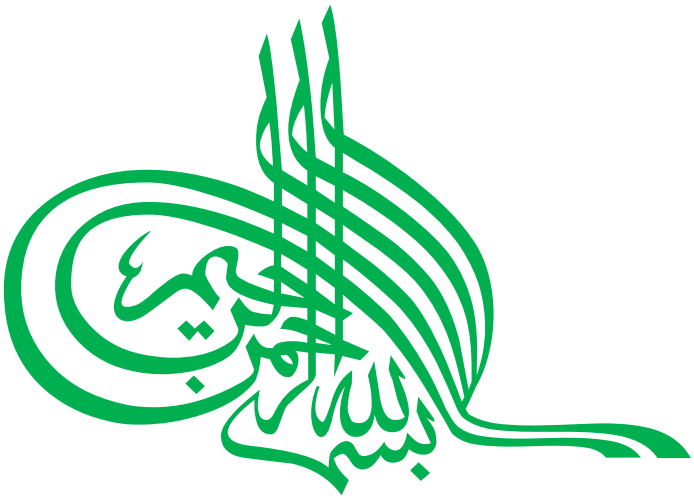
AN EVALUATION OF AN ONLINE ENGLISH FOR ACADEMIC WRITING PROGRAMME USING THE IHEP 2000 QUALITY BENCHMARKS

BY

MUH'D ABDEL HAKIM AREF FARRAH

INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA

2006


بسم الله الرحمن الرحيم

AN EVALUATION OF AN ONLINE ENGLISH FOR ACADEMIC WRITING PROGRAMME USING THE IHEP 2000 QUALITY BENCHMARKS

BY

MUH'D ABDEL HAKIM AREF FARRAH

A DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE DEGREE OF DOCTOR OF PHILOSOPHY IN ENGLISH LANGUAGE STUDIES
INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA

FEBRUARY 2006

ABSTRACT

One of the important issues in online learning is quality standards. In April 2000, the Institute of Higher Education Policy (IHEP) developed 24 benchmarks to ensure the quality of online programmes. Since the IHEP benchmarks were established, a few studies have used them to evaluate their online programs. This study looks at the extent to which an online English for Academic Writing course offered by the Centre for Languages and Pre-University Academic Development (CELPAD) of the International Islamic University, Malaysia (IIUM), met the IHEP 2000 benchmarks. Studies on language programmes using these benchmarks are hardly known, as evidenced in the literature review. This study marks the first time such a benchmark has been used to evaluate a language programme. Both quantitative and qualitative research methodologies were employed. Interviews were conducted for qualitative data. Thirty students and 15 instructors were interviewed. Quantitative data was obtained from two sets of questionnaires. The first one was completed by 421 students and the second by twenty eight instructors. For students, the stratified sampling method was used taking into consideration that the sample should represent the various faculties, nationalities, and gender. For the instructors, the entire population was used because of its small size. The benchmarks in the instructor questionnaire were: *(a) institutional support; (b) course development; (c) teaching and learning; (d) course structure; (e) student support; (f) faculty support;* and *(g) evaluation and assessment.* According to the instructors, the programme met *teaching and learning,* and *course structure* benchmarks. However, it did not meet the quality standards for *course development, student support, evaluation and assessment, faculty support, and institutional support*. The benchmarks that were examined in the student questionnaire were: *(a) institutional support; (b) course development; (c) teaching and learning; (d) course structure; (e) student support;* and *(f) value, flexibility and convenience*. The students perceived that the programme met all of the benchmarks with *student support* benchmark being the only exception. The results obtained from the interviews showed that the instructors felt that the aspects related to teaching and learning were achieved. However, the information collected through the interviews with the students showed that all the benchmarks have been achieved with the only exception of student support. Triangulating the empirical findings with the interviews helped to explain some of the problems faced by the Centre. This research demonstrated the usefulness of the IHEP benchmarks in measuring the quality of an online programme. Finally, the study concluded with recommendations for improvement in each benchmark and the necessary recommendations were also made for further research.

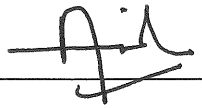
ملخص البحث

تعد مستويات الجودة من القضايا ذات الأهمية فيما يتعلق في مجال التعليم عبر الإنترنت، ولذلك فقد قام معهد رسم السياسة التربوية العليا عام 2000م بتطوير نموذج لقياس الجودة يتكون من 24 معياراً للتأكد من جودة برامج التعليم عبر الإنترنت. ومنذ تطوير المعهد لهذا النموذج، فقد تم استخدامه في عدد من الدراسات التي هدفت إلى تقويم البرامج التعليمية عبر الإنترنت. والغرض من هذه الدراسة هو النظر في مدى تطبيق برنامج تدريس الكتابة الأكاديمية باللغة الإنجليزية عبر الإنترنت - المعد من قبل مركز اللغات في الجامعة الإسلامية العالمية الماليزية - لمعايير النموذج المذكور سابقاً. ومن خلال استعراض الدراسات السابقة في البحث تبين أن هناك عدداً ضئيلاً جداً، لا يكاد يذكر، من الدراسات التي استخدمت هذا النموذج في تقويم برامج تعليم اللغات عبر الإنترنت. ولقد تم استخدام كلٌ من مناهج البحث الكمية والنوعية معا في الدراسة فضلاً عن إجراء المقابلات للحصول على بيانات نوعية، حيث تم إجراء مقابلات مع ثلاثين طالباً وخمسة عشر مدرساً. وقد تم الحصول على البيانات الكمية من خلال إعداد استبانتين حيث شمل الأول 421 طالبا وشمل الثاني 28 مدرساً. وبالنسبة للاستبانة الخاصة بالطلاب، فقد تم استخدام طريقة العينات المقبولة مع الأخذ بعين الاعتبار ضرورة أن تتضمن العينة مختلف كليات الجامعة والجنسيات وكذلك الجنسين. وأما فيما يتعلق بالمدرسين، فقد تم استخدام جمهور الدراسة كلها نظرا لصغر حجمها، ويشتمل الاستبيان على المعايير التالية: ا) الدعم المؤسسي ب) تطوير المنهج والمقررات ج) التدريس والتعلم د) مكونات المنهج هـ) دعم الطلاب و) دعم الهيئة التعليمية ز) التقويم. وبناء على استبيان المدرسين، فإن البرنامج طبق معايير التدريس والتعلم ومكونات المنهج، إلا أنه لم يعمل على تطبيق معايير الجودة فيما يخص تطوير المنهج ودعم الطلاب والتقويم، ودعم الهيئة التعليمية والدعم المؤسسي. وأما نقاط معايير الجودة التي استُخدمت في استبانة الطلاب فهي: ا) الدعم المؤسسي ب) تطوير المنهج والمقررات ج) التدريس والتعلم د) مكونات المنهج هـ) دعم الطلاب و) القيمة والمرونة والملاءمة. وتشير آراء الطلاب إلى أن البرنامج عمل على تحقيق كل المعايير المتعلقة بدعم الطلاب بشكل استثنائي. ومن خلال تطبيق أسلوب البحوث الثلاثية الأبعاد للتوثق من نتائج البحوث التجريبية مع المقابلات، تمكّن الباحث من تفسير بعض المشكلات التي يواجهها مركز اللغات. وعليه فإن هذا البحث يبين فوائد النموذج المذكور أعلاه في قياس جودة التعليم عبر الإنترنت. وفي خاتمة الرسالة تم وضع بعض التوصيات للارتقاء بكل من المعايير فضلاً عن عدد من التوصيات لمزيد من البحث في هذا المجال.

APPROVAL PAGE

The thesis of Muh'd Abdel Hakim Aref Farrah has been examined and is approved by the following:

Nuraihan Mat Daud
Supervisor



Ainol Madziah Zubairi
Supervisor

Adrian Ernest Hare
Internal Examiner

Subramaniam Govindasamy
Internal Examiner

Mohamed Amin Embi
External Examiner

Ibrahim Zein
Chairman

DECLARATION

I hereby declare that this thesis is the result of my own investigations, except where otherwise stated. Other sources are acknowledged by footnotes giving explicit references and a bibliography is appended.

Name: Muh'd Abdel Hakim Aref Farrah

Signature..... Date..... 02-02-2006

INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA

DECLARATION OF COPYRIGHT AND AFFIRMATION OF FAIR USE OF UNPUBLISHED RESERACH

AN EVALUATION OF AN ONLINE ENGLISH FOR ACADEMIC WRITING PROGRAMME USING THE IHEP 2000 QUALITY BENCHMARKS

Affirmed by Muh'd Abdel Hakim Aref Farrah.

Farrah
.....
Signature

02-02-2006
.....
Date

DEDICATION

I would like to dedicate this thesis to

My parents and parents' in-law

Most of all

A heartfelt thanks to my wife

Afnan

Thanks to my kids

Malik and Zainab who are my

source of inspiration.

