5.1 Introduction

The purpose of this study was to examine the perception of academic staff regarding quality assurance benchmarks in e-learning environment in one private higher institution. This study examined seven categories of quality benchmarks namely management support, course development, teaching/learning process, course structure, student support, academic support and lastly evaluation and assessment.

The objectives of this study were

- to examine the level of importance of the quality benchmarks as perception by the academic staff
- to examine the presence of these quality benchmarks in the in this private institution.

5.2 Summary of Findings

This section summarized the findings from this study in relation to the objectives and research questions as stated in this study.
5.2.1 Summary of Findings Related to Management Support Benchmarks
(based on research question 1 and 2)

Academic staff had ranked the importance of the quality benchmarks as listed below. The level of importance listed in decreasing order.

1. Reliability of technology to be failsafe
2. Documented technology plan
3. Professional support for innovative development in e-learning courses
4. Centralised system to support and maintain e-learning infrastructure
5. Reward system to encourage effective teaching

Academic staff perceived the reliability of technology as the most important and the reward system as the least important.

The degree of presence of these benchmarks in this private institution was listed as below. The presence of benchmarks listed in the decreasing order.

1. Reliability of technology to be failsafe
2. Centralised system to support and maintain e-learning infrastructure
3. Documented technology plan
4. Professional support for innovative development in e-learning courses
5. Reward system to encourage effective teaching

Reliability of technology had the highest degree of presence and the reward system is the least present benchmark in this private institution.
5.2.2 Summary of Findings Related to Course Development Benchmarks (based on research question 1 and 2)

Below was the course development benchmarks list according to their level of important. The level of importance listed in decreasing order.

1. Existence of guidelines for course development
2. Periodical review of instructional material
3. Consistent design of course structure
4. Having a team of expert to manage course development
5. Consideration of student’s learning style during course development

The guidelines regarding the minimum standard for the course development was perceived as the most important. Consideration of student’s learning style during course development was the perceived as the least important among the academic staff.

The degree of presence of these benchmarks was listed as below. The presence of benchmarks listed in the decreasing order.

1. Existence of guidelines for course development
2. Having a team of expert to manage course development
3. Consistent design of course structure
4. Periodical review of instructional material
5. Consideration of student’s learning style during course development

The guidelines regarding the minimum standard for the course development was perceived as the most present benchmarks and consideration of student’s learning style during course development was the least present benchmarks among the selected academic staff.
5.2.3 Summary of Findings Related to Teaching / Learning Process Benchmarks
(based on research question 1 and 2)

Academic staff had ranked the importance of the quality benchmarks as listed below. The level of importance listed in decreasing order.

1. Constructive and non-threatening feedback to students
2. Various ways to interaction among the academic staff and students
3. Timely feedback on student’s assignment
4. Inclusion of analysis and synthesis techniques on the course objectives

Constructive and non-threatening feedback to students was perceived as the most important benchmark. Inclusion of analysis and synthesis techniques on the course objectives was perceived as the least important.

The degree of presence of these benchmarks in this private institution was listed as below. The presence of benchmarks listed in the decreasing order.

1. Constructive and non-threatening feedback to students
2. Various ways to interaction among the academic staff and students
3. Timely feedback on student’s assignment
4. Inclusion of analysis and synthesis techniques on the course objectives

Constructive and non-threatening feedback to students was perceived as the most present benchmark in this private institution. Inclusion of analysis and synthesis techniques on the course objectives was perceived as the least present.
5.2.4 Summary of Findings Related to Course Structure Benchmarks (based on research question 1 and 2)

Below was the course structure benchmarks list according to their level of important. The level of importance listed in decreasing order.

1. Sufficient library resources for students
2. Course information was provided via student’s handbook
3. Setting specific expectation regarding time need to completed assignment
4. Clearly stated learning outcomes for each courses
5. Grading student’s assignment within the preset duration

Having sufficient library resources for students was perceived as the most important benchmark. The least important benchmark perceived by academic staff was grading student’s assignment within the preset duration.

The degree of presence of these benchmarks was listed as below. The presence of benchmarks listed in the decreasing order.

1. Course information was provided via student’s handbook
2. Grading student’s assignment within the preset duration
3. Setting specific expectation regarding time need to completed assignment
4. Clearly stated learning outcomes for each courses
5. Sufficient library resources for students

The benchmark with the highest degree of presence was course information was provided via student’s handbook. The least presence benchmark in this private institution was sufficient library resources for students.
5.2.5 Summary of Findings Related to Student Support Benchmarks
(based on research question 1 and 2)

Below was the student support benchmarks list according to their level of important. The level of importance listed in decreasing order.

