and accountability of each student towards discussion in their group. For grouping of students, I group them based on their gender, races and CGPA. In my case, some of the students come to me and informed that some of their group members did not contribute and did not appear during the discussion time (ada yg datang menangis, bergaduh dan macam-macam lagi. Even saya dah cakap if kerja nanti they can't choose their boss and office mate, they have to stay. So now we also have to play a role as a counselor). The worst case was when I asked them to do the peer rating, they gave very low mark to the one that I think very committed (from my observation during the class). What I did was I asked them to choose their own group members for the CPBL 2 and make sure they do their best for the CPBL 2. And finally, I quite impressed with their work. They gave me a very good final report, complete with charts, ranking etc. overall, the CPBL process teach our students to learn by themselves and think out of box. When they do the presentation, to encourage their friends to ask questions and listen to them (Memang meriah dengan soalan). At the end of the class, I noticed that actually our students can learn by their own by self exploration. They also can use the software with minimum explanation and demonstration.”- **Toibah Binti Abd Rahim, Pensyarah, J. Bahan, FKP, UTeM.**



### Comments by undergraduate students

“During the tutorial section for Material Selection subject, teaching and learning process was conducted using Cooperative Problem Based Learning (CPBL) method by Dr. Jariah Bt Mohamad Juoi. I believe the teaching and learning process become more interesting. By using CPBL method in our learning process actually help us to enhance our critical and creative thinking which are usually lacking in the normal way of teaching and learning process. It enables the student to work in a group to build up their teamwork and also creates an intellectual discussion among the student. Thus, it actually brings out the best from the student. Besides that, CPBL method provides the nearest experience towards the real situation in performing material selection process. Other than that, my experience during this particular teaching and learning process has been very knowledgeable, interesting and most importantly inspiring. I believe it has increased my confident level in sharing information, discussion and also presentation. This is because Dr Jariah manages to bring out or creates a very comfortable learning process. As a student, we are comfortable and inspired to share knowledge, ask question, trigger some ideas and also not afraid to be different or to made different choice than others. Most importantly, we can see the participation from the student in every discussion, reflection and presentation that has being conducted. Thus indicates that student involvements are the main focus during the teaching and learning process”- **Mazidah bt Zainudi – 3<sup>rd</sup> year student BMFB 2011/2012**

“Regarding Material Selection class with Dr Jariah, I learned many things that related to materials engineering. For me, Dr Jariah is very open-minded and she always gives the freedom to the students in terms of speech and opinions or ideas. For example, she always asks students to create their own style to solve problems in a case study given with the guidance from her. In addition, Dr Jariah also always gives tips on how to solve the problem properly and also how to present the work in front of the class. For example, she always emphasizes the content of the presentation and how to divide the right time during the presentation. Moreover, during CPBL class, she always asks the students to give opinions and ideas on the problem in the case study. Usually she would prefer the students to discuss in groups and then the students should give the arguments or proposals on the problems found in the case study. This kind of activity makes me feel free in contributing my ideas and wider my perspective in different angle of thinking among my fellow members. In general, Dr Jariah is a lecturer who always shares her knowledge with students and she always motivates her students to find their weaknesses and find the best way to solve problems and how to overcome that problems” –**Nur Aqilah Binti Ya’kob (FKP-3BMFB)**

“In my opinion, Cooperative Problem Base Learning (CPBL) is an effective tool for learning purpose. It acts as a platform for students to share their ideas amongst them and build interactions between them. CPBL helps students to become active learners by making them involve in the brainstorming activities, discussing activities in the class. Furthermore, through CPBL, students will be getting different perspective and angles or different point of view in solving problems given. For me, this is really good because if there is no CPBL, students tend to do the task by their own. All they do is search for the right answers and don't even care about other people opinion. But, with the help of CPBL, students manage to get more knowledge and broaden their thinking styles. It is not the matter of who get the right answer and who get the wrong answer anymore. All that matter is what is their approach and how they come out with the solutions for the problem given. CPBL is really effective and practical tool in developing divergent thinking amongst students”- **Zuriane Lokman, B050910174, 3BMFB**