ACKNOWLEDGEMENTS

Allhamdulillah, all praise belongs to Allah, the Lord of the Universe whose Mercy, Guidance, and Blessings have enabled me to complete this study successfully.

I would like to give my sincere appreciation to my major supervisor Prof. Dr. Nuraihan Mat Daud, who has given me her constructive comments, guidance, encouragement, and support to complete this thesis. I am also indebted to my co-supervisor Assist. Prof. Dr. Ainol Madziah Zubair for her constructive comments. Her invaluable assistance and guidance have made the process of writing this thesis run smoothly.

My appreciation goes to all lecturers at the Department of English, IIUM especially the Head of the department and the lecturers who taught me the required courses in the Ph.D programme. Thanks to Professor Syed Nasir Kazmi for all the guidance and inspiration he has provided. My sincere thanks are also due to Sister Noor Lide for providing every possible assistance related to research methodology in general, and Rasch Model in particular. Her insightful guidance and valuable support are given with generosity.

Thanks also due to Professor Trevor Bond, of James Cook University in Australia, for the time that he offered in showing me the possibilities of the Rasch model applications and for his valuable comments on my thesis. Thanks to Professor John Michael Linacre, of University of Sydney in Australia, for the valuable discussion we had in order to develop a procedure to determine whether the benchmarks have been met.

CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER ONE

INTRODUCTION

1.0 INTRODUCTION

The use of technology in second language learning has increased over the past few years. Many initiatives have been taken to promote its use in secondary and tertiary institutions. Great numbers of institutions are moving toward online delivery and this makes evaluation necessary. Evaluation concerns the use of relevant data to make informed decisions. Moreover, it helps to make sense and to establish the value of learning. Stern (1988) pointed out that:

> Evaluation is an activity that throughout the planning and the delivery of innovative programmes enable those involved to learn and make judgements about the starting assumptions, implementation processes, and outcomes of the innovation concerned
>
> (In Jackson, B. Sep. 2004)
> (www.icbl.hw.ac.uk/ltdi/evalstudies/evalimp.htm).

The principal goal of evaluating online learning is to provide institutions with enough data on which to make confident judgments concerning the efficiency of the innovation of delivery. Consequently, actions can be taken and this would lead to an improvement in learning and online delivery (Stern, 1988). Palloff and Pratt (2001:14) observe that through excellent preparation and evaluation processes, educational institutions can circumvent costly mistakes by developing realistic programmes that tackle the needs of the students.

In his opening address to the Secretary's Conference on Educational Technology, the U.S Secretary of Education, Richard Riley (as cited in McNabb, Hawkes and Rouk Üllik, 1999) highlighted the importance of educational technology

and the need for evaluation. He deemed that there is a need to gather information from all schools, and districts and to "study it, share it, and learn from it" (1999:1). He pointed out the need to know what works and what does not work. He emphasized that employing technology by itself cannot be successful. Consequently, he called for evaluation to create constructive change.

Seven issues in evaluating the effectiveness of technology in education were discussed in the conference:

- The effectiveness of technology is embedded in the effectiveness of other school improvement efforts.
- Current practices for evaluating the impact of technology in education need broadening.
- Standardized test scores offer limited formative information with which to drive the development of a school's technology programme. Most schools are looking for additional means for collecting useful data for this purpose.
- Schools must document and report their evaluation findings in ways that satisfy diverse stakeholders' need to know.
- In order for evaluation efforts to provide stakeholders with answers to their questions about the effectiveness of technology in education, everyone must agree on a common language and standards of practice for measuring how schools achieve that end.
- The role of teachers is crucial in evaluating the effectiveness of technology in schools, but the burden of proof is not solely theirs.
- Implementing an innovation in schools can result in practice running before policy. Some existing policies need to be "transformed" to match the new needs of schools using technology.

(McNabb, Hawkes and Rouk Üllik, 1999)
(http://www.ed.gov/Technology/TechConf/1999/confsum.html)

As there is a need for evaluation, researchers and educational institutions began to search for benchmarks to examine the effectiveness of online learning. Various educational institutions suggested some guidelines for effective online delivery. In 1995, the Western Cooperative for Educational Telecommunications (WCET) in United States of America (U.S.A.) developed "Principles of Good Practice

for Electronically Offered Academic Degree and Certificate Programmes" (http://www.wiche.edu/telecom/projects/balancing/principles.htm), which has been extensively distributed and implemented by states, and other regional accrediting associations. Then, at its September, 2000 meeting, commissions and institutions of higher education drafted "Guidelines for the Evaluation of Electronically offered Degree and Certificate Programmes" (http://www.wcet.info/resources/publications/guidelines.pdf). These guidelines were drafted by the Western Cooperative for Educational Telecommunications (www.wiche.edu/telecom/Guidlines.htm) and after a rigorous review, were adopted by many regional commissions. The guidelines are made up of five separate components: institutional context and commitment; curriculum and instruction; faculty support; student support; and evaluation and assessment.

In order to validate the benchmarks, the U.S.A National Education Association (NEA) and Blackboard Inc. approached the Institute for Higher Education Policy (IHEP). IHEP conducted a case study which consisted of three phases (Phipps & Merisotis, 2000). That study, entitled *Quality on the Line: Benchmarks for Success in Internet-Based Distance Education*, reviewed all of the existing guidelines and benchmarks that deal with the best practices in distance learning and combined them into a single list of 45 benchmarks (see Appendix 1). The Institution's examination of the information from the interviews and the questionnaire resulted in the exclusion of thirteen benchmarks and the inclusion of three new benchmarks. Several benchmarks were put together because they addressed the same issue. The study resulted in a list of 24 benchmarks that are "essential to ensure quality in Internet-based distance education" (see Appendix 2). The researchers considered these benchmarks as crucial measures to help institutions, faculty and students to judge the quality of Internet-

based distance education. The benchmarks are: (a) institutional support; (b) course development; (c) teaching and learning; (d) course structure; (e) student support; (f) faculty support; and (g) evaluation and assessment. These benchmarks were developed to aid planners and decision makers in universities and educational institutions. They can be a resource for the instructors and students to evaluate the quality of online learning at their institutions.

According to IHEP 2000, the institutional benchmarks concentrate on a documented technology plan that includes electronic security measures to ensure both quality standards and the integrity and validity of information, and whether there is a centralized system that provides support for building and maintaining the distance education infrastructure (Phipps & Merisotis, 2000: 2).

The course development benchmarks examine whether guidelines regarding minimum standards are used for course development, design and delivery, learning outcomes, and instructional materials. The teaching and learning benchmarks address an array of activities related to pedagogy such as students' interaction with faculty and other students including voicemail and/or email, feedback to student assignments and methods of effective research, including assessment of the validity of resources (Phipps & Merisotis, 2000: 2).

The course structure benchmarks necessitate that students are provided with supplemental course information that outlines course objectives, availability of library resources, expectations for assignment, and learning outcomes. The course structure benchmarks also address issues like students' self-motivation and commitment to distance learning. The student support benchmarks examine if students receive information about programmes, including admission requirements, tuition and fees, books and supplies, technical and proctoring requirements, and student support

services such as electronic databases, interlibrary loans, government archives, news services, and other sources (Phipps & Merisotis, 2000: 2).

The faculty support benchmarks concentrate on issues related to technical assistance in course development, training, peer mentoring, and whether instructors are provided with written resources to deal with issues arising from student use of electronically-accessed data. The evaluation and assessment benchmarks concentrate on the need to assess the programme's educational effectiveness and teaching/learning process through an evaluation process that uses several methods and applies specific standards. Data on enrollment, costs, and successful/innovative uses of technology are used to evaluate programme effectiveness. They also see whether intended learning outcomes are reviewed regularly to ensure clarity, utility, and appropriateness (Phipps & Merisotis, 2000: 3).

In this study, the researcher used the established benchmarks in his evaluation of the online course under examination.

1.1 Background to the Study

This study was conducted at the Centre for Languages and Pre-University Academic Development (CELPAD) of the International Islamic University, Malaysia (IIUM). The Centre offers Arabic, Malay and English language courses to equip the students with the necessary skills to follow the courses offered by the different faculties. English for Academic Writing (EAW) is one of the compulsory courses for the students in all of the faculties at the International Islamic University Malaysia (IIUM) (http://celpad.iiu.my/EAW). This course is intended specifically to support the students in terms of developing academic literacy skills in order to prepare them for the rigorous load required for all the students of the following faculties: Economics,

Engineering, Information Communication Technology (ICT), Science, Medicine, Islamic Revealed Knowledge and Human Sciences (IRKHS), Architecture and Law. The objective of the course is to develop students' language skills and to enable them to pursue library research professionally.

In 2000, CELPAD embarked on offering an online English for Academic Writing Course (EAW) along with a traditionally taught one. The course content, objectives and assessment of both the online and the offline courses remained the same. EAW is a compulsory course for all undergraduate students in the University. Thus, the number of students registering for the course each semester is large (Nuraihan and Ainol, 2005).

