

Factors contributing to Graduate on Time in a Technical University: Lecturers' Views

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Abstract— The aim of this study is to identify the factors that contribute to students' timely graduation at a technical university. The strategies practiced by an undergraduate program to produce high percentage in graduating on time were investigated. A study to explore the effective strategies used was conducted through open-ended interview questions. The open-ended questions were developed by the researchers. The head of section, program coordinators, and two lecturers were involved in study. Undergraduate students involved in the survey are from September 2013 cohort. Based on the open-ended questionnaire, the strategies practiced by the program were identified and factors contributing to graduate on time at Universiti Kuala Lumpur were highlighted in this study. The strategies can be employed by all programs in order to produce maximum percentage of graduate on time for every intake.

Keywords—graduate on time; effective strategies; technical university, engineering technology

I. INTRODUCTION

Students' success is always a key contributor to the country's economical growth. One of the means to measure students' success and an institutional effectiveness is through the timely graduation rate of full-time students. The other two factors that also contribute to institutional effectiveness are retention rate and academic achievement [1]. In many institutions, especially at public universities in other countries, undergraduate education is usually labelled as a-four year experience, but unfortunately, a lot of students delay in finishing their degree (40% completed within four years while 60% in six years) [2].

In addition to this, more and more professions require advanced education from graduates with a bachelor's degree. By graduating on time, the students are able to use the extra time and money to enhance their bachelor qualifications, thus, increasing the probability of being accepted immediately by the professionals. Texas Tech University stated that "The

longer it takes you to graduate, the more money you spend. Graduating on time saves you money and time" [3]. Thus, timely graduation is a crucial element to be improved in all institutions to ensure the students' success and the institution's affectiveness as well as being accepted by the professions, as that would directly contribute to the growth of the country.

Texas Tech University defines Graduate on Time (GOT) as:

"A timely graduation means the student graduated within the university expected timeline for the student's chosen degree program. More than 70 percent of the Texas Tech undergraduate degrees are designed to be completed in 4 years with a minimum course load of 15 hours per semester. Degree programs such as those in engineering or architecture require more hours and a timely graduation could mean 5 to 5.5 years".

Malaysian universities do not have a specific definition of GOT for any undergraduate programs. However, most of the universities underlined the minimum and maximum duration allocated for the postgraduate programs.

As for the university involved in this study, Graduation on Time (GOT) is defined according to the total number of credit hours eligible by each individual student as current academic regulation practices. There are three different cases as follows:

TABLE 1 Definition of Graduate on Time (GOT)

Category	Number of Credit Transferred (CrT)	Duration consider as GOT
1	$CrT < 21$	8 semesters
2	$22 \leq CrT \leq 36$	7 semesters
3	$CrT > 36$	6 semesters

Advancing students towards completing their studies on time is a central focus of any academic institutions. Thus, to achieve the target, this study is aiming to identify factors that contribute to students' high GOT in an undergraduate program at a technical university.

II. METHODOLOGY

In this study, open-ended interview questions were probed to six respondents which include Head of Section (HOS), Program Coordinators (PC), and senior lecturers. Ten open-ended questions were developed and submitted to respondents to gain information about the factors that lead to graduate on time in an undergraduate program at Universiti Kuala Lumpur Malaysia France Institute (UniKL MFI). Open-ended interview questions method were employed as it allows the respondents to answer the questions to the length and depth that they plan to. (Kendall & Kendall 2011). The data were analyzed manually to find the common opinions or points shared by all respondents.

III. FINDINGS AND DISCUSSION

Based on the academic data, one undergraduate program has been identified to achieve highest GOT percentage for three consecutive semesters. Six lecturers who are teaching the program were selected to participate in this study. All of them have been teaching at the university for more than 15 years. Two of them have experience as the Head of Section where one of them is the present Head of Section. Another two have experience as the Program Coordinator where one of them is currently holding the position. The other two are the lecturers teaching the university's common subjects. The respondents are referred by:

- HOS 1 = Former Head of Section
- HOS 2 = Current Head of Section
- PC 1 = Former Program Coordinator
- PC 2 = Current Program Coordinator
- SL 1 = Lecturer Teaching Common Subject 1
- SL 2 = Lecturer Teaching Common Subject 2

There are four main findings obtained from these three groups of respondents.

