

Chapter 3

Research Methodology

3.1 Introduction

This chapter begins with a description on the sample and data collection. The rationale for the choice of the research design used in this study i.e. a case design using questionnaire method to collect data. This chapter ends with a description on how the data was collected, analyzed and interpreted. This study was carried out during November 2003 to January 2004 in the three branches of one of the higher education institutions in Malaysia. These branches are located in Kuala Lumpur, Melaka and Petaling Jaya.

3.2 Sampling and Data Collection

This study involved collecting opinion on various key issues relating to quality assurance in e-learning. The respondents were group of academic staff from the three branches of one higher education institution. Selection of respondents was based on their familiarity with the general feature of e-learning education settings provided by this higher education institution.

Data, were gathered from the academic staff of the three branches. Written instruction was attached at the front cover page of the questionnaires. The respondents were recommended to spend approximately thirty minutes of their time to complete the questionnaire.

3.3 Research Design

A survey research method was used in this study. As the concerns of this study was getting perception from the academic staff on the quality assurance, a questionnaire survey technique were considered most suitable and practical method.

An investigation on the research literature had enhanced the usage of questionnaire in social science research. According to Burns (1990), questionnaire was a most commonly used descriptive method in educational research. The use of question in this study has a few advantages: wide coverage of the respondents; minimal cost and time are involved; and to ensure that the issue of validity associated to the low response rate is taken into account.

3.4 Instrumentation

The instrument used in this study was adapted from the case study conducted by the Institute of Higher Education in US in 2000. This framework was used and tested in both public and private higher education institutions. Furthermore, it was designed to measure the quality assurance in e-learning environment.

The questionnaire used in this study can be found in the Appendix. Adaptation from the original questionnaire was done after the discussion with the academic staff and staff from management level in this institution. This was to ensure that the benchmarks are fitted in this institution. The questionnaire was divided into four parts.

- Part A was used to gather respondents' demographic background which include the gender, the highest qualification, their job function and the branch's location.

- Part B contained thirty-five closed ended questions related to academic staff perception of importance of quality benchmarks in e-learning environment.
- Part C contained thirty-five closed ended questions related to academic staff perception of present of quality benchmarks in e-learning environment.
- Part D contained one-opened ended question, which served to identify additional benchmarks that can be included in the quality assurance model.

The questionnaire measured seven categories of quality benchmarks namely: management support, course development, teaching & learning process, course structure, student support, academic team support, and lastly evaluation & assessment.

3.5 Data Analysis

Data was analyzed quantitatively using simple descriptive statistics such as mean and standard deviation. Analysis was carried out using statistical software package, SPSS. Thirty questionnaires were distributed to all the respondents i.e. 10 respondents from each branch. Due to good support given from the academic teams in this institution, all questionnaires were collected at the preset time.

Information in Part A was analyzed to show the distribution of the respondents in term of their gender, highest qualification, job function and location of the branch. This information was used to show the distribution of the respondents.

Part B contained 5-points Likert scale questionnaires. Likert scale was selected because of the convenience in data analysis using computer statistical software package, SPSS.

A list of thirty-five quality benchmarks i.e. five questions for each categories. Each respondent was requested to rank each benchmark on based on the importance of benchmarks to ensure quality in e-learning. Score value of 1 = not important to 5 = very important. Data obtained in this section will be analyzed using a simple descriptive statistics i.e. mean and standard deviation. The result from the analysis was relevant to the research question 1 i.e. what are the quality benchmarks, which are important based on the academic staff perception?

Part C contained 5-points Likert scale questionnaires. A list of thirty-five quality benchmarks i.e. five questions for each categories. Each respondent was requested to rank each benchmark on based on the presence of benchmarks in e-learning environment in this institution. Score value of 1 = strongly disagree to 5 = strongly agree. Data obtained in this section will be analyzed using a simple descriptive statistics i.e. mean and standard deviation. The result from the analysis was relevant to the research question 2 i.e. what are quality benchmarks that present in the e-learning management?

The result from Part B and C will be used to answer the research question 3 i.e. what are the difference in academic staff perception regarding the quality benchmarks in term of the qualification, job function and location of the branch?. Data will be analysed using one way ANOVA test.

Part D contained one opened ended question, which served to identify additional feature that could be included in the quality assurance model. This data will be used to answer the research question 4 i.e. what are the additional benchmarks suggested by the academic team that can contribute to the quality assurance of e-learning?

This study revealed the important and additional benchmarks, which were suitable to be incorporated into the quality assurance model of e-learning in the higher education institutions' policies, practices and procedures.