






## QUALITY ACADEMICS IN HIGHER EDUCATION: MAPPING THE KEY COMPONENTS



 **Haslinda Yusoff<sup>1+</sup>**  
 **Jamiah Baba<sup>2</sup>**  
 **Suriyani Ariffin<sup>3</sup>**  
**Rokiah Embong<sup>4</sup>**

<sup>1</sup>Faculty of Accountancy, Universiti Teknologi MARA, Malaysia  
Email: [hasli229@salam.uitm.edu.my](mailto:hasli229@salam.uitm.edu.my)

<sup>2</sup>Faculty of Education, Universiti Teknologi MARA, Malaysia

<sup>3,4</sup>Faculty of Computer and Mathematical Sciences, Universiti Teknologi MARA, Malaysia



(+ Corresponding author)

### ABSTRACT

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There is an increasing concern over the quality of education and academics of higher education institutions, including in developing nations such as Malaysia. The aim of this study is to establish and propose the key components to measure the quality of academics from a local perspective. Utilizing a case study approach, this study had selected a prominent higher education institution and carried out a research based on three comprehensive stages of work. The research stages comprised a review of literature, a series of focused group discussions, a questionnaire survey, analyses of the survey responses and the development of the framework for academics' profile, and expert verification. Seven key components i.e. academic qualification, external attachment, teaching and learning, academic supervision, research and innovation, personal character and leadership and management have been identified as essential to signify the academics' range of quality. The study also found the variables and parameters for each of the components along with the elements for evaluation. These findings suggest a quality academic model that would be beneficial for the continuous improvement of academics in higher education institutions thus an initiative towards providing quality higher education for the nation.

**Contribution/Originality:** The study documents the key components relating to the quality of an academic. Such a finding is essential for the mapping of the quality index of academics towards a successful achievement of quality higher education.

## 1. INTRODUCTION

Quality is viewed differently by different people. It can be viewed as the degree of excellence of something or as the standard of something as measured against other things of a similar kind. The concept of quality has become more prominent in higher education (Harvey, 2006) and there is an increasing concern over quality education and quality academics in higher education. In general, quality academics in higher education institutions can be viewed as those that can produce quality graduates. Quality graduates may refer to those graduates who can meet the demands of the industries, demonstrate flexibility, maturity, ambition, logical thinking, quick learning, analytic skills, creativity and innovation, high levels of motivation and good communication skills. Quality academics, more definitively, refer to academic staff who possess specialist knowledge, practical skills, critical and creative thinking skills, communication and leadership skills, information technology (IT) proficiency, and at the same time, are

highly committed, compassionate, ethical, professional, entrepreneurial, socially responsible and practise lifelong learning.

As the concept of quality is multi-faceted (Harvey, 2006) several issues arise. What are the factors that determine quality? How can quality be measured? How can it be assured? Are there any mechanisms or standards that can be used to measure quality academics? To some extent, the quality of academics is measured by the existing performance indicators which are not integrated such as academic audit, peer review and student evaluation. For instance, some universities are using performance indicators that focus chiefly on research and publications outputs while some others focus on teaching and learning outputs, maybe solely on students' academic performance.

This paper is part of a larger study that aims to design a framework that maps the quality index of academics and develop a comprehensive system that generates the quality index of academics in higher education. Specifically, the paper outlines the processes involved in identifying and mapping the key components that indicate the quality of an academic. At the early stage of the research, seven key components were identified for assessing quality academics, which are academic qualifications, external attachment, teaching and learning, academic supervision, research and innovation, personal character, and leadership and management. The analysis requires an understanding of different conceptions of quality academics.

## 2. REVIEW OF LITERATURE

The concept quality in higher education is complex, multifaceted and often subjective (Harvey, 2006) hence problematic. Therefore, there exists a need to define quality and identify the components that construct quality academics.

### 2.1. What is Quality?

Generally, quality refers to a distinctive attribute or characteristic that shows a high level of value or excellence. Harvey and Green (1993 in Cartwright (2007)) defined quality as excellence, as transformative, as fitness for purpose or as value for money and as perfection. In the context of teaching and learning, quality teaching:

...transforms students' perceptions of their world, and the way they go about applying their knowledge to real world problems; it also transforms teachers' conceptions of their role as teacher, and the culture of the institution itself.

(Biggs, 2001)

Quality here implies a responsibility to the continual development of knowledge and skills through reflective and interactive academic activities. This notion reflects (Cheng, 2016) argument that quality only becomes possible if it is used as a useful force for individual academics and students to increase their commitment to learning and teaching.