### Comments by alumni

“Salam. Saya harap Dr Jariah sihat dan dapat menjalankan tugas sebagai pensyarah sebagaimana Dr Jariah berjaya mendidik kami sebelum ini. I'm Nurul' Ain Binti Haris (you recommend me for University of Sheffield a few months ago). Keep in touch. I saw your name printed on the board in front of the lecture theatre here, you've won the postgraduate poster competition in 2006 and excitedly told my friend "That's my lecturer!"- **Nurul Ain bt Haris, Alumni BMFB – graduated in 2008/2009**

*“Dr Jariah Mohamad Juoi is a lecturer when I was pursuing graduate studies at degree level. In addition, she is also the head of the department. What is an interesting about Dr Jariah, she was a lecturer who is very dedicated and committed to her work. One thing that distinguishes Dr Jariah to the other lecturers, she uses a different way of teaching during class. For example, before end of each class, she will assign a tutorial question for the topics to be discussed on the next week. When arriving on the class, tutorial questions will be discussed at the beginning of class. Each student will be asked questions and at the same time Dr Jariah will give an informal explanation associated with each response from students. After a few minutes tutorial session, the class started. She will give more detailed explanation on the topic discussed. At this time, this will makes all the students can easily understand the topic discussed. Thus, understanding and effectiveness of the information communicated better. Dr Jariah also a very hardworking person and she did not skip class even though she very busy with administrative tasks. This allows all the topics covered in time. Last but not least, I am really respect her with her academic achievement and career as a lecturer where leadership qualities, communication skills are very good and be an example to all of us as a student” – **Zainab Mahamud, Alumni- graduated in 2009/2010***

“My experience with Dr. Jariah as a lecturer on year 2010 is that she's a very dedicated lecturer in teaching despite her busy schedule. She hardly misses her class and would fully utilize her lecture's hours. Even when she could not attend for some classes, she would find a day for a replacement. On her every class, I can see that she was always well prepared on what to teach, and really care for student's enquiries/questions. She would never turn down a student's question with disappointing respond such as "you find it yourself". Even though, sometimes students will ask something out of her knowledge, she will humbly ask for the class opinion. When there was no answer, she will try to find out the answer and let us know on the next lecture. To summarize it, she is one of the very good lecturers in FKP”-**Kwan Wai Loon, Alumni -graduated in 2009/2010**

### Comments by postgraduate students

“Pada pendapat saya, Dr.Jariah adalah seorang yang sangat bermotivasi, berdedikasi di dalam menjalankan tugas dan sangat focus dalam menyelesaikan sesuatu tugasan. Saya rasa sangat bertuah kerana dapat berkenalan dan menyambung pengajian di bawah seliaan beliau. Selama dalam tempoh lebih kurang 2 tahun tersebut, beliau banyak mengajar dan berkongsi perkara yang bermanfaat dan berguna yang boleh saya pelajari dan teladani.

Pertama, bagaimana untuk mendapatkan dan mencari bahan bacaan ilmiah serta bagaimana untuk memulakan sesuatu kajian. Pelbagai tips dan kaedah di ajarkan kepada saya supaya penyelidikan yang saya jalankan lebih bersistematik serta berkesan bagi mencapai hasil yang terbaik. Seterusnya, beliau menjadi pencetus kepada idea-idea yang baru serta menggalakan saya sebagai pelajar untuk lebih berfikiran kreatif, kritikal dalam menyelesaikan sesuatu masalah. Beliau juga seorang pendengar yang baik dimana sedia untuk mendengar masalah- masalah yang dihadapi serta menerima idea dan cadangan daripada pelajar nya.