EAW is about writing a research paper. Each student has to write a paper in an argumentative style, by the end of the semester. Students are guided to write in an argumentative mode, through a variety of tasks set throughout the course. The mechanics and techniques of writing a research paper are explained throughout the course, and the application tested in a final examination.

EAW is a student-centred course where students are expected to find the source materials necessary to complete their papers. The course provides them with lots of useful suggestions and links to improve their general academic writing skills and to encourage them to be independent learners. These materials are intended to encourage students in organising their time. The key skills students are expected to learn include:

- Time management
- Library and Internet search for sources
- Citation style
- Argumentative Accurate writing
- Finding information
- Reading skills
- Refuting ideas
- Speaking skills

- Critical reading/thinking skills
- Listening skills

The online EAW course is divided into ten modules. Each module begins with a text that relates to the module, followed by a series of tasks. The tasks are for self-study and to encourage students to practise what they have learnt in the face-to-face sessions. Upon completion of the course, students will have learnt the necessary techniques to enable them to write a research paper. The course encourages students to use the Internet as a tool in preparing and writing their papers. The developers of the course included a list of English for Academic Purposes plus Study Skills links. In addition to this, students can access the virtual resource room. Throughout the course, students will be directed to useful sites to aid their learning process. Most of these lessons or materials are delivered as an online course with the support of instructors. At the beginning of the course, the students are asked to fill out a needs analysis form. This form is intended to assess students' strengths and their weaknesses in the following key skills: Reading, Writing, Listening and Speaking.

In the online mode, students are encouraged to email drafts of their paper to their facilitator's folder who will guide them in improving and rewriting a final paper (Nuraihan and Ainol, 2005). The facilitator does a number of things: s/he makes sure that all students are engaged in the given tasks in the online module and s/he initiates discussions via the discussion board and the chat room. In order to access the module, students are given the site address and the password to the programme and the labs are opened during the classes and in the evenings.

In Semester II, 2004 the administration of CELPAD decided to offer part of the EAW course online to all students. This means that all students have to spend six

contact hours: two of them online, three in face-to-face lecture mode, and one in tutorial. The aim of this change was to expose all the students to similar learning experiences. Before this only some of the students followed the blended approach.

In this study, the researcher examined whether the two online hours meet the adapted version of the IHEP benchmarks. Consequently, in this study, wherever the phrase 'online course' or 'programme' is used it refers to the two hours of online instruction that form part of the English for Academic Writing Course (EAW).

1.2 Statement of the Problem

There has been a rapid increase in the number of institutions of higher education that incorporate online delivery programmes in language teaching. However, little is known about the quality of such programmes. Since CELPAD started offering an online English for Academic Writing Course (EAW), there is a need to evaluate one such programme. This is deemed necessary to maintain approval for the implementation of online learning. Research such as this would add to the information on the quality of online programmes for language instruction.

1.3 Objectives of the Study

The main objective of the study was to examine the online English for Academic Writing (EAW) programme and to assess its perceived effectiveness by evaluating it against the adapted version of the Institute of Higher Education Policy benchmarks (IHEP 2000) established in the literature for quality online learning. The focus was on measuring to what degree the online course at CELPAD met the adapted version of the IHEP 2000 benchmarks. The benchmarks which were measured in this

study are: institutional support, course development, teaching and learning, course structure, student support, faculty support, and evaluation and assessment.

In brief the main objective of this research was to study the degree to which the adapted version of the IHEP 2000 benchmarks for quality online learning were being incorporated as perceived by the students and the instructors of the programme under study. In other words, this research aimed to investigate the extent to which the online classes at CELPAD met the following benchmarks:

(a) Institutional support benchmarks;

(b) Course development benchmarks;

(c) Teaching and learning benchmarks;

(d) Course structure benchmarks;

(e) Student support benchmarks;

(f) Faculty support benchmarks;

(g) Evaluation and assessment benchmarks.

1.4 Research Questions

The study investigated whether the online course met the benchmarks that were adapted from the IHEP 2000 for quality online learning as perceived by the students and their instructors. Specifically, the research questions of the study were:

1. To what extent does the online mode of the English for Academic Writing Course meet institutional support benchmarks?
2. To what extent does the online mode of the English for Academic Writing Course meet course development benchmarks?

3. To what extent does the online mode of the English for Academic Writing Course meet teaching and learning benchmarks?
4. To what extent does the online mode of the English for Academic Writing Course meet course structure benchmarks?
5. To what extent does the online mode of the English for Academic Writing Course meet student support benchmarks?
6. To what extent does the online mode of the English for Academic Writing Course meet faculty support benchmarks?
7. To what extent does the online mode of the English for Academic Writing Course meet evaluation and assessment benchmarks?

In brief the research question was:

To what extent has the online course met the adapted version of the IHEP 2000 benchmarks for online learning?

1.5 Significance of the Study

The increase in the use of technology in learning, particularly the use of Internet, has exerted a great influence on educational institutions to incorporate technology in the learning process. This has resulted in the emergence of novel methods of transmission and that includes the online delivery of courses. In many cases, there is a necessity to have online courses. They are normally offered to meet the increase in learner population, to solve the problem of lack of manpower, and to give attention to those who look for convenience and flexibility in their academic choices. Seng and Mohamad (2002:112) opined that online learning offers "quality learning opportunities to more students without compromising the merit of education". The success of an online programme requires administrators and instructors to be

knowledgeable about what constitute quality for such programmes. The results of this study are important for students who would like to enroll in online courses as well as to instructors and administrators who would like to develop and implement online learning in their universities as the results give indication of their effectiveness. Additionally, the findings are beneficial to institutions interested in designing, developing, delivering and evaluating online courses. Understanding the factors and components that are in play when implementing technology in learning would assist educators and decision makers to meet the demands of the students and provide them with the quality of education they deserve.

1.6 Methodology

In a combination of both qualitative and quantitative research methods, this study aims to measure to what extent the online course met the adapted version of the IHEP 2000 benchmarks for online learning.

This study used the adapted version of the IHEP 2000 benchmarks. Two sets of questionnaires were distributed to the instructors and students who were engaged in the online English for Academic Writing course. A questionnaire for the students was based on those generated at The Third Pew Symposium in Learning and Technology in 2001. A group of sixteen higher education leaders gathered at the Symposium to discuss "Preserving Quality in Distributed Learning Environments." Participants at the symposium generated a list of questions that students should be asked (see Appendix 3). The items are structured according to the IHEP 2000 benchmarks, with the exception of "Faculty Support" and "Evaluation and Assessment". One additional category of interest to students ("Value" and "Flexibility and Convenience") was

added at the Symposium (Pew Symposium, 2001) (http://www.center.rpi.edu/PewSym/mono3.html). The researcher transformed the questions into statements to suit a 1 to 5 Likert scale. The researcher also used the questions that were suggested by the Pew symposium as a guide for the interview (see Appendix 4 for the interview questions for the students, and Appendix 5 for the interview questions for the instructors).

The student questionnaire was piloted (see Appendix 6) and based on the results of the pilot study slight modifications (see Chapter Three) were incorporated in the final version of the student questionnaire (see Appendix 7).

The second questionnaire (see Appendix 8) was directed to instructors who were involved in the online learning programme to gain information on a number of issues under each benchmark in question. The researcher adopted the questionnaire used in the study that was conducted by the Institute of Higher Education Policy (IHEP 2000), the only exception being that the researcher excluded those statements that were deemed by IHEP unnecessary for ensuring quality online education (Phipps & Merisotis, 2000: 2). The researcher added some new benchmarks as recommended in the same study. The total number of statements was 24. The total number of items in the questionnaire was 33, because the researcher found that it was more practical to divide some of the variables into two to make it easier for the participants to give valid and reliable answers (Kline, 1993, Bachman, 1995).

1.7 Limitations of the Study

Limitations are inherent in most studies. Caution should be exercised when inferring from the results of this study. The specific nature of the programme also serves to limit the study. The limitations of this study include the following:

1. Subjects involved in this study are all students and lecturers of the online English for Academic Writing programme (EAW), in academic year 2003/4 at CELPAD.
2. The implementation of the online programme is in its infancy; lecturers are newly trained and may not be proficient in delivering online courses.
3. The course is only partially online.

Despite the limitations, the study can hopefully answer the research question it sets itself to answer.

1.8 Organization of the Chapters

The dissertation is organized into five chapters. These chapters are briefly described below.

Chapter One provides an introduction, background of the study, the statement of the problem, purpose and research questions, significance of the study, brief methodology and limitations, and finally the organization of the study.

Chapter Two is devoted to the literature review on current research related to evaluation of educational programmes employing online delivery methods, and the need for quality benchmarks.

Chapter Three describes the research design and the methodologies used in this study. The major steps in conducting this study, using a questionnaire and an interview, are explained. The steps include the sampling procedure, designing the questionnaires and piloting them, the interview procedure, and data analysis of the questionnaires and the interviews.