Significantly, Williams (2016; 2014) argues that quality enhancement cannot be achieved without good quality assurance. In Malaysia, Malaysian Qualification Agency (MQA), an agency responsible for quality assurance of higher education, has implemented the Malaysian Qualifications Framework (MQF) as a basis for quality assurance and reference point for the criteria and standards for national qualifications. The framework stipulates eight domains of learning outcomes, which are (a) knowledge; (b) practical skills; (c) social skills and responsibilities; (d) values, attitude and professionalism; (e) communication, leadership and team skills; (f) problem solving and scientific skills; (g) information management and life-long learning skills; and (h) managerial and entrepreneurial skills. Taking the MQA requirements very seriously, academics in Malaysia should possess similar competencies for continuous educational improvement so that the desired graduates can be nurtured. Therefore, the mapping of the

components of quality is crucial so that academics have a deep understanding of quality on which to base their professional choices and practices.

## 2.2. Components of Quality

The nature of academic work has changed due to the increasing complexity of the higher education sector. As such, academics are obliged to pursue excellence in several directions, including in teaching, research and scholarship, supervision, academic administration and management (Fry *et al.*, 2008; Fahnert, 2015). American Federation of Teachers (2010) also argues that a good development and evaluation system measures educators on the practices that, over time, produce desirable student outcomes, and provides educators the opportunity to hone effective practices.

Essentially, teaching in higher education draws on knowledge of three areas, namely knowledge about one's discipline, generic principles and ideas about teaching and learning (Fry *et al.*, 2008). This is hardly surprising as professional knowledge and understanding have been regarded as an essential component for academics (Shulman, 1987; 1986; Van Driel and Berry, 2012; Education & Training Foundation UK, 2014; Fahnert, 2015). In her study on academics' professionalism and quality mechanisms, Cheng (2009) found that high levels of education and qualifications are the most widely accepted features that help academics meet the high standards expected in their work. In reviewing the standards of teaching, Kleinhenz and Ingvarson (2007) assert that educators' levels of education and preparation in the subjects they teach have also been shown to correlate positively with higher levels of student achievement. Accordingly, effective teaching has to be predicated on an understanding of how students learn; the objective of the activities is to bring about learning, and there has to be insight and knowledge about learners' needs for teaching to be successful (Fry *et al.*, 2008).

The contribution of research to the development and application of teaching standards cannot be denied (Fahnert, 2015). This is because scholarship and research are inherently valuable to reproduce the existing levels of knowledge and to improve the critical reasoning capabilities and specific skills of individuals and to increase useful knowledge that can bring about social benefits (Vessuri, 2008). In other words, when engaging in research activities, academics:

...have identified the trends, examined them, considered their implications and how to adapt to them; explored how they might play out into the future; and explained their necessary continuity with what went before.

(Group of Eight, 2013)

Taking literature seriously, research activities should form an essential part of an academic's repertoire in order to provide quality higher education. Additionally, in the higher education setting, linkage between academia and industry has gained ground in recent years (Dill and Vught, 2010) and has become an important agenda (Tumuti and Wanderi, 2013). The linkage can be achieved through teaching and learning collaboration, research collaboration as well as smart partnerships. Significantly, these activities are beneficial to the country, the industry, the institution and the individual academics seen through economic growth, technology transfer, research and innovation, and creation of new knowledge (Hamdan *et al.*, 2011; Tumuti and Wanderi, 2013; Garcia *et al.*, 2016).

Another core activity in higher education which is related to research and innovation is academic supervision. According to Chiappetta-Swanson and Watt (2011) supervision is an activity undertaken by an academic within a higher education institution that has expectations and accountabilities to both the person being supervised and the institution. Furthermore, the function of supervision is to achieve the academic goals of higher education, which is to prepare students who have acquired research skills and broader skill sets required for future employment (Chiappetta-Swanson and Watt, 2011; van Rensburg *et al.*, 2016). Conversely, academic supervision enhances the academics' mentoring skills (including evaluation, communication, and supervisor-supervisee relationship) and personal research knowledge and skills (Abiddin *et al.*, 2011; van Rensburg *et al.*, 2016).

In higher education, academics are expected to possess significant capacity for judgment and self-directed activity and demonstrate academic leadership at their level consistent with the academic traditions of intellectual inquiry, scholarship and teaching and learning (Australian Government Tertiary Education Quality and Standards Agency (TEQSA), 2014). Ramsden (1998 in Scott *et al.* (2008)) asserts that leadership is “about change, about looking forward and outward, about ensuring the enterprise stays in alignment with a constantly changing environment. It is about establishing direction, about ‘doing the right thing’; it enables people to adapt to, work with change rather than resist it.” A number of the prevailing literature has shown the positive effects of leadership development to organization include followers’ satisfaction, commitment, and performance (Popper *et al.*, 1992; Barling *et al.*, 1996; Dvir *et al.*, 2002).