A. Lecturers' support (Academic and non-academic)

HOS 1

Encourage staff to keep in touch with all of the existing and ex-students and also the other 2 diploma programs through social network such as facebook, twitter, whatsapp etc. If they are connected it is much easier to trace or track down any difficulties.

HOS 2

The instillation made was through friendly reminders, i.e., during meetings either formally or informally.

One important matter is the mid semester academic review. This serve as a very good check valve to show any kind of students' setbacks. Definitely we discussed about any uprising issues and the lecturer(s) concerned will then find the corrective remedy.

PC 1

Always remind student at early semester begin.

PC 2

Among the strategies planned for good students are:

- i. *Give advice for students to maintain and improve furthermore their grades.*
- ii. *Give advice for students to be included in dean list group.*
- iii. *Give suggestion for further study to highest level.*

Among strategies planned for weak students are:

- iv. *Identify source of problem.*
- v. *Dedicate every student with good reputation mentors.*
- vi. *Include them in clinic classes.*

SL 1

I have no specific strategies. I just try to make sure they pass French on time and that they do not need to repeat. Pass On Time. POT.

I inform them about the MARA pay back loan incentives ie if they GOT and obtain a CGPA of above 3.75 the loan is transferrable into a scholarship etc.

SL 2

I did remind students regarding the importance of GOT.

I inform students regarding the consequences of NOT GOT where students will face financial problem.

Lecturers' support is one key element identified to encourage students' GOT in this program. Support was highlighted by [4] as one of the primary factor for students to be successful and persist. The support identified includes information and guidance provided by the lecturers to ensure students' smooth performance throughout the specified study duration. HOS 1 shares information in terms of monetary benefits and difficulties that the students would face in their real life by getting or not getting GOT.

HOS 1

Say about the hardship to live nowadays. Without funds provided by MARA, we could not afford to pay the high fee

which is roughly like RM78 K for a BET program. Inform the student/s on penalties by MARA and the extra money they have to pay for every credit taken if they go beyond the semesters allocated.

Do inform the students the students on the benefits they will get if GOT, inform on the offer for reduction by MARA based on the results achieved.

HOS 1 statements were also supported by PC 1 and PC 2. They highlighted the financial benefits of getting GOT to their students.

PC 1

*Remind than regarding the discount or reduction of MARA loan payment for those who excellent.
Able to work early and get more experience*

PC 2

I encouraged students by:

*Spread the news that they will get reduction of loan repayment for MARA loan if they had good pointer result.
Students will be always remind lost and profit by cost in term of money.*

The information about positive and negative financial implications is one primary element concerned by five out of six respondents. They emphasized the importance to inform students that if the students delay their graduation, they need to spend extra money to finally graduate. In this university, financial factor definitely puts the pressure to the students to graduate on time. PC 2 classified that debt with university is one of the reasons for not achieving GOT.

Support in terms of guidance was also identified as the contributing factor that helps students to timely graduate as mentioned by PC 2.

PC 2

Give assistance for them to well plan with their study.

Time management skill is one important element to be mastered by students since it is recognized as a major contributor to excellent academic standing [5]. When time management skill is linked closely with their future plans, the academics performance will be escalated [6].

The outcomes of this study in terms of information and guidance given by the lecturers are parallel to the conclusion

made by previous researchers. Staff attitudes and rapport with students will minimize the social and academic gap between them and hence create rooms for students to consult with their lecturers [7] [8]. In this case, the lecturers play an important role to guide students to strategize and plan for their studies and career path as highlighted by the respondents in the following part.

B. Job Prospects (Linkage with industries)

HOS 1

Create groups by involving the public that relates to the Fabrication and Inspection industry. In 'Telegram' there are something like 200 members from various companies and agencies discussing on all related issues on 'Fabrication and Inspection' in Malaysia. Let the students feel that they are in a group or association backed by the government with highest concern as do other engineering association.

Keep the students updated with job vacancies and opportunities related to Fabrication and Inspection in local and international companies. Hailed them as the best graduates in the field of Fabrication and Inspection available in the world.

Develop a 'rapport' with industries so that they will employ our graduates without hesitation. Keep up to date on the technology, various breakthroughs especially in welding industries.

Always begin the class with stories and information that currently happens in the oil and gas industries. Relate the stories to the student's career path, let them know the industry demands for the field they are involved with.