Chapter Four reports the findings and analysis of the questionnaires and interviews and will cover the following issues in detail: institutional support, course

COURSE STRUCTURE BENCHMARKS mean 0.008

development, teaching/learning process, course structure, student support, faculty support, and evaluation and assessment. The extent to which the benchmarks are met will be sought from the analysis of the questionnaires and the interviews. The interviews triangulate the data obtained from the questionnaire survey.

Chapter Five presents the conclusions along with the implications of the study. Recommendations for further research are also given in this chapter.

CHAPTER TWO

LITERATURE REVIEW

2.0 INTRODUCTION

This chapter reviews the current research in the area of online learning and the online quality benchmarks. Before reviewing the literature on the quality online benchmarks, it is necessary to review what has been written about other relevant topics. Specifically this chapter will review the current literature on technological advancement and its impact on educational institutions; Internet and education; the concept of online learning; its definitions, advantages and limitations; studies comparing online and offline modes; and finally the benchmarks for quality online learning.

2.1 Technological Advancement and Its Impact on Educational Institutions

Many institutions have started to offer a variety of online courses. Within the confine of online courses, some institutions have adopted a constructive and flexible mechanism for adding courses and are altering programme delivery to suit the changes that are taking place in the educational sector.

Tucker (1999) raised some issues related to the effectiveness of language learning and teaching through the use of technology and expressed his regret at the fact that social inequities seem to correlate with access to innovative technology. He suggested that:

(a) We must give concerted individual and collective attention to the problem of allocation and distribution of resources, including but not limited to technological resources;
(b) We must implement, as soon as is practical, a multifaceted and longitudinal research agenda to examine, from multiple perspectives, the value added to students who pursue some or all their language education using innovative technologies.

(Tucker, 1999: 216-217)

Stromberg (2002) believed that universities need to upgrade the faculty and students' information technology skills so that they can be more competitive and responsive to the needs of the workplace of today. A governmental report for the U.S. Department of Education states that:

> Learning-centered education places the focus of education on learning and the real needs of students. Such needs are derived from the requirements of the marketplace and the responsibilities of citizenship. Changes in technology and in the national and world economies are creating increasing demands on employees to become knowledgeable workers and problem solvers, keeping pace with the rapid changes in the marketplace. Education offerings need to be built around learning effectiveness. Teaching effectiveness needs to stress promotion of learning and achievement.
>
> (Education Criteria 2003: http://www.learn-live.com/0-Profile.htm).

Boehler (1999:3) highlighted that "Nobody can avoid technology; it has penetrated every aspect of life from home to the job. Those unable to use it face a life time of menial work". Dewy (1916) argued that schooling can be successful only if it is directly relevant to the students and their lives (as cited in Johns, 1997: 8). Nelson (2001: 13) pointed out that learners entering the work force in the 21st century need a set of different skills. She pointed out that technology advancement brings changes to teaching methodology. According to her, teaching today is no longer defined as the transfer of knowledge to the learner; learning is no longer defined as the retention of facts. She called upon instructors and students to work in "collaborative construction

of knowledge in order to change the students to develop deeper understanding in the context of real world situations" (Nelson, 2001: 13).

Stromberg (2002: 12) observed that there is a paradigm shift in higher education from a college that "provides instruction" to one that "produces learning". In this new learning paradigm, the objectives in school and life should "interact with valid and useful learning systems and materials at times and places convenient to our students to achieve competence" (p.13).

Hassan (2001: 56) called for a change in how we educate students if the students are to compete in the global community. In the context of the Muslims in Malaysia, he pointed out that they should be aware of the changing circumstances and the new demands and opportunities on the local as well as the global fronts. He warned that public universities in Malaysia cannot survive if they do not develop their competitive edge. He stressed the need to acquire the relevant information technology (IT) skills in order to improve teaching, research and development.

Many educational institutions worldwide have realized this change and have taken practical steps to equip their institutions with the needs of the age. They recognized that they must upgrade their systems to cope with this technological advancement. The most apparent aspect of this change is the use of the Internet. The following section discusses the Internet and its use in education.

2.2 Internet and Education

Today, in many institutions, the Internet is one of the most important instruments for the delivery of educational material. The Internet is a convenient and cost-effective medium for collaboration, e-commerce, entertainment, and communication (Siekman, 1999; Little, 2000; Schepise, 2002). Instructors and students can meet online where

there is no necessity for face-to-face communication. With the incorporation of Internet resources into the educational system, the face-to-face classes and traditional classroom environment are no longer the only sources of information delivery. The students of today, particularly those in virtual universities, are not constrained by time, place or schedules.

The incorporation of the Internet into various areas has surpassed other technologies such as radio, television, and the personal computer. Online learning is becoming an integral part of course delivery in many universities. With the advent of the Internet, millions of students can access thousands of online courses posted on the Internet. A great number of schools and universities are moving towards adopting online courses. A questionnaire conducted by the US Department of Education's National Centre for Education and Statistics (NCES) found that from 1994/5 to 1997/8 the number of distance learning programmes had witnessed an increase of 72 percent. Added to that, 20 percent of the institutions surveyed were preparing to set up distance education programmes within the next three years (Lewis, Snow, & Farris 1999, cited in Phipps and Merisotis, 2000). In a study conducted by the Sloan Consortium it was found that:

- Over 1.6 million students took at least one online course during Fall 2002.
- Over one-third of these students (578,000) took all of their courses online.
- Among all U.S. higher education students in Fall 2002, 11 percent took at least one online course.
- Among those students at institutions where online courses were offered, 13 percent took at least one online course.
- The number of students taking at least one online course is projected to increase by 19.8 percent over the one-year period from Fall 2002 to Fall 2003, to include a total of 1.9 million students.

(Sloan Consortium, 2002/3)
(http://www.sloan-c.org/resources/overview.asp)

In a more recent study conducted by the Sloan Consortium it was found that:

- Over 1.9 million students were studying online in the fall of 2003.
- Schools expect the number of online students to grow to over 2.6 million by the fall of 2004.
- Schools expect online enrollment growth to accelerate — the expected average growth rate for online students for 2004 is 24.8%, up from 19.8% in 2003.
- Overall, schools were pretty accurate in predicting enrollment growth — last year's predicted online enrollment for 2003 was 1,920,734; this year's number from the survey is 1,971,397.

(Sloan Consortium, 2003/4)
(http://www.Sloan-C.Org/Resources/Survey.Asp)

The two studies above show that there has been a steady increase in the number of students who join the online courses. However, the two studies do not show the extent of the online delivery that is used in the courses surveyed. The next section explains what is meant by online learning.

2.3 What Is Online Learning?

Diverse definitions for online learning are available. The source of confusion is whether this kind of learning should be totally online, with a total separation in both time and place as opposed to partial separation, where students receive some face-to-face instruction. Moore and Kearsley (1996: 2) define distance education as:

> Planned learning that normally occurs in a different place from teaching and as a result requires special techniques of course design, special instructional techniques, and special methods of communication by electronic and other technology, as well as special organizational and administrative arrangements.

Different terms have been associated with this learning environment in different studies such as "asynchronous studies", "distributed learning", "online instruction", "online education", "distance education", "e-learning", "Web-enhanced learning", "Internet courses", " virtual classroom", "electronic classrooms", "flexible

learning", or "ClassNet" (Cereijo, 1999; Sawyer 1997; Hensrud, 2001; Stromberg. 2002; Van Gorp 1999; Bielman, 2000; Taylor, 2001; Kearsley, 2000; Lao, 2002; Morrison and Guenther, 2000).

The use of the different terms may be related to the degree of the online delivery used in the course. A report prepared by the Higher Education Programme and Policy Council of The American Federation of Teachers (AFT) (2000) stated that the term "distance education" describes courses in which nearly all the interaction between the teacher and student takes place electronically. Reil and Harrasim (1994: 95) offered some descriptions of this kind of learning which they call "NetCourse":

> In this model, all course activities occur online, using computer conferencing or bulletin board systems, or, in a few cases, email interaction. Online class activity resembles face-to-face classes in many ways: A teacher typically organizes the material, describes the sequence, establishes the pace, and determines the reading and other assignments. However, online courses are asynchronous and place independent. Students may live in different cities or even different countries from one another and the instructor. In online courses, students read the course materials, log on to participate in online seminars, large and small group discussions, individual or group projects.

