

A survey on required time allocated vs. actual time spent by academic in pursuit of key performance indicators (KPIs) at department of quantity surveying, KAED, IIUM

Puteri Nur Farah Naadia Mohd Fauzi*, Khairuddin Abd Rashid, Azila Ahmad Sharkawi, Sharina Fariyah Hasan, Srazali Aripin

Kulliyah of Architecture and Environmental Design, IIUM, Kuala Lumpur, Malaysia

Abstract: Key Performance Indicator (KPI) is a measurable value that demonstrates how effectively an organization is achieving its main objectives. At IIUM, academics are allocated forty (40) hours working time in a week to achieve KPIs comprise of teaching, research, publication, supervision, consultancy and administration. Academics are said to spend more time in order to achieve the KPIs. This study is conducted to identify and compare required allocated and actual working time spent by academics at Department of Quantity Surveying, Kulliyah of Architecture and Environmental Design, IIUM. The study deployed 1) content analysis on teaching schedule for academic session 2014/2015, and 2) detailed interviews with six (6) academic staff at Department of Quantity Surveying, KAED, IIUM. The key results from the study appears that more than 50% of the academics' working time on average were spent for teaching and its related tasks i.e. preparation of courses, marking of assignments and students' consultations. In addition, the study found that academics are willing to work beyond the allocated required working time in order to achieve KPIs of the university. The outcomes of the study suggest that academics at Department of Quantity Surveying, KAED are dedicated and committed to achieve beyond the targeted KPIs for a more effective and quality academic performance as well as contributions to the university.

Key words: Key performance indicator (KPI); Academic; Working time; IIUM

1. Introduction

International Islamic University Malaysia (IIUM) is one of the public higher learning institutions in Malaysia. IIUM consists of fourteen (14) faculties or *Kulliyah* at four campuses i.e. Gombak as the main campus, Kuantan, Kuala Lumpur and Petaling Jaya as Centre of Foundation Studies (CFS). As of 2015, the University has 1,911 academic staff with 357 of them are international staff. In addition, the University also includes 18,252 total student populations at Gombak and Kuantan campuses with 2,474 of them are international students from 125 countries. The administration of the University is under the purview of the Ministry of Education Malaysia's policies and strategies towards developing human capital for the country. Consequently, areas being looked into, inter alia, are teaching and learning as well as research, development and commercialization.

For that matter, specific assessment instrument has been developed by the Malaysian Qualification Agency (MQA) to gauge the performance of the higher learning institutions. The former is assessed by the Malaysian Higher Education Institution Rating System 2011 (SETARA'11), while the latter is the Malaysia Research Assessment Instrument 2011 (MyRA). The performance of higher learning institutions were categorised using six tiers, with tier

6 representing 'Outstanding' as the highest tier and tier 1 'Weak' as the lowest tier. At the University level, these SETARA and MyRA assessment requirements are translated into the key performance indicator (KPI) of the staff in particular academicians. Essentially, the Ministry of Education will conduct performance assessment of higher learning institution based on the requirements of SETARA and MyRA, and utilise the results of as valuable input in formulating suitable higher education policies.

Consequently, the SETARA and MyRA requirements are translated through the key result area of KPI for academic staff at IIUM. The KPIs comprise of six (6) areas that are 1) teaching, 2) supervision, 3) research and consultancy, 4) publication, 5) conference, and 6) service to the Public. Each of the area has been set up with a minimum target percentage to be achieved by academic staff yearly. The minimum target percentage is set up by the University in order to achieve its targeted performance as a higher learning institution.

Accordingly, the University hence allocated forty (40) hours required working time for academics to achieve their minimum target KPIs yearly. However, it is claimed by the academics that they are working beyond the allocated working time required in order to achieve better and efficient work outputs and performance.

* Corresponding Author.

Therefore, a study is conducted with the aim to identify and compare required allocated and actual working time spent by academics in pursuit of KPIs focusing at Department of Quantity Surveying, Kulliyah of Architecture and Environmental Design, IIUM. This paper is structured as follows:

- i. Part 1: Introduction
- ii. Part 2: Literature review that covers the understanding of KPI and its requirement at IIUM
- iii. Part 3: Outline methodology used for the study
- iv. Part 4: Results of the study
- v. Part 5: Discussions and conclusion

2. Key performance indicator (KPI)

The key performance indicator (KPI) is defined as a set of measures focusing on those aspects of organizational performance that are the most critical for the current and future success of the organization (MQA, 2016). Parmenter (MQA, 2016) indicates seven (7) characteristics of KPI measurement as shown in Table 1.