Di samping itu, beliau seorang yang sangat bersungguh-sungguh dalam melakukan sesuatu tugas dimana ini telah menggalakkan saya untuk berusaha lebih keras untuk menyiapkan kajian saya. Sumbangan Dr.Jariah yang amat penting sebagai penyelia pada saya adalah, ketekunan, ketelitian serta keinginan beliau yang sangat tinggi untuk saya menghasilkan sebuah tesis yang bermutu. Untukitu, beliau tidak pernah jemu untuk memeriksa setiap isi kandungan tesis walaupun pada hari hujung minggu dan ini amat bermakna kepada diri sertak eluarga saya.”- **Yusliza Yusuf- Alumni M.Sc 2011**

“Dr Jariah is my M.Sc. supervisor. I was also in one of her classes in my degree. From what I know about her, she has depth knowledge in materials. She has the ability to guide her student to understand the subject and also to sustain it. She is a great combination of kindness and strictness. So far in her supervision, I could understand her explanation very well where she explains the theoretical parts with good examples. Moreover, when I am facing some problems during my master, she tries her best to solve the problems effectively. She never loses patience with her student eventhough she has a quite a number of student to be supervise and lectures”- **NurFarizanAyoob –Alumni and M. Sc student (Thesis submitted July 2012)**

*“My admiration began when she became a supervisor for my final year project. The spirit of her dedication and diligence in performing a task gave an impact in me. Projects undertaken can be implemented with good results plus continued encouragement and guidance to the completion of the project. Once again, I choose her to be a supervisor for my master project. The determination that she showed in guiding me solving a problem is admirable in accordance with her nature that each task/job should be done properly with best effort. She always gave words of spirit when there are challenges that occur throughout the project. Being a student to her is a very meaningful experience. Her positive attitude and not know the meaning of despair made her as my idol” –NurRifhanRosli- Alumni and M.Sc. student.*

“Supervision from Dr.Jariah is excellent as she provides assistance to students from the basics by carrying out a task together with them without hesitation. She conducts a well-planned supervision whereby students can have a clear understanding and a proper knowledge transfer takes place. A highly knowledgeable supervisor and offers a great assistance to students in tackling problems along the course. It is very comfortable and pleasant to be supervised by Dr.Jariah as learning process takes place smoothly and course is well guided to achieve the desired goal. It is a great opportunity to work and to be supervised by Dr.Jariah”- **Dilip a/I Arudra- M. Sc student.**

## 6.0 Academic Supervision & Advisory

List of student supervision and advisory

| <b>Program</b>             | <b>Name of Student</b>       | <b>Role</b>         | <b>Year</b> |
|----------------------------|------------------------------|---------------------|-------------|
| <b>Eng. Doctorate</b>      | MaslilahBt Said              | Main Supervisor     | 2011        |
| <b>M. Sc (By research)</b> | YuslizaBinti Yusuf           | Main Supervisor     | 2009-2011   |
|                            | NurFarizanbtAyoob            | Main Supervisor     | 2010        |
|                            | NurRifhanBtRosli             | Main Supervisor     | 2010        |
|                            | DilipArudra                  | Main Supervisor     | 2011        |
|                            | FarahaniIrnaNazari           | Main Supervisor     | 2012        |
|                            | MasayuDollah                 | Co-Supervisor       | 2009-2012   |
|                            | Kwan Wai Loon                | Co-Supervisor       | 2010        |
|                            | ZainabbtMahamud              | Co-supervisor       | 2010        |
|                            | NurhamizahBt Ahmad Rusli     | Co-Supervisor       | 2012        |
|                            | Mohamad Safwan Bin Ismail    | Main Supervisor     | 2008        |
| <b>Final Year Project</b>  | Yusman Halimi Yusoff         | Main Supervisor     | 2010        |
|                            | Nur Farizan Ayoob            |                     |             |
|                            | Nur Rifhan Rosli             |                     |             |
|                            | Saiful Afifuddin Bin Jalil   |                     |             |
|                            | Lum Yip Hing                 | Main Supervisor     | 2011        |
|                            | Nurhafiza Bt Ismail          |                     |             |
|                            | Nurul Ain Bt Norazizi        |                     |             |
|                            | Nurhamizah bt Rosli          |                     |             |
|                            | Che Muhd Firdaus             |                     |             |
|                            | Tuan Basiron bin Tuan Yusoff |                     |             |
|                            | Mohd Rubai'e Amir            | Main Supervisor     | 2012        |
|                            | Mohd Hafizul Tukimin         |                     |             |
|                            |                              |                     |             |
| <b>Industrial Training</b> | Jevintharan a/l Sivasankaran | Academic Supervisor | 2009        |
|                            | Lim Yeong Siang              |                     | 2010        |
|                            | Leng Siong Cheng             |                     |             |
|                            | Fazilah Bt Hassim            |                     |             |
|                            | Arief Ridzwan B Yussuff      |                     |             |
|                            | Nurhamizah Bt Ahmad Rusli    |                     |             |
|                            | Nurhernida Bt Abdullah Sani  |                     |             |
| <b>Academic advisory</b>   | 15 students                  | Academic Advisor    | 2009        |
|                            | 29 students                  |                     | 2010        |
|                            | 25 students                  |                     | 2011        |
|                            | 25 students                  |                     | 2012        |