Another aspect that defines the quality of academics is personal character. Character refers to a pattern of behavior, thoughts and feelings based on universal principles, moral strength and is directly connected to one’s integrity. Henard and Leprince-Ringuet (2008) and Voss and Gruber (2006) suggest that qualities and behaviors of academics significantly impact on how students perceive the quality of teaching and learning, and therefore should be the primary determinant of students’ perceptions of service quality in higher education. Given this, personal character is of one of the utmost criteria that need to be considered when measuring the quality of academics in higher education.

Clearly literature emphasizes various aspects of quality that academics should possess so as to nurture graduates who are equipped with the 21<sup>st</sup> Century skill sets. Although such aspects are evident within the academics’ practices, these components have not been formally identified and mapped to measure the quality of academics, particularly in the institution selected for the study.

### 3. RESEARCH METHODOLOGY

This study employed a qualitative approach, in particular, a case study method. A case study can be defined as an intensive study about a person, a group of people or a unit which is aimed to generalize over several units (Gustafsson, 2017) or an intensive, systematic investigation of a single individual, group, community or some other unit in which the researcher examines in-depth data relating to several variables (Heale and Twycross, 2018). The study had focused on one higher education institution in Malaysia (the case) to achieve the aim of the study i.e. to identify and map the key components of quality required of an academic. This institution was specifically selected due to it being/having:

- the largest higher education institution in the country
- the highest number of academics employed
- the highest number of student enrolment

These justifications signify the appropriateness and potential contribution of the research site in enhancing the quality of academics in the country. Moreover, in line with the aspiration of the country to improve the overall quality of higher education towards quality human capital development, the selection of this institution as a case is deemed significant based on its significant contribution of human capital for the country.

In total, the quest to map the indicators for quality academics involved three main stages. The early stage of the research encompassed three phases of work i.e. a review of literature, a series of focused group discussions and questionnaire surveys. A review of literature was made on related studies and strategic plans to enhance the quality of academics, and training needs for quality academic career development. The literature review is deemed important to the methodological framework of the study because it allows the researchers to understand the phenomenon being studied and guide the direction of the research by offering insights and different perspectives. A series of focused group discussions was conducted with three respective divisions in the institution where significant policies and plans of the institution were obtained as inputs to the study. The focus group discussion is used as a qualitative approach to gain an in-depth understanding of current processes and procedures of quality

assurance related to the academics in the university. Based on the inputs obtained in the discussions, three questionnaires on aspects that are relevant to the mapping of the key components of academics' quality were developed. The instruments aimed to seek relevant input on, and verification of, the primary components of quality academics, which are, the key criteria for quality academics, the need for academics' industrial attachment and the need for research-related training. The questionnaires were sent out to deputy deans of all faculties, deputy rectors of various campuses as well as relevant directors – Deputy Deans of Academics, Deputy Deans of Industry, Community and Networking, Deputy Rectors of Academics, and Directors of Research Centers.

The second stage of the research comprised two major phases i.e. analyses of the survey responses and the development of the framework for academics' profile. Analyses were carried out on all survey responses received from the studied faculties and campuses. These inputs were crucial as they were feedback pertaining to expectations and demands of various industries, as well as requirements of faculties and campuses for students learning programs and activities. The outcomes from the review of literature, focused group discussions and questionnaire surveys were utilized to identify the primary components of quality academics, in particular, to develop the framework of an academic's profile.

The third stage of the research involved expert verification on the preliminary findings of the study, developed from the earlier two stages. A workshop, which gathered ten (10) panel experts i.e. professors who had held high management positions in the institution and professors who are trained in human resource management and development, was held. Specifically, the panel experts verified three research findings:

- (1) primary components of quality lecturers;
- (2) elements for assessment, weightage for assessment, detail computation for quality scores and performance values for each of the primary quality components; and
- (3) model of scoring for lecturers' quality.

Diagram 1.0 shows the summary of the research stages involved in this study, as discussed above.

