

Developing Quality-conscious Professionals Through the Basics of Quality Management Course: Students' Expectations

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ABSTRACT: *The course "Basics of Quality Management", an elective and liberal course for undergraduate level in UKM. The course represents an important effort in producing quality conscious professionals who will be able to utilise the knowledge for the betterment of the organisation and society. The study is guided by the following research questions: (1) What is students' expectation in learning about quality management concepts?, and (2) How does this course add value to the students' future career? Research participants consist of 62 undergraduate students from different faculties who registered in this course in the first week of the semester. This study employed qualitative method, where research participants were asked open ended questions in Google Form. Their responses were then analysed into themes. Their expectation in learning the course can be categorised into three themes: that they expect this course would enable them to (1) understand quality concepts; (2) be more quality conscious, and (3) solve quality-related problems related in their personal and professional domains. Regarding the value-added importance of this course, three themes emerged, that (1) to prepare for their future highly specialized and sensitive nature of their future career; (2) to add competitiveness nature of their aspired new business venture, and (3) to inculcate quality in their professional life. This study serves as an opportunity to gain insight into student perspective into their choice of this course as one of their elective and how this course can add value to their future career.*

Keywords : *Career development, higher education, quality management, undergraduate education.*

1. INTRODUCTION

The course "Basics of Quality Management", an elective and liberal course for undergraduate level in UKM. The course represents an important effort in producing quality conscious professionals who will be able to utilise the knowledge for the betterment of the organisation and society [1].

The course Basics of Quality Management; was introduced in May 1999. The course aims to equip would be graduates with another important knowledge under the third objective, that is to expose students with breadth of knowledge. The course is identified as relevant to their future career as many organisations have been implementing quality in management culture and practices. Quality is now has become everybody's business and all organisations wishing to excel are taking quality seriously.

Regarding the name Basics of Quality Management; rather than Total Quality Management or ISO9000 was chosen because we believe that learning the concepts of quality is the requirement for understanding models or techniques of achieving quality. TQM and ISO9000 are just among the models or techniques to achieve quality. Another important thing that we have to bear in our minds is that the models and techniques are not going to be permanent and they are to be replaced with others which are thought to be more useful and more practical.

The course is offered initially as a general education programme. With the new structure of liberal education program in UKM, the course is put under the liberal domain of Leadership, entrepreneurship and innovation. This means that:(1) This course is open to students of all faculties in UKM; (2) This course is not a specialised course on specific area, it is relevant to all areas; and (3) This course is not a specialised course on specific quality concepts such as TQM and ISO9000

Although the content of the course is not tailored to their area of specialisation, students are encouraged to undertake research projects on organisations relevant to their area of study. For example, students from Faculty of Health Sciences may choose hospitals, medical centres and medical research institutions which are excel in quality management for their research. Students from Faculty of Humanities and Social Sciences go for language institutions and government departments while those from Faculty of Business Management take business organisations as their preference. Students wishing to specialise on quality management can pursue their studies by enrolling in Master of Science in Quality and Productivity at the Centre for Graduate Studies, Universiti Kebangsaan Malaysia (UKM).

The study is guided by the following research questions: (1) What is students' expectation in learning about quality management concepts?, and (2) How does this course add value to the students' future career?.

2. RELATED LITERATURE

Dr W. Edward Deming is widely regarded as the pioneer of quality movement. His lectures and seminars on quality improvement methods in Japan are said to be the key to Japan's success in economic reconstruction after the Second World War [2]. The world-wide quality movement begins in 1960s with the concept of Quality Control Circle (QCC) introduced by Deming, Juran and Feigenbaum (History of Quality, 2020). The concept was further developed into Total Quality Control (TQC) by Feigenbaum [2]. In 1980s, Crosby introduced the concept of TQM [3]

Quality is viewed positively in Malaysia. According to Idris [4], among the main benefits of TQM are customer satisfaction, teamwork, productivity, communication and efficiency. According to [4], among the outcome of TQM are; improving organisation's attitude towards customers, improvement in quality and employee participation in quality improvement. In Malaysian public sector, the government has introduced various programmes in order to promote quality practices [5]. Among them are TQM, KMK (QCC), MS ISO9000 etc. The government also published circulars as guidelines for quality improvement [6]. Among the circulars are on telephone handling skills, management of TQM, client charter, QCC and benchmarking practices.

The 1990s has seen the emergence of ISO9000. The private and public sectors are increasingly aware of the importance of gaining ISO9000 certification. Up to end of December 2001, at least 510, 616 ISO 9000 certificates had been awarded in 161 countries and economies (The ISO Survey of ISO 9000 and ISO 14000 certificates- the 11 th cycle). This represents the highest annual increase in all 11 cycles of the survey conducted since January 1993. In Malaysia alone, the figure is increasing every year. In 2001 for example, 3,195 certificates had been awarded. According to MAMPU, as of August 14, 2001, 249 government agencies had been certified against ISO 9000.