Table 1: Targeted KPI for academic staff at IIUM

No.	Key Results Area of KPI	DS51/DS52 Assistant Professor			DS53/DS54 Associate Professor			VK7/VK6/VK5 Professor		
		Target	Weightage	Hours per week	Target	Weightage	Hours per week	Target	Weightage	Hours per week
1.	Teaching	12 Credit Hours	30	12	12 Credit Hours	30	12	6 Credit Hours	15	6
2.	Supervision	1 Master	10	4	1 PhD; 2 Master	10	4	2 PhD; 4 Master	15	6
3.	Research & Consultancy	30K (Non S&T)/50K (S&T) & 1 Consultancy Project	20	8	50K (Non S&T)/80K (S&T) & 1 Consultancy Project	25	10	100K (Non S&T)/150K (S&T) & 1 Consultancy Project	30	12
4.	Publication	2 No of book/book chapter/article in indexed journal	20	8	3 No of book/book chapter/article in indexed journal	25	10	5 No of book/book chapter/article in indexed journal	30	12
5.	Conference	1 No attended as presenter (National or International)	10	4	2 No attended as presenter (National or International)	5	2	4 No attended as presenter (National or International)	5	2
6.	Service to the Public	1 committee position at University level	10	4	1 committee position at University level	5	2	1 committee position at University level	5	2
Total hours per week			100	40		100	40		100	40

3. Malaysian higher education institution rating system 2011 (SETARA '11)

The MQA Rating System for Higher Education Institutions in Malaysia for 2011 (SETARA '11) is the third rating exercise undertaken at the institutional level for universities and university colleges in Malaysia that measures the performance of teaching and learning at level six of the Malaysian Qualifications Framework (undergraduate level) (Parmenter, 2007). A total of 52 universities and university colleges participated in the exercise for which the open and distance-learning institutions were separately assessed using an instrument that adapts the SETARA '11 instrument to capture the peculiarities of the open and distance learning mode (Parmenter, 2007).

The resulting rating system uses a six-tier categorization with Tier 6 identified as "Outstanding" and Tier 1 as "Weak". The position of the universities and university colleges in the respective tiers was based on their scores. According

to Malaysian Qualification Agency (MQA) (Parmenter, 2007), the final results show that out of the 52 universities and university colleges rated, 35 institutions achieved a Tier 5 category representing approximately 67% of total population of universities and university colleges rated; 16 institutions in Tier 4, approximately 31%, and the remaining one, in Tier 3, that is, about 2%. None of the universities and university colleges is in Tier 6; neither are they in Tiers 1 and 2.

4. Malaysia research assessment instrument 2011 (MyRA)

'MyRA' refers to a comprehensive system developed to assess the research capacity and performance of all Higher Education Institutions (HEIs) in Malaysia (USIM, 2015). The first objective of MyRA was to meet the Malaysian Research University (MRU) agenda of the Ministry of Higher Education (MoHE) and that was to identify 5 universities in Malaysia for award of the MRU status.

Currently, the MRU agenda is well enshrined in the National Higher Education Strategic Plan (PSPTN) 2007-2020, which is to elevate the standing of public HEIs to attain world-class status and to create differentiated higher education scenarios to meet the socio-economic aspirations of the country while being cognizant of the limited resources available to pursue such goals (USIM, 2015).

MyRA is applied as an assessment tool to accredit and monitor the research performance of public universities. Starting in 2014, all HEIs in the country were mandated to participate in the annual assessment exercise to coincide with the opening up of MoHE research grants to all universities (public or private) in the country (Ministry of Higher Education, 2015). MyRA now includes a 6-Star rating system and all participating HEIs are document-audited and Site-audited by a panel of trained auditors.

5. Targeted KPIs at IIUM

In order to achieve good performance as higher learning institution in Malaysia, IIUM has set up

standard KPIs to be achieved by all academics. The key result area in the KPIs was translated based on the requirement of SETARA and MyRA. One of the IIUM Corporate and Strategic Planning involves improving and enhancing output, research and publications by the academics (Office of Corporate Strategy, 2015).

The targeted KPIs at IIUM are set up according to grade of service of employer. Employer at grade DS 51 and above i.e. holding PhD is considered as full time academics at IIUM. Based on the SETARA exercise in 2015, IIUM was in Tier 5 where none of the universities or university colleges received the highest Tier 6 rating (Outstanding), nor the lower Tiers 2 (Satisfactory) and 1 (Weak). As for the star rating of MyRA, which rates the research, development and commercialisation (R and D and C) performance, IIUM received 5 stars in 2011 exercise, however dropped to 4 stars in 2014-15 exercise (Office of Corporate Strategy, 2015).