Get them to read books and magazine available in the GLH, there are various magazine subscribed by the university that can picture the actual job scope they would be involved with. The more they read the closer they will see the opportunity.

PC 2

They will earn high payment with good result from company.

Respondents agree that it is important for students to know the requirements and demands of their future employers. If they do not see this connection, the urge to persist and work hard in their studies will not be prioritized [6]. By graduating on time they will able to grab the best opportunity available for them.

In conjunction to this point, the experience received from the alumni who has successfully excelled in the working world is crucial. In addition, senior students' experience served as a model to help students in succeeding in their studies. These ideas are emphasized by the respondents in the next points.

C. Alumni/Senior Students' Support

HOS 1

Accept invitation from students in Alumni activities, 'Talks' by industry representatives. Show up the links and ties between academician and industries. Students will grow up with the confidence brought up by their lecturers.

Show pictures of INTRA students, their seniors performing their works and ongoing activities in the oil and gas industry or INTRA placement. Push them to perform their best.

PC 2

1. *Asking them to help their friends who are weak.*
2. *Give some example of graduate students among their friends who are successful in their filed.*

Based on the ideas shared by the respondents, alumni and also peer mentoring is another key element that will drive and support students to be successful in their academic performance [9]. Peers in this context relate to friends from the same programme, seniors who has gone through the same programme as the students and also alumni group who have succeeded the programme and joined the work force. But this could also include all the people around the students that they interact with and feel connected [10]. When there is a strong connection and support between family members, there is bound to be the same effect with peers, thus resulting to a better performance in the academic achievement [11]. If the support and connection from the family and peers are not strong, then the role of the counsellor will be more pertinent as mentioned by PC 2.

D. Counselor Role

PC 2

Eye to eye discussion or refer them to counselor.

PC 2 acknowledges the role of counselors to be as important as academic advisors in encouraging students' engagement to strengthen their academic performance. Furthermore, counselors act as an agent to promote students' awareness on the educational system and are able to propose alternative interventions to encourage GOT [8].

IV. CONCLUSION

In this study, four elements were identified as major driving factors to help students to graduate on time (Fig.1). The factors are lecturers' support, job prospects, alumni/senior students' support, and counselors' role.

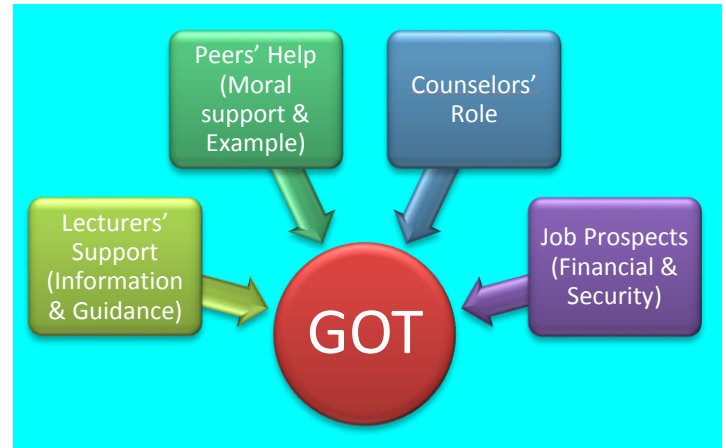


Fig. 1. Lecturers' Views on Factors Contributing to Graduate on Time

A strong sense of belonging promotes positive learning environment for students at the university. Students need attention from all members of the university to facilitate and motivate them to succeed and excel in their studies. The motivation to be successful in their studies encourages students to be an active player to control their own learning. This spirit enhances students to graduate on time in their studies.

By delaying the graduating time, students will need to spend extra money and time. The institutions will also need to recruit more teaching staff to cater the additional number of students. Alternatively, the number of teaching hours for the lecturers will be increased to overcome this issue. Due to these limited number of resources, namely teaching staff, time, and also classrooms, students will not be able to graduate on time. In the end, the country will lose out as it lacks the number of required graduates to fulfil the growth of the nation. Thus it is important that GOT attainment is put into priority by all parties in any academic institutions.

Further investigations need to be carried out to strengthen the findings in this study. The new groups of respondents need to include current students, alumni, and the counselors. It is hoped that through this further investigations, a GOT Model for UniKL could be proposed as a reference for all parties involved.

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