3. THE COURSE COVERAGE

The course is offered as a general education programme. This means that:

- This course is open to students of all faculties in UKM
- This course is not a specialised course on specific area, it is relevant to all areas
- This course is not a specialised course on specific quality concepts such as TQM and ISO9000

Although the course is not tailored to their area of specialisation, students are encouraged to undertake research projects on organisations relevant to their area of study. For example, students from Faculty of Allied Health Sciences may choose hospitals, medical centres and medical research institutions which excel in quality management for their research. Students from Faculty of Humanities and Social Sciences go for language institutions and government departments while those from Faculty of Business Management take business organisations as their preference. Students wishing to specialise on quality management can pursue their studies by enrolling in Master of Science in Quality and Productivity at the Centre for Graduate Studies, Universiti Kebangsaan Malaysia (UKM).

ORGANISATION OF THE COURSE

There are three objectives of this course:

- To instil awareness on the importance of quality management in public and private sectors to students from various faculties
- To introduce basic quality concepts and issues in current management practices
- To produce quality conscious graduates who are able to work effectively in organisations that employ them.

Quality awareness are exposed through lectures and discussion, video viewing sessions, research Project on quality organisations and research project presentations.

The course topic coverage is organised into three segments:

- Segment 1: Introducing earlier quality gurus. Focus is on concepts and ideas rather than personal biographies. Among the gurus are Deming, Juran, Feigenbaum and Crosby.
- Segment 2: Introducing the concept of Total Quality Management. Government Circulars as one of reference in discussing implementation of TQM in the government sector. QCC is also introduced.
- Segment 3: Introducing the quality system ISO9001. The importance, the benefits, documentation process and brief overview of elements.

In segment 1, the students are introduced with the followings:

- Deming's Fourteen Points
- Deming's Seven Deadly Diseases
- The Juran's Trilogy
- Juran's Ten Steps to Quality Improvement
- Feigenbaum 40 Steps to Quality Improvement
- Crosby's Four Absolutes of Quality Management
- Crosby's Fourteen Points

The biography of the quality gurus are not the focus of discussion. Students are, however encouraged to have insights into the life of the gurus from books and websites.

3.1 Lecture and discussion

In segment 2, the following topics are discussed:

- The concepts of TQM
- Seven Principles of TQM in Public Sector
- McKinsey's 7-S Model
- Concept of QCC
- Problem solving techniques in QCC

Segment 3 focuses on ISO9000. Among the topic discussed are:

- Introduction of ISO9000
- Documentation
- Brief overview of 20 elements (to be replaced with four generic business processes as in ISO9001:2000)

3.2 Research Project

Students are required to conduct a small scale research project on quality organisations. They are required to choose either one of the following questions:

- Study the process of quality improvement through implementation of TQM at an organisation of your choice.
- Study the process of quality improvement through implementation of QCC at an organisation of your choice.
- Study the process of quality improvement through certification of ISO9001 or ISO9002 at an organisation of your choice.

In managing the project, they normally go by the following guidelines:

- Step 1: Selecting a topic
- Step 2: Selecting an organisation
- Step 3: Searching for information from printed materials and websites
- Step 4: Interviewing key personnel in the selected organisation
- Step 5: Presenting the research to the class
- Step 6: Writing and updating research paper to be handed in.

In step 2, list of organisations can be accessed from MAMPU website (list of award winning organisations) and SIRIM website (equipped with search engine to enable surfers to obtain

list of ISO certified organisations. In step 3, students are to acquire information about quality organisations from websites and printed materials. They also required to interview quality personnels in the organisation in order to gain insight into the implementation process as in Step 4. A letter confirming their undertaking of the research project is also issued.

Among organisations chosen by the students are: Malaysian Institutes of Nuclear Technology, Malaysian Palm Oil Board, Lembaga Urusan Tabung Haji, Dewan Bandaraya Kuala Lumpur (Kuala Lumpur City Hall), Majlis Perbandaran Kuantan, Majlis Perbandaran Kajang, Majlis Bandaraya Shah Alam, etc. Tenaga Nasional Berhad Sony Technology Sdn Bhd

3.3 Research project presentations

Research project they undertake give them the opportunity to learn about quality management in organisations of their choice. This complements what they learn in lectures. They are expected to present their research to others.

4. METHODOLOGY

The study is guided by the following research questions: (1) What is students' expectation in learning about quality management concepts?, and (2) How does this course add value to the students' future career? Research participants consist of 62 undergraduate students from different faculties who registered in this course in the first week of the semester. This study employed qualitative method, where research participants were asked open ended questions in Google Form. Their responses were then analysed into themes.

5. RESULTS & DISCUSSION

Summary of participants' discipline is in Table 1.

Table 1: Summary of Participants' Faculty

Faculty	n	%
Economics and Management (FEP)	29	46.8
Social Science and Humanities (FSSK)	18	29.0
Science and Technology (FST)	7	11.3
Islamic Studies (FPI)	5	8.1
Centre for Liberal Education (CITRA)	2	3.2
Technology and Information Science (FTSM)	1	1.6
TOTAL	62	100

There were 62 participants in the study. Participants consist of students from various faculties in Bangi campus of Universiti Kebangsaan Malaysia. They registered this course to fulfill their elective courses requirement. Nearly half of the participant were from the Faculty of Economics and Management (46.8%). The second biggest group come from the Faculty of Social Science and Humanities (29%), and there were also a sizable number of students from Faculty of Science and Technology (11.3%). The rest of participants came from Faculty of Islamic Studies, Centre for Liberal Education and Faculty of Technology and Information Science.