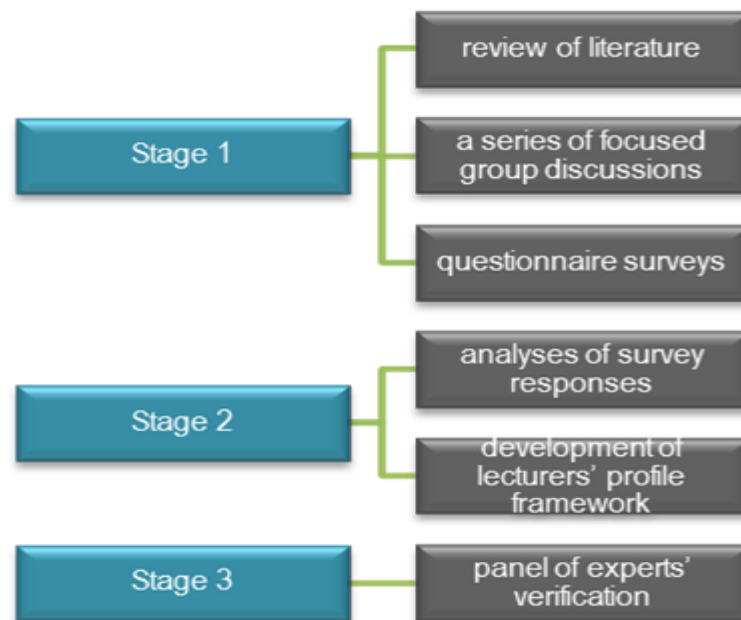


Diagram-1. Summary of research stages

#### 4. FINDINGS AND DISCUSSIONS

This study aims to identify and map the primary components for quality academics in higher education, from the Malaysian perspective. The findings of this study are considered significant for the continuous improvement of

the overall quality education in higher education institutions. In general, a quality academic is not only excellent in teaching and learning, but also has deep knowledge of the subject matter, strong passion and high enthusiasm for teaching thus an inspirational role model to students. Accordingly, these common qualities are vital in achieving the desired learning outcomes hence quality graduates. Based on the three comprehensive research stages, as explained in the earlier section, this study has discovered seven primary components to measure the quality of academics (Figure 1.0).

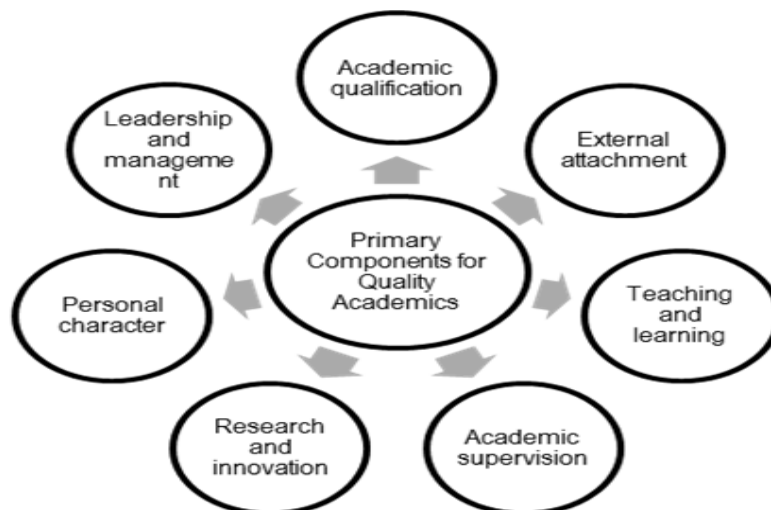


Figure-1. Primary Components for Quality Academics

The input from all faculties, campuses and academic centers indicate the details of the required components for quality academics of the studied institution, as indicated in Table 1.0 (Description about the Primary Components for Quality Academics). Table 2.0 (Components and Elements of Evaluation in Measuring the Quality of Academics) indicates the seven key components for measuring the quality of academics and the elements and band used to evaluate each component.

Table-1. Description about the Primary Components for Quality Academics

	Primary Components	Description
1	Academic qualification	The level of academic qualification. Academics are expected to enhance their academic qualification to the highest level. (Certificate – Diploma – Bachelor’s Degree – Master’s Degree/Professional – PhD)
2	External attachment	Experiences obtained from working with the industry, sabbatical stint with other higher education institution or post-doctoral training.
3	Teaching and learning	Knowledge of subject matter gained from teaching experience.
4	Academic supervision	Supervisory experience of both undergraduate and postgraduate students.
5	Research and innovation	Research and innovation performance based on the expectation and guidelines of the institution.
6	Personal character	Respectable level of personal behaviour, attitudes and values in being an academic that encompass elements of integrity, professionalism and high moral values.
7	Leadership and management	Leadership and management skills obtained from experiences in holding formal leadership roles in the institution, including self-assessment on the level of acquired skills while in tenure.

