

# Exploring FYP Students Expectations and Concerns

Harimi Djamila, Jidon Makinda  
Faculty of Engineering  
Universiti Malaysia Sabah  
Kota Kinabalu, Malaysia

**Abstract**—Final Year Project (FYP) is compulsory in the Faculty of Engineering at the Universiti Malaysia Sabah. The importance of final year project (FYP) in strengthening competences of engineering students is widely known. However, little is available about students' expectations and concerns while carrying out their projects. In this article, a survey was conducted at the Universiti Malaysia Sabah, Faculty of Engineering under civil engineering programme. The purpose is to investigate the students' expectations and concerns about their FYP. This study is a replication of a case study carried out in the UK with few alterations. The expected and the preferred type of supervision, the frequency of the expected face to face Supervision were carefully analyzed and discussed. This investigation is very useful in addressing students concerns for preparing mentally the next batches for better performance with least frustrations while improving the students' performance.

**Keywords**—Component; FYP, OBE, expectations, Malaysia

## I. INTRODUCTION

Final Year Project (FYP) is a compulsory subject in the Faculty of Engineering at the Universiti Malaysia Sabah. It is a major requirement for any accrediting body [6]

The final year project covers two semesters. The main aim during the first semester is designing a sound FYP methodology. This may not be achieved without in depth knowledge about their FYP topics. Therefore, specific objectives are expected to be carefully written and well justified in chapter 1 of their FYP1 reports. Many students will also gain new multidisciplinary knowledge through literature review. They will certainly learn about the best engineering practices of their current FYP topics.

During the second semester, the students will control better their final year projects. At this stage, the students are expected to execute their research designs and made any necessary adjustments. It is essential that the students should analyze and discuss rigorously their own results according to similar studies. Their FYP reports obviously end by conclusions linked to each objective. Future work recommendations are mandatory. This is because there is no perfect achievement without seeking further knowledge on the topic.

The students from the engineering faculty of the Universiti Malaysia Sabah are subjected to accredited engineering degree. This is required by the faculty to be recognized by the Malaysian government. Currently, the engineering education system in Malaysia recognizes the international accreditation agreement for professional

engineering academic degrees. It is known by Washington accord. This reflects the globalization aspect of education at international level. It has been reported that education is no more an entity that belongs to a specific country only but to the world [2].

Given that globalization has a direct connection to education. Different universities around the world have different approaches to meet the minimum requirements of the accreditation bodies [5]. In Malaysia, FYP1 and FYP2 are also subjected to a continuous quality improvement (CQI). In Fact, CQI is important regardless of the adopted education system. This may be explained by that; the changes in any society are inevitable. Consequently, the education system has to be improved to stay viable [1].

In designing an effective process, it has been reported that we are expected to be mindful on effective teaching strategies [3]. The main challenge is the students' perceptions and expectations with the increase of the complexity level of the education system. It has to be mastered. The high quality standard has to be acquired as well in FYP project. Hence, this article is written to explore and analyze students' perceptions, expectations and concerns prior starting and almost after completing their final year Projects (FYP2).

## II. METHOD

The present case study was conducted at the University Malaysia Sabah. The selected students are from civil engineering programme. The selected procedure was a replication of a case study conducted in the UK with some alterations. Such study is important in helping the students to reach the highest possible standard with minimum frustrations. It has been reported that research based on a case study needs to clarify whether a single case study or multiple case studies are necessary [4]. The present investigation is about exploring students' perceptions, expectations prior starting and also prior submission of their FYP2. This is very helpful in terms of preparing the next FYP students with least frustrations. It will certainly clarify students own perceptions toward their FYP versus the current FYP outcomes.

This study was conducted in a university located in East Malaysia. The final year project (FYP) course is divided into two semesters. FYP 1 is usually carried out during first semester of the 4<sup>th</sup> year. FYP2 is continuation of FYP1. It is carried out during 2<sup>nd</sup> semester. The students are expected to reach their highest possible ability during their FYP. It may

be reflected by ensuring quality results with optimum cost and best time management.

