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Trends Towards Professionalism – Case Study of Architectural Graduates from the Universiti Sains Malaysia

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Article history: Received 11 August 2017 Accepted 21 November 2017 Available online 01 December 2017The path to becoming a professional architect in Malaysia is largely affected by the two systems involved in it; the tertiary education (accredited LAM programs) and the official regulating body (LAM) for the field. In order to ensure that the current systems are providing the right and most efficient route towards producing more professionals in the construction field for the development of the country, it is crucial that the directions or trends of the past architectural graduates be analysed thoroughly to get a grip on their effectiveness. This paper is aimed at establishing the numbers of architectural graduates and identifying their trends of career paths towards professionalism as well as the factors that influence their decisions. Data is retrieved from USM's student Records and Data Unit for graduates of B.Sc. HBP and B.Arch from 1993 to 2017. The data is then mapped according to criteria such as race and gender to the listed records of registered Part III architects and graduate architects retrieved from LAM. Findings show that about 50% or half of the graduates chose to pursue a professional career while the other half have deviated due to several reasons such as course difficulty, struggles to sustain interest and personal choices. © 2017 INT TRANS J ENG MANAG SCI TECH.	ARTICLEINFO	A B S T RA C T
	Article history: Received 11 August 2017 Accepted 21 November 2017 Available online 01 December 2017 Keywords: Program Accreditation; LAM; PAM; Architecture Graduates; Part I Part II;	The path to becoming a professional architect in Malaysia is largely affected by the two systems involved in it; the tertiary education (accredited LAM programs) and the official regulating body (LAM) for the field. In order to ensure that the current systems are providing the right and most efficient route towards producing more professionals in the construction field for the development of the country, it is crucial that the directions or trends of the past architectural graduates be analysed thoroughly to get a grip on their effectiveness. This paper is aimed at establishing the numbers of architectural graduates and identifying their trends of career paths towards professionalism as well as the factors that influence their decisions. Data is retrieved from USM's student Records and Data Unit for graduates of B.Sc. HBP and B.Arch from 1993 to 2017. The data is then mapped according to criteria such as race and gender to the listed records of registered Part III architects and graduate architects retrieved from LAM. Findings show that about 50% or half of the graduates chose to pursue a professional career while the other half have deviated due to several reasons such as course difficulty, struggles to sustain interest and personal choices.

1. Introduction

The designation "architect" is generally reserved by law or custom to a person who is professionally and academically qualified and generally registered/licensed/certified to practice architecture in the jurisdiction in which he practices and is responsible for advocating the fair and sustainable development, welfare, and the cultural expression of society's habitat in terms of space, forms, and historical context. As such, the training of architects must encompass those expected skills and knowledge (PAM, 2009). Colleges and universities are given the roles as education providers to start the training of the architects. At this tertiary level, those taking the architecture course learn about design, architectural history, structures, construction, professional practice, and so many other subjects relevant.

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In Malaysia, colleges and universities offering the architecture course are governed by the CAAEM or the Council of Architectural Accreditation and Education Malaysia (Malay acronym - MAPSM), formed under the purview of the Board of Architects (or Lembaga Arkitek Malaysia). CAAEM is being tasked to advise the Board on issues and challenges that relate to architectural education of which matters on accreditation and validation of architecture programmes are placed directly under the scope and duties of the Council (www.lam.gov.my). Those students wanting to pursue an architectural degree are advised to go to accredited schools, for the Part I and the Part II, so your future as architects will not be jeopardised, or delayed.

LAM, or the Board of Architects Malaysia, under the examination council, is also the controlling body of the part III professional examinations. Upon passing, it will allow the candidates to be registered as professional architects with the 'Ar.' title, thus ending the uphill climb towards finally becoming a professional. Of course, there are other smaller requirements like the log book, the oral examination, the report etc. but basically, those are the standard procedures to become a professional architect here in Malaysia.

2. Problem Statement

How feasible or practical or possible is it to become a professional architect in Malaysia? The answer is, at present, very difficult without the data and statistics. It is no doubt that those students who opt to take architecture as the course of study at the university, want to be an architect. However, how many made it?

According to Ar. Mohd Zulhemlee An (The Star, 2016), who was the immediate past president of PAM or the Malaysian Institute of Architects, there are some 2,000 professional architects in the country. However, the ratio between one architect against the population is 1:15,000 – far below the range of 1:4,000 to 1:8,000 recommended by UNESCO for developed nations. (The Star, 2016). Zulhemlee added that "We need to double our numbers. To achieve the UNESCO ratio, we must register 400 new architects annually over the next five years. But we're only registering between 50 and 100 new professionals yearly." Where could the problem be?

3. Objectives

This paper takes Universiti Sains Malaysia (USM) as a case study, the School of Housing, Building and Planning (HBP) as an architectural education provider, and the USM architecture students as samples. This research has the following objectives:

- To determine the numbers of architectural graduates from USM from the year accreditation was received to present, and see the trends of career paths of architectural students graduating from USM – the number of them becoming professionals, registered graduates and others.
- 2. To investigate if race and gender of the USM architectural graduates have any effects to becoming the professional architect.
- 3. To investigate the hurdles faced by architecture graduates hindering them from becoming professional architects and to suggest ways to counter them.