Most of respondents were from three faculties: Economic and Management, Social Science and Humanities and Science and Technology.

Their expectation in learning the course can be categorised into three themes: that they expect this course would enable them to (1) understand quality concepts; (2) be more quality conscious, and (3) solve quality-related problems related in their personal and professional domains. Regarding the value-added importance of this course, three themes emerged, that (1) to prepare for their future highly specialized and sensitive nature of their future career; (2) to add competitiveness nature of their aspired new business venture, and (3) to inculcate quality in their professional life.

Table 2: Summary of Emerging Themes

RESEARCH QUESTIONS	THEMES
(1) What is students' expectation in learning about quality management concepts?	(1) understand quality concepts; (2) be more quality conscious, and (3) solve quality-related problems related in their personal and professional domains
(2) How does this course add value to the students' future career?	(1) to prepare for their future highly specialized and sensitive nature of their future career; (2) to add competitiveness nature of their aspired new business venture, and (3) to inculcate quality in their professional life.

Table 2: aaaaa

5.1 Their expectation in learning the course

There were three themes that emerged: that they expect this course would enable them to (1) understand quality concepts; (2) be more quality conscious, and (3) solve quality-related problems related in their personal and professional domains.

(1) understand quality concepts;

The importance of understanding quality concepts was aptly illustrated by Nurul Suzana who stated that:

“I would like to know more about the importance of quality in service and management of organizations. This is important in order to evaluate, improve and study what are needed in the organization. Therefore, for those who aspire to join the organization can get themselves ready with the quality standards as required by the organizations” (Nurul Suzana, FSSK).

For her, the understanding would enable her to be ready to adopt the quality culture of the organization she wishes to join after graduation.

(2) To be more quality conscious

Instilling the quality conscious attitude is one of the reasons many students registered in this course, as pointed out by Nurul Najwa:

“In every organization, there is a benchmark to be achieved. Therefore it is important to realise the importance of quality in any organization. For some people quality is a trivial issue and it does not affect the organization. Of course it does, it contributes to the negative and unhealthy environment”. (Nurul Najwa, FEP)

She came to the realization that quality is not a small matter, it affects the rise and downfall of any organizations. Therefore registering in this course is the right step for her, as many others.

(3) solve quality-related problems related in their personal and professional domain

Solving quality-related problems is among the reasons why the participants are interested in this course, for example, Devi:

“After graduation, I’d like to be a Risk Management Officer in any business organization because my specialization is in Financial and Risk Management. This QM course adds value to my career because my profession prioritizes quality. My profession requires me to avoid and minimise the risk caused by poor quality products.” (Devi, FEP)

It looks like Nur Aida’s vision is a step in the right direction. Although she had not been to the lecture yet, but she understood well how important is the knowledge for her future career.

5.2 The value-added importance of this course

There were three themes emerged, the selected quotes below illustrate how this course adds value to their future career.

(1) to prepare for their future highly specialized and sensitive nature of their future career;

For students who will be in the sensitive and highly specialized nature of future career like

Rejaswary, this course clearly adds value to their employability:

“After graduation I am hoping to work in Medical Physics area. This area is focussing on how to diagnose and treat cancer patients using up to date technologies. Through my learning of quality management, I would be able to assure that the patients would get high quality service.” (Rejaswary, FST)

Rejaswary’s forward-looking expectation is certainly important in order to inculcate quality conscious professionals who always take quality matters seriously

(2) to add competitiveness nature of their aspired new business venture,

This theme runs through respondents who aspire to be entrepreneurs after graduation, for example, Jegaswaran:

After graduation, I aspire to be a successful entrepreneur.. This course can guide me on how to improve quality service and product. With the quality product, I can gain the trust of the customers. This would lead to my identity being known in the market because I have loyal customers. This course makes me aware how importance quality is and I would be more aware when I venture into business after my graduation. (Jegaswaran, FEP)

(3) to inculcate quality in their professional life.

The third theme is about the enculturation of quality in their future professional life. In this regard, Siti Salina’s reflection is the illustrative one:

“As a student of Human Resource Management, my knowledge on quality sistem will enrich my own knowledge. Furthermore, it would give an added value to my future career. I would like to know how the organization monitor their quality system. This is because the quality system is not only about product quality but also service and human resource.” (Siti Sazlina, FEP)

The curiosity-driven motivation of Siti Sazlina would certainly leads to enculturation of quality into her professional life.

6. CONCLUSION

The course represents an important effort in producing quality conscious professionals who will be able to effectively function in their work organization. From the students’ perspective, their education should be focussed on the value-added element of the course. The findings underline the fact that the students were forward thinking in their selection of liberal courses. By registering in this course, they expect to expose themselves with knowledge on quality concepts and management which will be useful in their future career.

7. REFERENCES

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