In this investigation, the final year civil engineering students were requested to fill in a questionnaire during FYP briefing sessions. The questionnaire is related to their final year projects. It was distributed two times. The first time was prior starting their FYP1 and the second time after almost completing their FYP2. The questionnaire distributed to the students is briefly explained in results and discussion in the next section.

### III. RESULTS AND DISCUSSION

This section covers mostly the qualitative analysis and discussion of the collected data. This section covers the expected type of supervision, preferred type of supervision, frequency of the expected face to face supervision, and other relevant issues

#### A. Expected type of Supervision

In the first part, the students were asked whether they were expecting strict timetable or flexible timetable types of supervision. The plotted results in Fig.1 revealed that about 90% of the students expected that their supervisors' timetables will be flexible. Therefore, in the next batch, the students were informed by the head of the programme to respect the supervisors' schedules and to adhere to the time suggested by them. The students also were clearly informed to be more independent in carrying out their final year projects. This is while seeking advices and recommendations from their supervisors. The aim is to ensure high standard achievements from independent students.

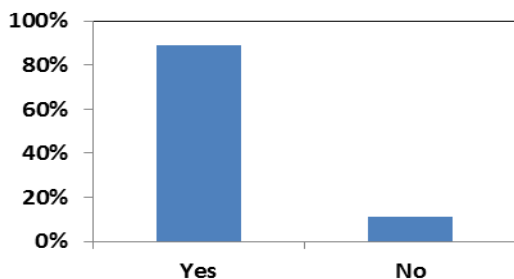


Fig. 1. Students Expectations Prior FYP1

Number of respondents (49)

Prior Submission of their FYP 2 reports, the students were further asked about the kind of supervision found during their FYP. The results are plotted in Fig.2. It is apparent that the percentage of votes related to "strict timetable" increased by 10%. However, when the results were compared with the UK students, about 36% expected flexible supervisor, whereas 64% expected strict timetable of supervision. Their sample size was 80 undergraduate students. It is necessary to mention that the students of both case studies have different backgrounds

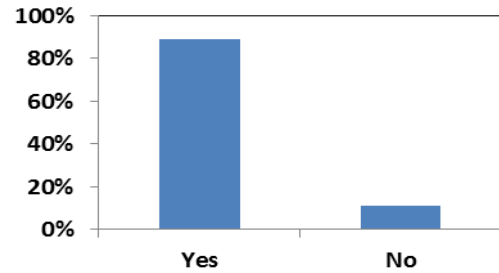


Fig. 2. Students Expectations Prior FYP2 Reports Submission

Number of respondents (45)

#### B. Preferred Type of Supervision

The next step, the students were further asked about the preferred type of supervision. This was prior starting their FYP1. The majority of the students (96%) preferred face to face supervision. Only 4% preferred email type of supervision. The results are illustrated in Fig.3.

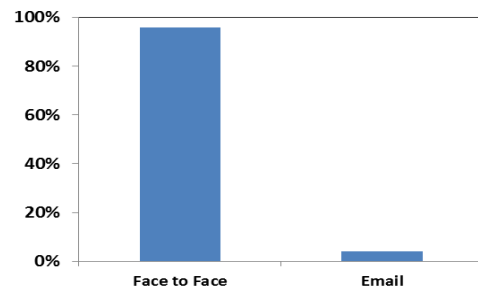


Fig. 3. Preferred Type of Supervision prior FYP1

Number of respondents (46)

In the UK case study, the students were given more choices, face to face, email, and phone. The question was elaborated differently. However, the majority of the students preferred face to face supervision. The next preference was for emails and last for phone.

In this study, the students were further asked about the fulfilment of their preferred type of supervision. This was just prior submission of their FYP 2 reports (Fig. 4). The majority of the students found the preferred type of supervision was fulfilled.