4. Methodology

From the USM data base, the list of names of architectural graduates from the School of Housing, Building and Planning were compiled from 1993 (the year when USM received the accreditation from LAM) to 2017 which was the last batch of B.Arch students as it would be upgraded to M.Arch in the coming 2018 graduation batch. These names and numbers were listed and arranged according to their year of graduation; Part I (B.Sc) and Part II (B.Arch) and also according to their race and gender. Then, a mapping was done based on the lists of registered architects and graduate architects retrieved from the website of Lembaga Arkitek Malaysia to see how many of the USM graduates managed to strive and accomplish the Part III, and how many are registered as graduates with LAM with the hope to achieve the Part III. The race and gender of the samples were also noted and taken into account.

Names collected from the USM data base were matched to the names retrieved from the website of LAM. A simple analysis of total, and percentages were derived in graphs for visualisation.

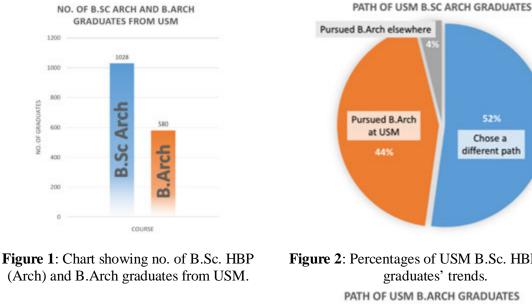
5. Findings

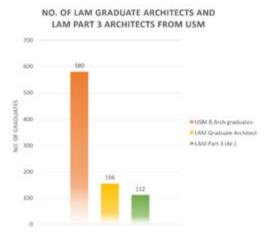
From 1993 till 2017, USM through the School of Housing, Building and Planning has graduated 1028 numbers of B.Sc. HBP (Architecture) students and 580 B.Arch students. This is expected as there usually is a filtering procedure for the selected ones who are found to be more capable of proceeding to the Part II. So there is about a 50% cut there as even though intake to the B.Arch USM could have come from other universities, most come from USM. This is seen in Fig 1.1 when about 4% were found to pursue their Part II elsewhere, and only 44% proceeded with the Part II at USM. A big 52% chose a different path or they may complete their B.Arch or M.Arch but did not bother to be a registered graduate with LAM. This 52% indicates a strong inclination of NOT having the intention of getting the 'Ar.' as one needs to be a registered LAM architectural graduate as a prerequisite for that.

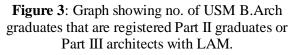
Then, from the website of Lembaga Arkitek Malaysia, it was found that only 156 names of the listed registered Part II graduates matched the USM Part II graduates. As for the professional architects (the Ar.'s), the number of names that matched came to be 112 (Fig 1.2). As can be seen in Fig 1.3 it was found that the part III Ar.'s coming from the total USM B.Arch graduates is 19% and the registered Part II graduates is 27%. This means that for the last 14 years for graduating B.Arch students in a LAM accredited Part II program, only 19% have made it to becoming the Part III professional architects, and another 27% are hopefully on the way to make it there. Meanwhile, 54% have chosen different paths or have not the intention to become a professional architect.

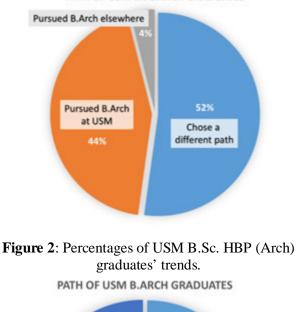
For the record, statistics as of September 2017 from the LAM website has the registered architects (the Ar.'s) at 2021 in number and the graduates at 2293. This means around 6% of the professionals were groomed at the Universiti Sains Malaysia. 8% of the registered graduates are

also from USM. In other words, one can say that 7% of the Malaysian architecture fraternity consisting of registered architects and graduate architects actually come from USM. It was also interesting to note that the last recorded architectural graduate from USM that has their Part III was in 2011, meaning it may take at least 5-6 years of practising in the field to be able to pass the Part III exam.









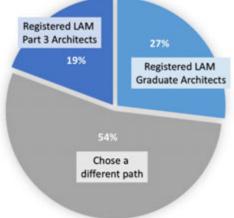


Figure 4: Percentages of USM B.Arch graduates' career paths.

In terms of gender and race, in the case of USM B.Sc. HBP architectural graduates, from the total 1028 it was found that 58% are Malays, 39% Chinese, 1% Indians and 2% others. The male to female ratio is 1.2:1. From these numbers and percentages, we found only 15% of the Malays (a majority of which are male) proceeded to the Part II while the other 85% didn't. The Chinese 39% did (also the majority of which are male) and 61% didn't while the Indians 9% did and 91% didn't.

6. Conclusion

For USM B.Sc. HBP architecture graduates, the road to professionalism – going towards the Part II of another 2 years of academics seems relatively low at 50%. With just a Part I the work in an architect's office is usually termed as assistant architect not yet capable to handle projects and still in need of a lot of supervision with salaries usually below RM2.5k. What could be the reasons for this is the subject of further investigations. A very random survey came up with answers that they are tired of studying as architecture is indeed found to be very challenging and a tedious course of study. Loss of interest is another favourite answer and this could have been due to a wrong selection of career in the beginning. Family and content with the job offer is next. If the number of professional architects is to be increased, then this first hurdle of getting more of them going on in their studies to the Part II needs to be thought of.

7. Acknowledgement

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