## 7.0 Other Teaching-Related Activities

### 7.1 Curriculum Development and Syllabus Revision

1. Engineering Team Analysis, Mechanical Engineering Curriculum Review, Mechanical Engineering Department, Universiti Teknologi Petronas, 2002.
2. Task Force for Foundation studies Curriculum, University Technology Petronas, 2002.
3. Bachelor of Manufacturing Engineering (Eng Materials) Curriculum Review, UTeM 2009-2010.
4. Task force on Curriculum development for the Bachelor of Materials Engineering, UTeM 2010.
5. Member of workshop on reviewing Mining Engineering Curriculum, Organized by Malaysian Professor Council, 2012.

### 7.2 Talks on Teaching and Learning.

1. OBE Implementation at UTeM, 16<sup>th</sup> Mac 2011 (Seminar to Non Engineering Faculty Staff), PPS Auditorium, UTeM.
2. J. M. Juoi, Z.M. Rosli, S.Y. Chang, S.R. Shamsuri, and T.A. Rahim, Implementation of CPBL in achieving learning outcomes for bmfb 3323 material selection subject, OBE SEMINAR, UTeM, 18 July 2011.
3. LATIHAN MODUL PENDIDIKAN BERASASKAN HASIL (OBE), TAHAP 1 (ADTECH), Student Learning Time, 9 Nov 2011.
4. LATIHAN MODUL PENDIDIKAN BERASASKAN HASIL (OBE), TAHAP 1 (ADTECH), Teaching Plan, 9 Nov 2011.
5. Demo Sistem OBE UTeM.

### 7.3 Talks on Postgraduate study

1. Article Writing, Research Methodology Course, UTeM, 2010, 2011 & 2012.
2. Research Presentation, Research Methodology Course, UTeM, 2010, 2011 & 2012.
3. Article Writing for M.Sc. Student, FKP, , Nov 2011.
4. How to Write a Research Proposal, Infineon and Research Methodology Course, 2011.
5. Short Course on Research Methodology for Final Year BMFB Students for FYP 2010.

### 7.4 Courses and Conferences

1. Group facilitation Skills, Education Technology Development Unit, Universiti Teknologi Petronas, 4-5 March 2002.
2. Testing & Evaluation and Teaching Methodology, Education Technology Development Unit, Universiti Teknologi Petronas, 16-17 January, 2002.
3. Kolokium Pengajaran dan Pembelajaran, Fakulti Kejuruteraan Pembuatan, 4 November, 2003.
4. Bengkel Portfolio Pensyarah, Pusat Pengajaran dan Pembelajaran (PPP) UTeM, 2010.
5. Bengkel OBE: Siri 1, PPP, UTeM, 2009.
6. Bengkel OBE siri 2, PPP, UTeM, 2009.
7. Bengkel OBE siri 3: PBL Part 1, PPP UTeM, 2010.
8. Bengkel OBE Siri 4: PBL Part 2, PPP UTeM, 2010.