Table 2 shows the targeted KPIs for academics at IIUM.

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4.	Publication	2 No of book/book chapter/article in indexed journal	20	8	3 No of book/book chapter/article in indexed journal	25	10	5 No of book/book chapter/article in indexed journal	30	12
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6.	Service to the Public	1 committee position at University level	10	4	1 committee position at University level	5	2	1 committee position at University level	5	2
Total hours per week			100	40		100	40		100	40

6. Kulliyah of architecture and environmental design (KAED), International Islamic university Malaysia (IIUM)

At IIUM, Kulliyah of Architecture and Environmental Design (KAED) offered programmes related to the built environment. KAED was established on 1st June 1996. Its principal objective is to fulfil the need for competent professional in the

built environment capable of integrating Islamic values and contemporary knowledge, understanding and skills of their respective professions. KAED currently offers programmes, both at undergraduate and postgraduate levels, in area of studies related to architecture, urban and regional planning, landscape architecture, quantity surveying and applied arts and design (KAED, 2015).

All undergraduate programmes at KAED take four years to complete (with the exception of BSc.

Architectural Studies and a further 2 years for the B. Architecture programme). All programmes are currently recognized by the relevant authorities and accredited by the respective professional boards and the Malaysian Qualifying Agency (MQA). In addition, the B. Quantity Surveying programme is accredited by the Royal Institution of Chartered Surveyors (RICS) an international accreditation agency based in the United Kingdom. In terms of postgraduate programmes, KAED currently offers taught masters (5 programmes), Master in Built Environment by research and PhD in the Built Environment by research.

7. Department of quantity surveying, KAED

The Department of Quantity Surveying was established in May 2000 and began its first intake of 27 students in July 2000. The population of student growth and as of May 2015, the numbers of students is 337. The number of students graduated in year 2014 is 77. Currently, the department offers the Bachelor of Quantity Surveying (B.QS). Bachelor of Quantity Surveying (B.QS) is a four years degree programme that aims to fill a need for professionals in the construction industry with a sound knowledge of management of expenditure in construction, construction economics, management and technology, the Islamic perspective of man’s *khalifah* on earth, the ability to apply this knowledge to the

complex and dynamic situations, prevailing within the construction industry and the process of construction, and procurement of which it is comprised (Kulliyyah of Architecture and Environmental Design, 2015).

This programme is considered highly relevant to the prospective career of a Quantity Surveyor in Malaysia as it was established during the time where the profession of quantity surveying in Malaysia is facing challenges in terms of its roles and functions: traditional versus newer approaches, change with the ICT as the key driving force, market liberalisation, intense competition from allied professions, demand by the clients for higher quality services (Kulliyyah of Architecture and Environmental Design, 2015).

8. Methodology

In carrying out the study, the methodology adopted involved two parts that are 1) content analysis and 2) structured interview. Documents produce by KAED Academic Office for academic session 2014/2015 on numbers of academics and teaching workloads at the Department of Quantity Surveying are analysed. Table 3 shows the summary of academics and teaching schedule of Department of Quantity Surveying, KAED, IIUM for Session 2014/2015.

Table 3: Summary of academics and teaching schedule of Department of Quantity Surveying, KAED, IIUM for Session 2014/2015

Academic session 2014/15	Number of Courses	Number of Credit Hours	Number of Students				Number of Academic	
			Year 1	Year 2	Year 3	Year 4	Full Time(PhD)	Part Time
Semester 1	25	67	66	66	75	126	7	1
Semester 2	19	50	66	66	75	126	7	1
Semester 3	1	3	66	66	75	126	7	0

In addition, actual teaching hours spent by academics Department of Quantity Surveying, KAED, IIUM for Session 2014/2015 are also analysed based on committed teaching hours provided. The actual teaching hours spent as shows in Table 3 is the

average hours spent by academics per week. Table 4 shows the committed teaching hours of academics in a week for session 2014/2015 at Department of Quantity Surveying, KAED, IIUM.