It has been found that the institution has set up a proper human resource development program for the academics. Accordingly, the institution is aiming for a high percentage of the academics to attain the highest academic qualification i.e. Doctoral of Philosophy. Hence, academic qualification is deemed a crucial aspect in reflecting quality academics (Kleinhenz and Ingvarson, 2007; Fry et al., 2008; Cheng, 2009). External attachment of the academics in other universities and industries has also been recognized as a significant aspect in measuring the



quality of institution's academics. This form of attachment offers academics greater knowledge and experience, as part of professional enhancement in teaching and research, especially from attachment with the industry (Hamdan *et al.*, 2011; Tumuti and Wanderi, 2013; Garcia *et al.*, 2016) sabbatical stints with other higher education institutions and post-doctoral training.

The study has also discovered teaching and learning as one of the primary components for quality academics. This component is significantly connected to the academic performance of students as there is a direct process involved between academics and students (Kleinhenz and Ingvarson, 2007; Fry *et al.*, 2008) both in conventional classroom settings as well as in electronic teaching and learning environment. Academic supervision has been recognized as an important aspect for quality academics. Supervisory experience accounts for supervision of undergraduate students' final year projects and postgraduate students' research-based dissertation. It is highly believed that apart from providing worthwhile exposure, supervision experience has the potential to heighten an academic's knowledge especially on research skills (Abiddin *et al.*, 2011).

**Table-2.** Components and Elements of Evaluation in Measuring the Quality of Academics

Components	Elements of Evaluation	Band				
		1	2	3	4	5
Academic Qualifications	Academic qualification	Certificate	Diploma	Bachelors	Master's/ Professional	Doctor of Philosophy
External Attachment	Evidence of attachment activities	Not Available				Available
Teaching and Learning	<ul style="list-style-type: none"> <li>▪ Year of teaching</li> <li>▪ Students feedback score</li> </ul>	0 – 59	60 – 69	70 – 79	80 – 89	90 – 100
Academic Supervision	<ul style="list-style-type: none"> <li>▪ Number of years on academic supervision</li> <li>▪ Number of students</li> <li>▪ Academic supervision score</li> </ul>	0 – 59	60 – 69	70 – 79	80 – 89	90 – 100
Research and Innovation	<ul style="list-style-type: none"> <li>▪ Number of grants</li> <li>▪ Number of years of research involvement</li> <li>▪ Number of publications, patents or others</li> <li>▪ Number of awards</li> <li>▪ Number of professional services</li> </ul>	0 – 59	60 – 69	70 – 79	80 – 89	90 – 100
Personnel Character	<ul style="list-style-type: none"> <li>▪ Self-evaluation of value</li> <li>▪ congeniality and collegiality from peer assessment</li> <li>▪ Professionalism ethic score</li> <li>▪ No disciplinary action</li> </ul>	0 – 59	60 – 69	70 – 79	80 – 89	90 – 100
Leadership and Management	<ul style="list-style-type: none"> <li>▪ Leadership skills index</li> <li>▪ Tier of academic administrator position</li> <li>▪ Number of years in position</li> </ul>	0 – 59	60 – 69	70 – 79	80 – 89	90 – 100

The study has also found that research and innovation is a good indicator for quality academics, which is in line with literature (Vessuri, 2008; GoE, 2013). Interestingly, this finding corroborates with the extensive guidelines and initiatives of the studied institution in promoting research, innovation and commercialization amongst the academic staff. Moreover, this quality component is one of the major criteria for the promotion scheme of the institution.

All faculties, campuses and academic centers, when surveyed, agreed that a respectable level of personal traits and values in being an academic is an essential component to reflect the quality of an academic. Generally, the academics' integrity, professionalism and high moral values affect the learning outcomes, and thus, graduates' quality (Voss and Gruber, 2006) and are significant for the sustainable progression of the institution. The institution also views leadership and management as an important quality component for its academics. Effective leadership is deemed crucial to the success of an organization (Scott *et al.*, 2008; AFT, 2010) and that good leaders would bring positive change to his organization through wise use of creativity and innovative thinking which ultimately will result in enhanced quality of the higher education institution.

#### 4.1. Contribution of the Study

Essentially, the study was able to identify seven key components to measure the quality of academics from the Malaysian context. The identification of the key components can help establish a more comprehensive system of academic quality assurance in higher education, particularly within the said institution, thus, addresses the increasing concern over the quality of university education and academics in the country. This is in line with what has been argued by Williams (2016; 2014) that without good quality assurance, quality enhancement cannot be achieved.

## 5. CONCLUSION

The seven key components of quality identified for academics indicate that they should be involved in inevitable processes of professional growth and continuing process of learning. This dynamism is fundamental to delivering high quality education, particularly in the context of the institution studied. Highly competent graduates can be produced if higher education academics are anticipative of on the changing educational landscape and strive to take appropriate advantage of the uncertain climate.

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