Morrison and Guenther (2000) drew attention to the considerable confusion about the definitions of this mode of delivery. They distinguished between two sets of definitions; the first one is based on the separation of students in both time and location, whereas, the second stresses a separation in *location* rather than in *time*. They also point out a distinction made by Mayadas (1997: 16) who classified distributed learning into: *on-campus*, where there is an instructor who implements a discussion board to continue discussion outside the classroom: *near-campus*, where there is an extensive use of online discussion; and *a very-far-from-campus*, where there is a very "extensive use of technology for both synchronous and asynchronous

communication." Palloff and Pratt (2001: 68) observed a similar classification. They pointed out that online courses can be classified into three types: *Web courses*, where students access material that is placed on a website; *web-enhanced courses*, where students learn in both environments: face-to-face meetings and online sessions; and *web-centric courses*, which are "interactive courses conducted exclusively using a course site that is housed on the Web." But the definition that they favour is one that has been posted on Blackboard. This definition views online education as:

> An approach to teaching and learning that utilizes Internet technologies to communicate and collaborate in an educational context. This includes technology that supplements traditional classroom training with Web-based components and learning environments where the educational process is experienced online.
>
> (Blackboard Inc. 2000: 1)

This definition is more comprehensive and it covers several learning environments. It is also applicable in this study where the Internet is used as a supplement to traditional classroom teaching.

2.3.1 Advantages of Online Learning

Online learning offers a great opportunity to learn without the limitations of time or location. Moreover, students become more independent and responsible for their own learning. Seng and Mohamad (2002: 111) pointed out that this kind of education can be a solution for institutions "where manpower is a stumbling block". The advantages also include improvements in the quality of learning. Researchers observed that the degree of participation among students and instructors in online learning revealed an increase in autonomous demonstration participation with equal chance for participants to communicate their beliefs. This would have been unattainable in face-to-face sessions. There was an even higher percentage of student-student interaction

compared to student-teacher interaction (Hackett, 1996; Feenberg, 1999; Spencer, 2000; Little, 2000; Ho, 2004). Ho (2004) pointed out that discussion transcripts present a lasting written documentation which is not achievable in an oral interaction. Spencer (2000) observed that learners have the opportunity to write to their own peers in the real world community.

According to Cereijo (1999: 17), with the introduction of the Internet to distance learning, the concept of the virtual classroom has become a reality. She pointed out that nowadays in synchronous transmission, students and instructors are simultaneously connected through the Internet, while being miles away. Students and instructors can meet in virtual classrooms in different parts of the world. She opined that all of the literature reviewed in her study encouraged the use of technology, but the teacher still plays the leading role. To her, "Technology is only providing the tools that help the teacher facilitate learning".

2.3.2 Limitations of Online Learning

Online learning is not devoid of limitations and criticism. These limitations spring from technological problems such as a) slow servers, b) training and developmental issues, c) lack of Web materials, and d) lack of facilities and high cost.

2.3.2.1 Slow servers

Stoks (1993) suggested that hardware facilities should be better: more powerful computers are needed. Singhal (1997) as well as Kennedy and Duffy (2000) observed that the nature of the network system and computers themselves can be a disadvantage at times. Among the disadvantages they mentioned include busy lines, too many users, and time consuming. They warned that learning via the Web can be impeded if

learners are frustrated by the slow accessibility and technical glitches. This is supported in other studies where the long time taken to download certain pages caused students' dissatisfaction (Haworth, 1995; Fitri Suraya, 2000; Mohamed Amin, 2004; Suhaila and Ridwan, 2005).

2.3.2.2 Training and development

Several researchers pointed out that educational administrators need to provide the budget to train teachers to facilitate the implementation of technology (Singhal, 1997; McMeniman and Evans, 1998). Singhal (1997) warned that the lack of training can be a barrier to effective language learning. She pointed that in the hands of skilled language teachers and learners, the potential of CALL is enormous.

2.3.2.3 Lack of Web material

Haworth (1995) pointed out that any Web materials should be worked into the existing curricula. However, this could be a problem since many Web materials do not fit within the traditional mould. As a result, the process of material collection can be tiresome and time-consuming for language teachers. Scheuermann, Larsson, and Toto (2000) pointed out that effective online course design and development "requires attention to technical execution, adaptation of content and course concepts, attention to motivation, and must afford interactivity". Stewart (2002: 9) observed the principles as cited by Driscoll (1998) for effective Web based materials: They should have multimedia (e.g. text graphics, video, sound, and animation), easy-to-use graphic user interface (e.g. hyperlinks and navigation), attention to educational details (e.g. clear guidance and direction for each lesson with clear objectives, adequate practice, and meaningful feedback), attention to technical details (e.g. free from "bugs" where the

links to other Websites work), and interaction (Stewart, 2002: 9). Nuraihan (1994) pointed out that the teaching materials for the online course were not available at the time of the study in the Malaysian context. This was supported by Mohamed Amin and Afendi Hamat (2005: 36) when they pointed out that "the strength of the Web as a language learning teaching and learning tool has prompted many ESL educators to start presenting their materials online". However, according to them, Malaysian ESL teachers "usually do not have access to the tools or skills needed to successfully implement it in their institutions."

2.3.2.4 Lack of facilities and high cost

The availability of the facilities is a necessity to enable students to have access to online materials (Rayan, Scott, Freeman, Patel, 2000). The lack of facilities can be a problem. Several studies revealed that the inadequacy of computing facilities on campus posed a barrier to access materials and forced students to find other means to get online (Singhal, 1997; Fitri Suraya, 2000; Partee, 2002; Suhaila and Ridwan; 2005). Moreover, institutions have to provide the suitable budget to fund the facilities of the online programme. Singhal (1997), Sawyer (1997) as well as Shiao-Chuan and Tun-Whei (2002) observed that the cost of facilities is an important issue when it comes to the implementation of technology. They warned that technology should not widen the gap between the 'haves' and the 'have-not'. Instead, they emphasized the need to be careful that the facilities should be available to all learners with a reasonable cost. Lee (2000) classified financial barriers (cost of hardware, software, maintenance and staff development) among the inhibiting factors to the implementation of Computer-assisted Language Learning. Rayan et al (2000) opined that institutions should maintain the quality of learning while still being cost-effective.

They suggested that institutions can enter into credit sharing to reduce cost. Similarly, Salmon (2002:7) pointed out that "the cost of producing materials for online courses is very high, but savings can be made on delivery". She suggested reducing costs by sharing the existing resources and urging the participants to exchange knowledge.

The following section mentions the results of some comparative studies that have been conducted in the field of online learning.

2.3 Studies Comparing Online and Offline Learning Programmes

A number of studies have been conducted to evaluate the effectiveness of online programmes, most of which are comparative in nature. Hiltz (1994) conducted a comprehensive study to evaluate online courses. He examined courses in sociology, English composition, management, computer science and statistics. The study revealed that mastery of course material was equal to, or better, than in offline classes. Moreover, it revealed that there was an increase in students' interest, participation, satisfaction, and ability to synthesize information. He concluded:

> Results were superior in the virtual classroom for well-motivated and well-prepared students who have adequate access to the necessary equipment and who take advantage of the opportunities provided for increased interaction with their professor and with other students, and for active participation in the course
>
> (Hiltz, 1994: 196)

This means that online learning has a different impact on the individuals. Motivated and prepared students are expected to do better. Hiltz believed that the ability of the instructor to sustain cooperative, collaborative learning groups played a decisive role in judging whether or not the virtual classroom mode is better than the conventional mode. The limitation of this study is that the effectiveness of the virtual classroom was examined by questionnaires prepared originally for traditional classroom

evaluation. Consequently, some questions relevant to Internet literacy, multimedia, and Web page navigation are overlooked. McGorry (2002) examined students' perception towards online learning, and courses delivered online. The study revealed positive feedback regarding online courses. The students also reported satisfaction with the Internet, adapted material and showed genuine interest in learning about the Internet in general. The lack of networking and interaction were the major concerns of the students. In another study, Liou (1997) examined the learners' perception and the impact of the WWW, as a news information source, on EFL college learners in Taiwan. The author found that the experimental group improved their reading comprehension and writing, and they held positive attitudes towards Web activity and its prospects. Taylor (2001) compared a traditional Psychology class, which met approximately three hours a week, with another class taught completely over the Internet. Students in both course formats used the same textbook, covered the same chapters, and were administered the same final exam. Online students scored higher than the offline students in all four performance variables (class quizzes, final exam, sample GRE questions, and semester grades). Similar findings were found in a study conducted by Little (2000) where the online medium provided a learning environment that significantly improved students' writing skills and increased their technology skills, networking, and online communication. Moreover, the study showed improvement in students' writing abilities as well as their growth as individuals and provided an overall positive learning experience.

Contrary to the findings of the previous studies, Nuraihan and Ainol (2005) - in a quantitative study conducted at CELPAD in the International Islamic University (IIUM) - compared the performance of online and offline students following an English for Academic Writing course to see whether there were any significant

differences in their performance. The study revealed that there was a significant difference between the two groups of students: the offline classes did better than the online classes in the final semester examinations. However, no significance difference was found when the project papers of the two groups were analysed. Similarly, Nauss (2002) examined the effects of a supplemental computerized reading programme on the comprehension of first-grade readers as compared to students in classrooms without access to such a programme. The study was conducted in a rural school in South Florida. Students showed no significant difference in reading performance in either group.