Table 4: Committed teaching hours of respondents in a week

No.	Respondents	Committed Teaching Hours Per Week				
		Sem 1	Sem 2	Sem 3	Average	Weightage
1.	DR1	42	30.5	28.5	31	77.5
2.	DR2	35	33	19	30	75
3.	DR3	39	6	7	26	65
4.	DR4	39	39	19	34	85
5.	DR5	25	24	-	25	62.5
6.	DR6	33	32	19	29	72.5
7.	DR7	29	41	-	28	70
Total		242	166.5	92.5	203	507.5
Average		34.6	23.8	13.2	29	72.5

Based on the document provided by the KAED Corporate Office, only actual hours for teaching can be analyzed. Hence, a series of personal interview with all respondents are conducted to ascertain actual time spent for the remaining KPIs. For the

purpose of this study, to contrast the time taken within the forty (40) working hours of academics per week against each KPIs, the indicators are defined to include their related tasks as shown in Table 5.

Table 5: Key Performance Indicators (KPI) and their related tasks

No.	Key Results Area of KPI	Tasks
1.	Teaching	Browsing and updating new materials for teaching Teaching session Marking and keying in assignments' mark and final exam papers Students' consultation
2.	Supervision	Discussing research topic Facilitating/guiding/monitoring/checking/reading/reviewing Giving feedback Students' consultation
3.	Research & Consultancy	Browsing, reading, analyzing and synthesizing materials for study Writing, reviewing and finalizing proposals Submission of proposals Establishing a data collection tools Data collection and analysis Discussion of the study Presentation and writing of reports
4.	Publication	Browsing, reading, analyzing and synthesizing materials for study Writing and reviewing papers Editing works Establishing a data collection tools Data collection and analysis Discussion of the study Writing and submission of paper
5.	Conference	Attending conference Organizing conference/seminar Preparation of conference/seminar Dealing with organizer/academics i.e. invitation/call for paper/arrangement
6.	Service to Public	Reviewing academic programmes/journal papers Examining thesis/dissertations Managing students' activities i.e. site visits, studio, portfolio Networking with practitioners/industry

On top of six (6) key results area of KPIs (refer Table 5), there is also an area of administration works included as separate indicator of academics' performance. The administration works involve tasks such as filings and documentations, acting on head of department's instructions from time to time, appointment and responsibilities as office barrier and upload and update data as accordance to University system.

Subsequently, the actual time spent for teaching (refer Table 3) together with KPIs and their related tasks (refer Table 5) are presented to respondents. All the seven (7) full time academics holding PhD are selected as targeted respondents for this study as they are subjected to University KPIs shown in Table 1. The respondents are required to share their actual time spent in pursuit to all KPIs excluding teaching as well as administration works; out of seven (7) academics at the Department of Quantity Surveying, KAED, one (1) decided not to participate in the interview. Therefore only six (6) academics are interviewed.

9. Results

Table 6 and 7 show the results of the interviews i.e. actual time spent by academics for each KPIs per

week at Department of Quantity Surveying, KAED, IIUM for Session 2014/2015 and comparison between required and actual working time spent respectively.

10. Discussions

The paper reported on a study to identify and compare allocated working time of academics at Department of Quantity Surveying, Kulliyah of Architecture and Environmental Design, IIUM against their actual working time in pursuit of the university's targeted KPIs. From the results, it appears that the actual working time of all academics is well in excess of the allocated working time as prescribed by the university. In the case of the assistant professors (DR1 to DR5), they are working 120% more than the allocated working time. In terms of teaching alone, they are working 48% more than the allocated working time. In the case of the professor (DR6), he is working 200% more than the allocated working time. In terms of teaching alone, he is working 55% more than the allocated working time. At that time of the survey, the respondent; DR6 was a serving Dean of the Kulillyah.

Table 6: Actual hours spent by academics in pursuit of IIUM KPIs per week at Department of Quantity Surveying, KAED, IIUM for Session 2014/2015

Key Results Area of KPI	Actual Working Time Spent Per Week (Hours)							
	DR1	DR2	DR3	DR4	DR5	Total (DR1-DR5)	Average (DR1-DR5)	DR6
Teaching	31	30	26	34	35	156	31.2	28
Supervision	24	19.5	10	10	20	83.5	16.7	26
Research & Consultancy	6	15	4	6	8	39	7.8	15
Publication	3	15	3	4	8	33	6.6	15
Conference	3	8	2	7	8	28	5.6	3
Service to the Public	2	1	6	3	3	15	3	3
Administration works & others	15	31	1	15	24	86	17.2	30
Total actual hours spent per week	84	119.5	52	79	106	440.5	88.1	120

*Actual hours spent for teaching are based on committed teaching hours (refer Table 4)

Table 7: Comparison between required and actual working time spent by academics for each KPIs per week at Department of Quantity Surveying, KAED, IIUM for Session 2014/2015