1. Assistance for students to help them to access electronic data easily
2. Prompt responses by student service personnel to student’s query
3. Structured system to address student’s complaints
4. Hands-on training for students to assist them in accessing electronic material
5. Written information about type of services provided via student’s handbook

Academic staff perceived the assistance for students is the most important benchmark. Written information about type of services offered being the least important benchmark.

The degree of presence of these benchmarks in this private institution was listed as below. The presence of benchmarks listed in the decreasing order.

1. Written information about type of services provided via student’s handbook
2. Assistance for students to help them to access electronic data easily
3. Hands-on training for students to assist them in accessing electronic material
4. Prompt responses by student service personnel to student’s query
5. Structured system to address student’s complaints

Written information about type of services provided was perceived as the most present benchmark in this private institution. Structured system to address student’s complaints was perceived as the least present.
5.2.6 Summary of Findings Related to Academic Support Benchmarks
(based on research question 1 and 2)

Academic staff had ranked the importance of the quality benchmarks as listed below. The level of importance listed in decreasing order.

1. Peer mentoring and other support for academic staff
2. Assistance provided from classroom teaching to e-learning instruction
3. Training and other assistance throughout the progression of e-learning courses
4. Technical staff available for academic staff
5. Written instruction on dealing with issues arise from students

Peer mentoring or other support was perceived to be the most important and written instruction on dealing with issues arose from students was perceived as the least important by the academic staff.

The degree of presence of these benchmarks was listed as below. The presence of benchmarks listed in the decreasing order.

1. Training and other assistance throughout the progression of e-learning courses
2. Peer mentoring and other support for academic staff
3. Assistance provided from classroom teaching to e-learning instruction
4. Written instruction on dealing with issues arise from students
5. Technical staff available for academic staff

Training and other assistance throughout the progression of e-learning courses was the highest degree of presence benchmark in the private institution. The least present benchmark was technical staff available for academic staff.
5.2.7 Summary of Findings Related to Evaluation & Assessment Benchmarks
(based on research question 1 and 2)

Below was the evaluation and assessment benchmarks list according to their level of important. The level of importance listed in decreasing order.

1. Evaluation process is aimed to improved teaching and learning
2. Review of learning objective to ensure appropriateness in the market
3. More than one method to evaluate the effectiveness of any courses
4. Placing standard to improve student’s learning objective
5. Range of information used to evaluate the effectiveness of the courses

Academic staff perceived evaluation process as the most important benchmark and using a wide range of information to evaluate the effectiveness of the courses as the least important.

The degree of presence of these benchmarks in this private institution was listed as below. The presence of benchmarks listed in the decreasing order.

1. Evaluation process is aimed to improved teaching and learning
2. Placing standard to improve student’s learning objective
3. More than one method to evaluate the effectiveness of any courses
4. Range of information used to evaluate the effectiveness of the courses
5. Review of learning objective to ensure appropriateness in the market

The benchmark with the highest degree of presence was evaluation process. The least present benchmark in this private institution was review of learning objective to ensure appropriateness in the market
5.2.8 Summary of Findings on The Differences in Perception Regarding The Importance of Quality Benchmarks. (based on research question 3)

In term of variability of perception, there was no significant difference in perception the importance of the quality benchmarks and the qualification. There was also no significant difference in perception the importance of the quality benchmarks and the job function. However, there was significant difference in perception in term of branch’s location and the level of importance in three quality benchmarks i.e. teaching / learning process, course structure and student support. This means that the academic staff in different branches perceived differently the level of importance of the quality benchmarks.

5.2.9 Summary Findings on the Additional Features in the Quality Benchmarks (based on research question 4)

Based on the feedback received from the one opened-ended question in the questionnaire, most of the academic staff did not state any additional features, which can contribute in improving the quality assurance model.

5.3 Implication of Findings

The quality assurance benchmarks served to ensure that the standard of each category was maintained.

The purpose of quality assurance is to assist the development of schools and to provide a public account of the effectiveness of the schools in meeting community needs in schoolings. Quality assurance provides members of the schools community with an important voice in the evaluation of the schools the schools program achievement and future direction.

(NSW DES, 1992, p1). ¹

¹ Cited from MCB Managing Service Quality Vol.8 Issue 2, pg.10
Therefore, quality assurance in e-learning should involved reviewing the performance and development of any courses offered in this mode. However, there was a substantial difference between the importance of the benchmarks and their presence in this private institution.

In Management Support category, the management of this private institution should improved their professional support as many academic staff selected in this study, were unsure of its presence in the e-learning environment. Another area of concern was the documented technology plan. With the rapid growth of the technology, the management should try to keep up to the pace of this growth. Many of the academic staff in this study were unsure the presence of this benchmark.

In the Course Development category, the management should put more emphasis on these benchmark as many of the academic staff was unsure of its presence in the e-learning environment.