The variation in the findings is probably due to factors related to the environment of the study and the availability of the conditions that help to maintain the quality of online learning. This calls for the development of benchmarks for successful implementation of quality online learning.

2.5 Benchmarks for Quality Online Learning

The advent of online learning has raised a number of questions regarding quality. How can we maintain the quality of teaching and learning in our institutions? How can a teaching/learning process that deviates so markedly from what has been practiced for hundreds of years qualify as quality education? This question has been raised by a study conducted by the Institute of Higher Education Policy in an attempt to develop benchmarks for quality online learning. There is a consensus among researchers that online learning should maintain quality in order to have the potential for excellence (Little, 2000; Lao, 2002; Seng and Mohamad, 2002). Twigg (2001) pointed out that online learning differs from traditional learning and therefore requires new quality measures.

Some issues were identified by researchers as being important in measuring quality in online learning programmes. They include: programme planning and support, administrative support, student support, student-teacher interaction, access to resources including equipment, connectivity and software, counseling issues, course characteristics, course offerings, and course completion (Amenta-Shin 2000; Flowers, 2000; Egbert, Paulus & Nakamichi, 2002). Sawyer (1998) who examined Leonard's four factors for a Web-based course success (students, instructors, technical support and administration) concluded that if any factor is left out, the course runs the risk of failure and the students who take the class may end up bearing the brunt of a failed attempt.

In 1999, The American Federation of Teachers (AFT) published guidelines entitled "Distance Education: Guidelines for Good Practice". It reports that in 1999, two hundred members of AFT, who were distance education practitioners, participated in a survey regarding distance education. AFT developed the following 14 standards that should be available in distance education:

1. The faculty must retain academic control;
2. The faculty must be prepared to meet the special requirements of teaching at a distance;
3. Course design should be shaped to meet the potential of the medium;
4. Students' must fully understand course requirements and be prepared to succeed;
5. Close personal interaction must be maintained;
6. Class size should be set through normal faculty channels;
7. Courses should cover all materials;
8. Experimentation with a broad variety of subjects should be encouraged;
9. Equivalent research opportunities should be provided;
10. Students assessment should be comparable;
11. Equivalent advisement opportunities must be offered;
12. Faculty should retain creative control over use and re-use of material;
13. Full undergraduate degree programmes should include same-time, same-place coursework; and
14. Evaluation of distance coursework should be undertaken at all levels.

The American Federation of Teachers (AFT); 1999)
(http://www.aft.org/highered/down loadable/distance.pdf)

In the same year, the Institute of Higher Education Policy (IHEP) released a report entitled "*What's the difference?* (Phipps and Merisotis, 1999). The report reviewed the existing research by comparing the outcomes of online and face-to-face delivery and identifying the shortcomings in the research. The report identified three broad measures that are examined in the studies:

- Student outcomes, such as grades and test scores;
- Student attitudes about learning through distance education; and
- Overall student satisfaction toward distance learning.

Phipps and Merisotis, the authors of the report, observed,

> With few exceptions, the bulk of these writings suggests that learning outcomes of students using technology at a distance are similar to the learning outcomes of students who participate in conventional classroom instruction. The attitudes and satisfaction of students using distance learning also are characterized as generally positive" (p.1).

They, however, question the reliability and validity of the instruments and the adequacy of researchers in controlling the feelings and attitudes of the students and faculty who participated in the study.

Following this work, the IHEP conducted a study to identify a list of standards within the online education field (Phipps and Merisotis, 2000). These standards were designed to offer guidelines of the best practices for online delivery. A set of 45 benchmarks were identified and organized under seven major categories:

(a) institutional support;

(b) course development;

(c) teaching and learning;

(d) course structure;

(e) student support;

(f) faculty support; and

(g) evaluation and assessment.

As the IHEP 2000 benchmarks has been used in several studies (see Chapter Two, section 2.6), they will be adopted and adapted in this study. Each of the benchmarks will be discussed in greater detail in the following sections.

2.5.1 INSTITUTIONAL SUPPORT

The institutional support benchmark necessitates the availability of the following measures:

- Security assurance;
- A centralized system for infrastructure;
- Reliability of the technology delivery system; and
- Quality assurance;

2.5.1.1. *Security Assurance*

Several studies have indicated that security measures are very important for the success of online learning (Dooley & Murphrey, 2000; Jolliffe, Ritter, Stevens, 2001; Lynch, 2002; Choy, McNickle and Clayton, 2002; Rekkedal and Qvist-Eriksen, 2004; Rowe, 2005; Maguire, 2005). Sparrow (2002) believed that institutions need to deal with various issues pertinent to technology use. Among the issues she discussed was security assurance. She stressed that the university should provide "authentication of the user" to ensure that those who use the system and courses are verified users; providing the user with a user name and a password could do this. Hensrud (2001) was of the same opinion as Sparrow. She stressed the need to ensure safe and efficient access to information. Lynch (2002) warned that the lack of security makes the system an easy target for electronic hackers and plagiarists. Lee (2004) concluded from her qualitative data that her subjects were concerned about the security measures in the English language programme.

2.5.1.2. A centralized system for infrastructure

Before embarking on delivering online courses, institutions should create an adequate centralized system for faculty and student support and build a solid infrastructure to support the use of the technology (Pallof & Pratt, 2001; Jolliffe et al, 2001; Lynch, 2002; Shigemitsu, 2004). Several studies have raised concerns about inadequate infrastructure, hardware, and software (Berge, 1998; Betts, 1998; Bonk, 2001). Pallof and Pratt (2001) suggested considering the following issues when building a technology infrastructure: faculty readiness to teach online, the training needed, cost of training, providing technical assistance to students and faculty, and the technology budget. Jolliffe et al (2001) believed that the viability of online delivery depends on the attention given to the infrastructure.

2.5.1.3. Reliability of the technology delivery system

Reliability of system delivery is an important issue. Lack of reliability will result in impeded learning experience (Berge, 1998; Betts, 1998; Bonk, 2001; Rekkedal and Qvist-Eriksen, 2004; Shigemitsu, 2004). A key element in online learning is the students' ability to access reliable delivery system and research materials (Lynch, 2002). In addition to the reliability of the delivery system, Shiao-Chuan and Tun-Whei (2002) emphasized the reliability of the information on the Web.

2.5.1.3. Quality Assurance

Several studies indicated that policies must be in place to ensure quality standards. (Hensrud, 2001; Harman & Meek, 2000; Shigemitsu, 2004). Faculty in several studies noted their interest in getting more of their students involved with technology, as they realize the importance of technology in learning. Simultaneously, they

perceived teaching via online learning as a benefit to them in that it is an opportunity to use technology more innovatively and to enhance course quality (Betts, 1998; Bonk, 2001; Dooley & Murphrey, 2000; O'Quinn & Corry, 2002).

Fairhurst (2002) called upon institutions to set out a strategy for achieving high quality standards. He added that central support can lead to a more cost effective and high quality service. He emphasized that the institution should have a central staff development team to support online instructors in designing materials and delivering the programme. Lynch (2002: 99) believed that "designing, developing, maintaining, and delivering a quality course is time consuming but rewarding at both personal and institutional levels". She added that once a course is developed, it can be used again and again with changes and periodic reviews when needed.

From this we can realize the importance of the institutional policy and the commitment of the administration of the institutions to ensure that they provide their institutions with sufficient technological support and professional development. Once this commitment is found at the institutional level, we can move to course development which is discussed in the following section.

2.5.2 COURSE DEVELOPMENT

Course development benchmarks involve three important criteria. They are:

- Periodical review of instructional materials;
- Creating standards to guide course development, design, and delivery;
- Design of courses so that students are required to engage themselves in analysis, synthesis, and evaluation as part of their course and programme requirements.

2.5.2.1. Periodical review of instructional materials

Several studies have emphasized the importance of the periodic review of instructional materials (Phipps and Merisotis, 2000; Rayan et al 2000; Palloff and Pratt, 2001; Yeung, 2001; Buchanan, 2002; Shigemitsu, 2004). Shiao-Chuan and Tun-Whei, (2002) found that the online language students gave a moderate rating for this aspect.

Palloff and Pratt (2001: 40) believed that planning and development should start with "instructional design and the overall outcomes in mind". Buchanan (2002) suggested that faculty should be made aware of how transmission influences the appearance of course materials. He recommended constant review of materials to ensure maximum possible quality for online learning. Mozzon-McPherson (2002) called on instructors to regularly explore new media, evaluate, update and manage language resources to ensure an effective and efficient use of different learning spaces. Dunkin (2000) pointed out that "the institution must review all of its operating procedures and structures to ensure that the support is holistic". He warned that "without such change, the academic who seeks to embrace the online educational world is left stranded."