9. Course on Supervision & Evaluation of Graduate Research, PPP, UTeM, 2010.
10. KursusPenilaianTesisSebagaiPemeriksaDalamandanLuaran, PPP, UTeM, 2010.
11. KecemerlanganPengajaran&Pembelajaran, Modul 2, TK5, PejabatPendaftar, UTeM, 2010.
12. Pengukuran&PenilaiandanPengurusanKualiti, Modul 3, (TK5), PejabatPendaftar, UTeM, 2010.
13. Penyeliaan, Modul 4, TK5, PejabatPendaftar, UTeM, 2010.
14. Program Executive Talk: InovasiDalamPengajaran, PPP, UTeM, 2011.
15. Bengkel Continuous Quality Improvement, PPP, UTeM, 2011.
16. KursusLatihanPenyeliaan Program PhD Industri, PusatPengajianSiswazah, UTeM, 2012.
17. Program Executive Talk: Learning Motivation, PPP, UTeM, 2012.

## 7.5 Publication

1. **J.M. Juoi**, Z.M. Rosli, S.Y. Chang, S.R. Shamsuri, and T.A. Rahim “Implementation of Cooperative Problem-Based Learning in Achieving Learning Outcomes”, The First National Conference on Active Learning, , Melaka, Dis 2011-**BEST PAPER AWARD**

## 7.6 Grant

1. PJP/2011/FTMK (21D)/S00967An Improved Model in Teaching and Learning of Computer Programming for Novice Learner-**C0-Researcher**.

## 7.7 Consultations

1. Program Latihan Modul Pendidikan Berasaskan Hasil, Pusat Latihan Kemahiran Tinggi (ADTEC) Melaka- RM15K
2. Program Semakan dan Pemurnian Kurikulum Berdasarkan OBE, Pusat Latihan Kemahiran Tinggi (ADTEC) Melaka- RM 7, 180.

## 7.8 Committees

1. Pengerusi **JK Ad-Hoc Penggubalan Polisi Akademik** Universiti
2. Pengerusi **JK Pelaksana Program Artikulasi**
3. Ahli **JK Kursus Kaedah Penyelidikan Universiti**
4. Ahli Sektor Penyelidikan &Pengurusan Penyelidikan di bawah CPD Akademik
5. Setiausaha **JK Pelaksanaan Pendidikan Berasaskan Hasil (OBE)**,
6. **Ahli Teknikal** Membangunkan **Sistem Pendidikan Berasaskan Hasil (OBE)** UTeM
7. Setiausaha JK Program Mobiliti Pelajar UTeM
8. Tenaga Penggerak Penubuhan Fakulti Kejuruteraan Bahan
9. Ahli JK Kerja Akademik dan Antarabangsa Malaysian University Network (MTUN)

## **8.0 Teaching Improvement and Future Plans**

In achieving my objective in teaching and learning, I need to always equipped myself with the relevant knowledge and methods so that meaningful learning is taking place thus benefiting my student in each own way (not only in their career but most important in life). Moreover, within the scope of my responsibility, the levels of intended outreach is becoming wider (from a person to a class, faculty, university, nation and worldwide). There will always a continuous challenge as the approach, skill needed and methods do varies with time. As such, lifelong learning is a must practises. I am to face the challenge with optimistic mind, determination and innovative action as teaching and learning is a passion that I am living with (*There is not even a time that I am entering my lecture session without a nervous feeling as that is the moment that I am trying to perform with my very best, upon my very best preparation*). With this spirit I look forward to contribute more in developing a person who appreciates knowledge in life, hence honouring the importance of knowledge in human life.