Under the Teaching / Learning category, there was one area, which need to enhance. Timely feedback to students’ assignment should be emphasis as many of the academic staff was unsure of its presence.

In the Course Structure category, three areas of concern detected. There were sufficient library resources, clearly stated learning outcome for each courses and setting a specific expectation and time for student’s assignment. The academic staff perceived these benchmarks as important but lack of its presence in the e-learning environment.
In the Student Support category, the management should put more emphasis on these benchmarks as many of the academic staff was unsure of its presence in the e-learning environment.

Under the Academic Support category, three areas need to enhance the presence i.e. assistance provided to academic staff who are in the transition from class room teaching to e-learning instruction, the availability of the technical assistance for academic staff and support available for the academic staff.

In the Evaluation and Assessment category, the management needs to enhance the presences of two benchmarks, which concern using more than one method to evaluate the course effectiveness. The academic staff was unsure of its presence.

Apart from actions taken to enhance the presence of the benchmarks, it must be noted that branch’s location influenced the academic staff perception of the importance of some of the benchmarks i.e. teaching / learning process, course structure and student support benchmarks. The effectiveness of learning is based on the preparation, the instructor’s understanding of the need of the students (Omoregie, 1997). Hardy and Boaz (1997:43) found that electronically based education required students to be more focus, more time manager and able to work independently and with group members. Hence, as the branch’s location was not strategic enough for promote e-learning, academic staff perceived some of these benchmarks as less important.
5.4 Discussion of Findings

E-learning had become widely accepted mode of learning. However, the use of technology in education had created concern among the various stakeholders on whether or not students received quality education through this mode of learning. Therefore, it is important for the academic level to ensure that quality in delivery e-learning courses.

According to QAA (1997), quality issues were complex and interrelated with many other academic functions. Therefore, quality issues should focus on the importance of delivery high quality education programs. QAA (1997) had formulated six provisions to assess quality (refer to page 24 – 26). Committee of Quality Assurance & Distance Learning, University of Maine System, USA in 1998, reviewed documents from various accrediting agencies on the quality assurance issues and had developed seven guidelines or principles for the technological based distance education (refer to page 28 - 29). In Malaysia, National Accreditation Board (LAN) had formulated six guidelines (refer to page 33) for any study program offered by any private institutions.

As there exists guidelines or principle on the quality in education, it is important to include only the benchmarks that ensure quality e-learning education in the list of the benchmarks. These essential benchmarks will form the quality assurance model of e-learning.

The following benchmarks are not essential for ensuring quality e-learning education. The removal of these benchmarks was based on their contribution in ensuring quality and guidelines developed by three accreditation agencies mentioned above.
In the Management Support category, there are two non-essential benchmarks i.e. professional support to encourage innovation and reward system to encourage effective teaching. In the Course Development category, there are also two non-essential benchmarks i.e. having a team of academic to manage the course development and consideration of student's learning during the course development.

Under the Teaching / Learning Process category, there is one non-essential benchmark i.e. non-threatening and constructive feedback for students. In the Course Structure category, there is one non-essential benchmark i.e. clearly stated learning outcomes are stated for each courses. For the remaining three categories i.e. Student Support, Academic Support and lastly Evaluation and Assessment, all the benchmarks used in this study are essential i.e. contribute to the quality to e-learning education.

The revised list is considered most essential to the success of any e-learning study program in this private institution (Appendix 2). This list is useful to policymaker, academic department and students as well as any individual who are interested in ensuring the highest quality of education provided via e-learning mode.

5.5 Recommendation for Further Research

This study revealed the benchmarks for quality assurance of e-learning, which were perceived to be important by academic staff. The quality assurance benchmarks used in this study was developed from the discussion with the top management of this private institution. They contained essential benchmarks that promote quality and non-essential benefits, which did not promote quality.
According to Yeung (2001), there are at least two stakeholders in any educational setting i.e. the academic staff and student. Therefore, in order to have an effective quality assurance model of e-learning, it will need to conduct a study on student’s perception on this issue and incorporate the result with the academic staff perception to obtain a more complete picture of the whole quality assurance model.

5.6 Conclusion

Quality is important for educational institutions, especially in term of gaining competitive advantages and meeting the public expectation. Success in market place depends on the institution ability to attract satisfy and retain its customers. Many higher institutions have invested heavily for keeping their image in the eye of the public.

The rapid growth of electronic mediated learning (e-learning) in higher education has prompted concerns on the quality issues. Various quality assurance agencies such as QAA in UK, CHEA in USA and LAN in Malaysia had developed guidelines to ensure quality education is provided to students.

In addressing the quality assurance issues, careful analysis is required so that unintended consequence in one area can be resulted in the bad choices in another. Hence, various guidelines or principles, which was developed by quality assurance agencies, were used in deciding the quality assurance model for e-learning.