Peters (2001: 71) pointed out that there are various decisions that should be taken within course development and review of instructional materials. Most importantly,

- The teaching aims must be thoroughly discussed and precisely defined;
- The content must be selected and coordinated carefully with regard to the aims and the preset learning schedule, and
- Tests and examination questions must be set at the beginning.

2.5.2.2. Creating standards to guide course development, design, and delivery

Phipps and Merisotis (2000) considered this benchmark as an essential factor in online learning. Kearsley (2000: 94) observed that the most widely adopted methodology in course development is the Instructional Systems Development (ISD) model in which the instructional development has five stages: analysis, design, production, implementation, and evaluation. He associated this with other techniques such as "task analysis, definitions of objectives, media selection, and formative evaluation". Learning outcomes and objectives in course design are also influencing factors, as are course syllabus and structure (Palloff & Pratt, 1999). Learning outcomes should determine the technology being used to deliver course content and not the technology. Bennett and Green (2001: 4), as cited in Sparrow (2002: 23), warned that, "Technology will not magically transform a poorly developed course into a stimulating learning experience".

2.5.2.3 Design of courses so that students are required to engage themselves in analysis, synthesis, and evaluation as part of their course and programme requirements.

Analysis, synthesis, and evaluation have been considered to be important factors in the general design principles of online courses (Kearsely, 1996; Hensrud, 2001; Yeung, 2001; Shigemitsu, 2004). These activities are among those listed in Bloom's taxonomy which categorizes thinking skills from the concrete to the abstract--knowledge, comprehension, application, analysis, synthesis, evaluation (Cotton, 2001). The last three are considered higher-order skills. Under analysis, students are required to interpret word meanings in relation to context. Under synthesis, students are asked to apply concepts in a new setting. Finally, evaluation requires that students assess the

relative merits of the content and concepts contained in the subject. Schafersman (1991) considered critical thinking skills -analysis, synthesis, reflection, etc. - should be learned by actually performing them and including them in students' homework, term papers, and exams.

In a qualitative study, Shigemitsu (2004) found that online learning affected positively the English language programme as students were involved in analysis, synthesis and evaluation. Sparrow (2002) found that 92% of the respondents of the faculty agreed that they met this aspect. However, in Choy et al's (2002) study this aspect was given quite a moderate rating.

2.5.3 TEACHING AND LEARNING

In the IHEP (2000), the teaching and learning benchmarks address an array of activities related to pedagogy, such as students' interaction with the faculty and other students, and time taken in giving feedback. Hacker and Niederhauser (2000: 53) put forward the following five guidelines, supported by strong empirical research, for evaluating lifelong learning in the online classroom:

- Do the instructors encourage active participation of students in their own learning?
- Is learning grounded in effective examples?
- Are collaborative problem-solving and problem-solving strategies given attention?
- Do instructors use feedback that is commensurate with performance?
- Are motivational components for self-efficacy and challenge embedded in instruction?

(Hacker and Niederhauser, 2000: 53).

Several studies considered interaction and feedback as the key factors in the success of an online course (Chamberlain, 1999; Sparrow, 2002; Hensrud, 2001;

Palloff and Pratt, 2003; 2001; Yeung, 2001; Kelsey & D'souza, 2004). Due to this importance, it is necessary to elaborate on them in greater detail.

2.5.3.1 Interaction

Interaction is one of the most important factors in online learning. When interaction is encouraged, participants become more individually involved. This enables them to create a shared meaningful learning experience (Spencer, 2000; Felix, 2001). Altun (2005) found that interaction was given a moderate rating in an online English language teaching programme. According to him, this finding was reasonable since the instructors were available in the building, and there was no geographic barrier for students to see the instructor as expressed by his subjects in the course of the interviews.

Chickering and Ehrmann (1996) noted that learning is improved when it is collaborative and social, not competitive and isolated. According to them, teamwork enhances participation in learning. Moreover, communication of ideas "improves thinking and deepens understanding". The Internet allows learners and instructors "to converse and exchange work much more speedily than before, and more thoughtfully and "safely" than when confronting each other in a classroom or faculty office". They added that "with the new media, participation and contribution from a diverse range of students becomes more equitable and widespread." They stressed that study groups, collaborative learning, group problem-solving, and discussion of assignments can all be significantly supported in the course of communication. Palloff and Pratt (2001) emphasized that pedagogy is the critical thing and not technology. They elaborate:

> A well-delivered course provides multiple means by which the students and the instructor can interact, including email, discussion

> boards, and careful use of synchronous discussion. The effective use of the means by which interactivity is enhanced deepens the learning experience and creates a more satisfying outcome for each one.
>
> (Palloff and Pratt, 2001: 153)

The responsibility of the instructor is to guarantee an advanced level of interactivity (Kearsley, 2000). The instructor, then, is required to design activities that motivate students to engage in meaningful communication. Moore and Kearsley (1996) pointed out three types of interaction: learner-content interaction, learner-instructor interaction, and learner-learner interaction.

- Learner-content interaction provides the learner with the opportunity to construct new knowledge by incorporating the lesson information into previously existing cognitive structures.
- Learner-instructor interaction, which is regarded as essential by most learners, provides the instructor the opportunity to assist students in their construction of new knowledge as well as providing guidance, support and encouragement.
- Learner-learner interaction allows distance students to join and form a community of learners dealing with a common topic or course.

(Moore and Kearsley, 1996)

Two fundamental forms of interaction are suggested by Berge (2000: 25). The first happens when the learner interacts with the content; the other is a more social one. According to him, the latter occurs when "a student interacts with others about the content". He suggested that interaction with the content is important and that hyperlinks enable learners to do so. Moreover, hyperlinks allow the learners to control the sequencing of the content.

Online discussion necessitates careful preparation and facilitation to succeed (Morrison and Guenther, 2000; Rayan et al, 2000). Technical problems and lack of

feedback will hinder interactivity. Palloff and Pratt (2000) listed a number of suggestions to be taken into consideration to enhance participation in an online course. Among these is the ability of the instructor to be a model of good participation by logging on frequently and contributing to the discussion. Rayan et al (2000: 123) concluded that "technologies are tools for creating interaction, but they do not foster interactivity in themselves". They suggested that the instructor still plays a central role for facilitating and moderating the discussion.

2.5.3.2 Feedback

Constructive and beneficial feedback is emphasized in several studies (Chickering and Ehrmann, 1996; Chamberlain, 1999; Little, 2000; Hacker and Niederhauser, 2000; Alexander & Boud 2001; Felix, 2001; Rekkedal and Qvist-Eriksen, 2004; Altun, 2005). Naturally more feedback and less stress cause excitement for learning. Alexander and Boud (2001) pointed out that an experience without feedback and reflection is a somewhat empty experience. Altun (2005) deemed that consistent and timely feedback for students' questions and comments turned online language learning into an enjoyable experience.

Chickering and Ehrmann (1996) noted that learners should have regular occasions to initiate and receive feedback on their performance. Moreover, "students need chances to reflect on what they have learned, what they still need to know, and how they might assess themselves" (http://www.tltgroup.org/programmes/seven.html). Little (2000: 60) suggested that instructors should know when to ask suitable questions, sum up and stress key learning, "modeling how to offer constructive feedback to individual writers." Learners should be encouraged to ask for feedback

from their peers, before asking their instructors (Bonk, Kirkley, Hara, Dennen, 2001). Instructors can monitor discussion groups and intervene only "if the discussion is proceeding in an unfruitful way." This kind of intervention will be fruitful, because it provides constructive feedback (Hacker and Niederhauser, 2000). Too much feedback by the teacher may result in a decreasing level of interaction among learners and may cause an undesired degree of dependence on the teachers. According to Palloff and Pratt (2001: 31), "balance is the key to facilitating a good online discussion."

In a study entitled *Evaluating online courses using "SELT"*, conducted by the Learning and Development Unit in the University of Adelaide, Australia, it was found that teachers need to offer two types of feedback: "acknowledgement feedback and information feedback." (www.adelaide.edu.au/itdu/staff/evaluation/evalonline.html). According to the study, information feedback provides 'information or evaluation, such as an answer to a question, or an assignment grade and comments", whereas, acknowledgement feedback "confirms that some event has occurred" such as sending an email by the teacher to acknowledge receiving a question or an assignment.

2.5.4 COURSE STRUCTURE

The benchmarks for course structure call for the inclusion of four elements: (IHEP 2000):

- Introducing the students to the programme and identifying their needs;
- Supplemental course information that outlines course objectives, concepts, and ideas, and learning outcomes;
- Sufficient library resources; and
- Expectations regarding assignment completion.