Key Results Area of KPI	DR1 - DR5						DR6					
	Required working time		Actual working time spent		Difference		Required working time		Actual working time spent		Difference	
	Hr	Wt	Hr	Wt	Hr	Wt	Hr	Wt	Hr	Wt	Hr	Wt
Teaching	12	30	31.2	78	19.2	48	6	15	28	70	22	55
Supervision	4	10	16.7	41.75	12.7	31.75	6	15	26	65	20	50
Research & Consultancy	8	20	7.8	19.5	-0.2	-0.5	12	30	15	37.5	3	7.5
Publication	8	20	6.6	16.5	-1.4	-3.5	12	30	15	37.5	3	7.5
Conference	4	10	5.6	14	1.6	4	2	5	3	7.5	1	2.5
Service to the Public	4	10	3	7.5	-1	-2.5	2	5	3	7.5	1	2.5
Administration works & others	Unlimited	Unlimited	17.2	43	17.2	43	Unlimited	Unlimited	30	75	30	75
Total	40	100	88.1	220.25	48.1	120.25	40	100	120	300	80	200

*Hr - Hour; Wt - Weightage

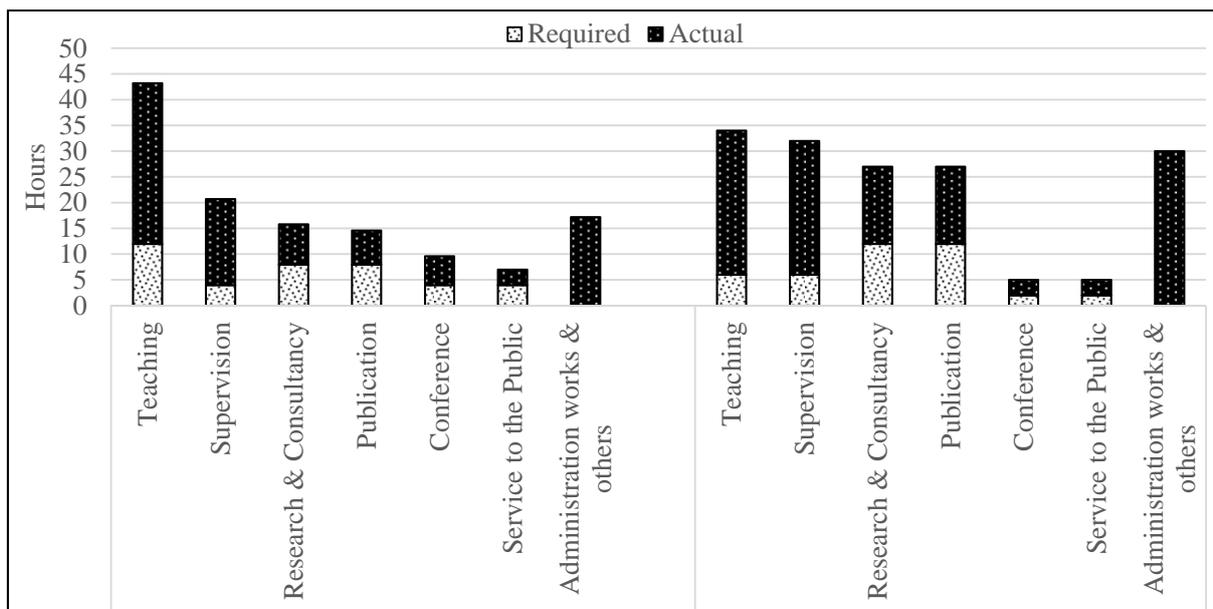


Fig. 1: Distribution of actual working time spent in pursuit to IIUM KPIs per week at Department of Quantity Surveying, KAED, IIUM for Session 2014/2015

The result therefore indicated that in pursuit of the university KPIs academics at the Department of

Quantity Surveying have to spend more time than what the university has allocated for. On the one

hand, such a phenomenon imply the academics passion and willingness to work hard to support achieving the university's vision and mission in the context of the university's KPIs. However, on the other hand the significantly high working time in excess of allocated working time shows that the academics are working hard at the expense of their personal and private life, perhaps at the expense of their health and family well-being.

11. Conclusion

In the light of the above findings, it is imperative for the university and academics to come to term with what would be the most appropriate working hour and their corresponding KPIs. A more balance allocated working time and the appropriate KPIs is considered to be highly desirable so as to ensure that work and life balance of the academics are not jeopardize while at the same time the university desired vision and mission in the context of KPIs are not compromised. This would be the subject of future study.

12. Authors and affiliations

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