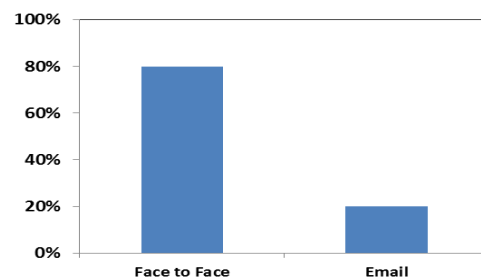


Fig.4 Preferred type of Supervision

Number of respondents (46)

**C. Frequency of the Expected Face to Face Supervision**

In this study, the frequency of the expected face to face supervision was addressed. The students were asked about the frequency of face to face private supervision. This was prior starting their FYP1. The results are plotted in Fig 5. Despite the majority of the students expected flexible timetable supervisor, to our surprise, only 47% (almost half of the students) expected meeting the supervisor once a week. The next percentage was for 35%. These students expected meeting their supervisors twice per week. This was followed by every two to three weeks, every fortnight. It may be important to report that the recommended duration for meeting students with their supervisors in the present faculty is one hour per week.

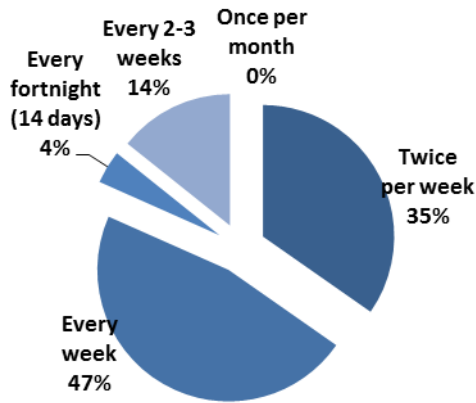


Fig.5 Frequency of Expected private face-to-face Supervision

Number of respondents (49)

For the UK case study, about 63% of the students expected weekly private face to face supervision. Surprisingly, the next highest percentage of 31% was for every fortnight. Only 3% selected once per month, 2% twice per week and also 2% every two to three week. The differences between the two case studies are obvious.

In this investigation, the students were further asked about their wishes in getting more time from their supervisors. This was just prior submission of their FYP 2 reports. The results are plotted in Fig.6. About 90% of the students wished that their supervisors provided more time.

The students were further asked about the expected duration of private face to face supervision. The highest percentage of the students of 56% expected 15-30 minutes duration. The next highest percentage of 36% was for 30-60 minutes. The results are illustrated in Fig. 7 and 8

It is apparent from Fig. 8, that the expected duration of face to face meeting was mostly fulfilled (89%). The comparison with the UK case student cannot be made. This is due to some differences in the way of asking the question.

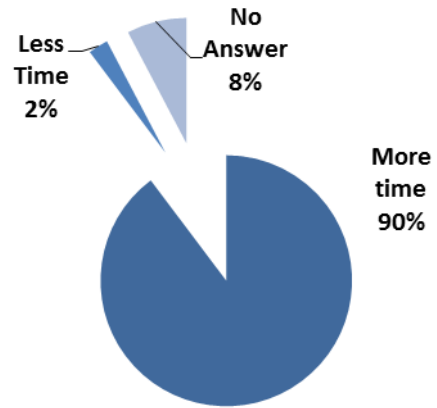


Fig. 6 Students wishes toward the allocated time to the students.

Number of respondents (39)

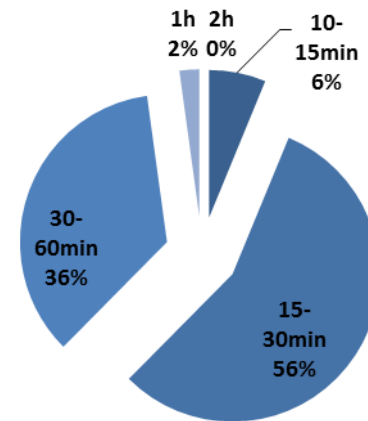


Fig. 7 Expected duration of face to face supervision prior FYP1

Number of respondents (48)

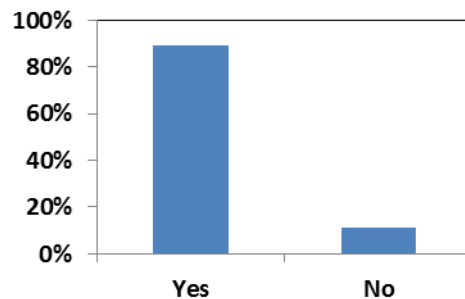


Fig. 8 Expected duration of face to face meeting my supervisor prior FYP2 reports submission

The students were also asked about the greatest fears/concerns of their dissertations. The greatest fears were about facing difficulties in one piece of work; time management and balancing dissertation with other modules". Similar votes were also for the case of not receiving high enough grades for the purpose to get sufficient guidance and support from their supervisors.

Finally, the students were further asked whether their supervisors were helpful or not. The results are plotted in Fig. 9. The majority of the students found that their supervisors were helpful. It is necessary to highlight that the students were requested to avoid writing their names prior answering the questionnaire.

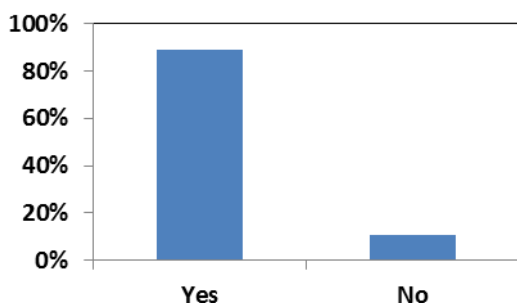


Fig. 9 Students' perceptions toward their supervisors

#### IV. CONCLUSIONS

In this investigation, the students' expectations toward their supervisors in terms of time and duration, type of supervision were analysed and compared with a case study conducted in the UK. The analysis showed that the student expectations prior the first briefing were understandable. However, some expectations were different from the programme and faculty goals. The students' frustrations were mostly reasonable. Overall, their attitudes toward completing their projects were positives. Such study is not only helpful in providing advices and recommendations to the students prior their FYP study. It also helps the lecturers in tackling and handling their students' expectations prior and during their FYP projects.

#### REFERENCES

- [1] Chan, S. Ismail, J. K. Lim, S. H. Tan, V. M. Vadivelu, C. T. Tye, M. N. Murat, S. C. Low, C. P. Leo, "A First Attempt at Project Based Learning (PBL) on Final Year Design Project Chemical Engineering Undergraduates Student at Universiti Sains Malaysia (USM)", Proceedings of the 6th International Conference on Process Systems Engineering, Kuala Lumpur (PSE ASIA), 25 - 27 June 2013,
- [2] Scott Thompson-Whiteside, "Are Standards-based Quality Systems a Threat to the Internationalization of Teaching and Learning?" The IAFOR Journal of Education. Vol. 1, pp. 11-37, 2013.
- [3] Tom Cosgrove, Declan Phillips and Michael Quilligan, "Educating Engineers as if they were Human: PBL in civil engineering at the University of Limerick", 3rd International Symposium for Engineering Education, 2010, University College Cork, Ireland
- [4] Martin Jaeger<sup>1</sup>, Desmond Adair, "Case Study: Ethics Concepts during a Student's Final Year Project in the Middle East. Journal of Modern Education Review", Vol. 3, pp. 78-98, Academic Star Publishing Company, 2013.
- [5] Abdulkareem Sh. Mahdi Al-Obaidi, Douglas Tong Kum Tien, Mushtak T. Al-Atabi. Abdulkareem. EURECA, "A Unique Approach For Final Year Project at TAYLOR'S University", Proceedings of the 10th International CDIO Conference, Universitat Politècnica de Catalunya, Barcelona, Spain, June 16-19, 2014.
- [6] ABET, Criteria for Accrediting Engineering Programs 15 June 2015, <http://www.abet.org/accreditation/accreditation-criteria/criteria-for-accrediting-engineering-programs-2015-2016>.