2.5.4.1 Introducing the students to the programme.

Before starting an online programme, students should be advised about the programme to determine if (1) they possess the self-motivation and commitment to learn online and (2) they have access to the minimal technology required by the course (Phipps and Merisotis, 2000; Mozzon-McPherson, 2002; Rekkedal and Qvist-Eriksen, 2004). Mozzon-McPherson (2002) opined that the key aim in advising is to support students in their language learning and help them find the most effective and efficient way of doing so in a variety of learning environments (online, in self-access centres, in classroom contexts). According to her, advisers should achieve this task by creating the appropriate conditions for language practice and helping them develop the ability to determine their learning objectives, define the contents, select the methods and resources, monitor progress and evaluate their outcomes. Jolliffe et al (2001) pointed out that learners should have an appropriate computer and software to access the learning materials. Moreover, they should be adequately equipped with the necessary skills and knowledge to be able to engage effectively in a medium which is unlike a traditionally oral and/or written mode of learning (Ho, 2004). Jolliffe et al (2001) suggested conducting remedial learning for those who require it to ensure all learners are given the same opportunity to meet the learning goals and objectives.

2.5.4. 2 Supplemental course information

Students should be provided with supplemental course information that outlines course objectives, concepts, ideas, and learning outcomes for each course (Phipps and Merisotis, 2000; Mozzon-McPherson, 2002; Rekkedal and Qvist-Eriksen, 2004). These should be summarized in a clearly written, straightforward statement. Simonson (2000) believed that while designing learning activities, it is essential that the

expectations for students' achievement be recognized in order to steer the selection of appropriate technologies. He added that it is important for students to "demonstrate learning outcomes by using a variety of technology based activities" (p.31). Knowlton (2000: 11) pointed out that students need shared goals that will allow them to reach learning objectives. Palloff and Pratt (1999: 88) believed that the online instructor should begin with an end in mind, adding that in preparing the online course, "it is important to consider expected outcomes as the course is being developed". Mozzon-McPherson (2002) called on instructors to regularly explore new media, evaluate, update and manage language resources to ensure an effective and efficient use of different learning spaces.

2.5.4.3 Sufficient library resources

Students need to have access to sufficient library resources including a "virtual library" which is accessible through the World Wide Web. This element is regarded as very important by many researchers (Jolliffe et al, 2001; Phipps and Merisotis, 2000; Rekkedal and Qvist-Eriksen, 2004; Qingyang, 2003; Roberts, 2002; Egbert, Paulus, Nakamichi, 2002; Godwin-Jones, 2005). Palloff and Pratt (2003) warned that educational institutions cannot presume that online learners will have access to local libraries. Instead they suggested that the institution offers links to databases and other means for learners to access and retrieve library materials. In Mohamed Amin and Azmi's (2004) study, the participants of the study gave a positive response to the availability of online materials and in that the ESL learners found the materials useful, interactive, authentic and attractive. The availability of online materials was also given high ratings in other studies (Felix, 2001; Lee, 2000).

2.5.4.4 Expectations regarding assignment guidelines and completion

Faculty and students should agree upon the expectations placed upon them regarding the times for student assignment completion and faculty response. Setting such expectations is essential, since vagueness of expectations may hinder successful online learning (Phipps and Merisotis, 2000). Every instructor should provide written guidelines detailing class procedures specific to the online learning course. A description of course objectives, tasks to be completed, assignment due dates, breakdown of marks, and test dates should be given to learners (Moore & Kearsley, 1996; Paloff & Pratt, 1999; Jolliffe et al, 2001).

2.5.5 STUDENT SUPPORT

The benchmarks for student support include four support services:

- Providing students with accessible technical assistance and support services;
- Establishing a structured system to address students' complaints;
- Supplying students with written information regarding course requirements and student support services; and
- Providing access to materials through electronic databases, and news services.

Several studies reported that the above are very important support services in online learning (Phipps and Merisotis 2000; Stick & Ivankova, 2004; Kennedy & Duffy, 2000; Scheuermann et al , 2000; Jolliffe et al, 2001; Fairhurst, 2002; Palloff and Pratt, 2003; Kenny, 2003; Rekkedal and Qvist-Eriksen, 2004; Lee, 2004).

2.5.5.1 Providing students with accessible technical assistance and support services.

The need for support is the most repeatedly stated feature of online learning. In fact, throughout the duration of the course, students should have access to technical assistance, including detailed instructions on how to use electronic media. There should be practice sessions prior to the beginning of the course, and convenient access to technical support for instructors should be made available. Students in online courses should also be told what to do in case of technical problems (Moore & Kearsley, 1996; Paloff & Pratt, 1999; Lee, 2004). Templeton (2004) pointed out that:

> Students face a number of challenges in the online learning environment including administrative and technical difficulties, cultural and time zone differences and course work issues. The main challenge for the institution is how to provide the students with support in all these areas without the tutor feeling they have to take on all these roles and thus affect the level of learning support they can give
>
> http://otis.scotcit.ac.uk/onlinebook/otisT7p.htm.

She added that tutors need to be aware of and familiar with the support services provided by the institution and available to students and be able to direct the student to the appropriate service. Singhal (1997) warned that net and technical glitches themselves can lead to frustration in the language classroom.

2.5.5.2 Establishing a structured system to address students' complaints

The purpose of establishing a structured system is to provide technical assistance to students. Generally, learners come across technical issues related to computer use and they have lots of questions. The technical problems may result in a very frustrating learning experience. Students may become so discouraged with their failure to access the Internet. This necessitates the need for a help desk to address students' needs and technical problems. Students have to know that there is a structured system to address

students' complaints in case of technical problems (Moore & Kearsley, 1996; Paloff & Pratt, 1999; Phipps and Merisotis 2000, Lynch, 2002; Kenny, 2003; Lee, 2004). Palloff and Pratt (2003) suggested that the educational institution should provide service instructors who are available to online learners at regular posted hours.

2.5.5.3 Supplying students with written information regarding course requirements and student support services

Roberts (2002) suggested providing comprehensive study materials and textbooks, examination briefing, sample examinations papers, study group facilitation, a telephone help-line and email support.

2.5.5.4 Providing access to materials through electronic databases, and news services

Students ought to be provided with hands-on training and information to aid them in securing materials through electronic databases, interlibrary loans, government archives, news services, and other sources (Phipps and Merisotis 2000; Kenny, 2003). Canada (2000: 37-38) suggested that instructors should convey information through email messages and the World Wide Web and those learners should "treat these supplementary materials as essential reading." Felix (2001), based on the qualitative feedback that he obtained from his language students, stated that the students accessed the materials easily due to clear and logically organised content, clear objectives, meaningful feedback and easy navigation. Since all students were connected to the Internet, authentic materials could be readily accessed, thus providing them with rich and practical language input (Parks, Huot, Hamers, H.-Lemonnier, 2003).

2.5.6 FACULTY SUPPORT

The faculty support benchmark consists of four elements:

- Accessibility of technical assistance;
- Availability of training and peer monitoring resources;
- Providing faculty with written resources; and
- Assisting faculty in the transition from offline to online class.

2.5.6.1 Accessibility of technical assistance

Technical assistance for course development should be available to the faculty (Nuraihan, 1994; Phipps and Merisotis, 2000; Lee, 2000; Good, 2001; Felix, 2001; Rekkedal and Qvist-Eriksen, 2004). Chickering and Ehrmann (1996) held that:

> Institutional policies concerning learning resources and technology support need to give high priority to user-friendly hardware, software, and communication vehicles, that help the faculty and students to use technologies efficiently and effectively. Investments in professional development for instructors, plus training and computer lab assistants for students, will be necessary if learning potentials are to be realized".

Fairhurst (2002) suggested creating a central staff development team to support online instructors in designing materials and delivering the programme. Nuraihan (1994) listed technical problems among the major obstacles in trying out the device in a language programme. According to her subjects, this problem can be solved if technicians were easily available.

2.5.6.2 Availability of training and peer monitoring resources

Instructor training and assistance, including peer mentoring, should continue through the progression of the online course (Nuraihan, 1994; Singhal, 1997; Warschauer & Healey, 1998; Phipps and Merisotis, 2000, Lynch, 2002). Studies have revealed that training and professional development are the key elements for the online instructors

(Hensrud, 2001; Kearsley, 2000). Warschauer and Healey (1998) deemed that teacher training is a key element for success in this more flexible language classroom, so that teachers can use multimedia and other resources effectively. Singhal (1997) opined that lack of training and familiarity on part of the teachers can make it difficult to implement using the Internet in the language classroom. McMeniman and Evans (1998: 1) conclude that language teachers alter their practices and beliefs (or "learn") when "presented with evidence that shows positive effects of the new teaching method on quality of learning outcomes" and "develop expertise in the new method". In other words, there is a need for training to show the sufficient evidence of any positive effects of technology-enhanced teaching the thing that may motivate teachers to incorporate technology in their teaching practices. LeLoup and Ponterio (1995) opined that English teachers need particular training and technical support to help them to deal with the increased complexity of electronic communication. Nuraihan (1994) found that her interviewees listed training on the top of their priorities. However, attendance at workshops was very poor due to the heavy teaching load and lack of drive and motivation. She suggested providing in-house training to solve the problem of the staff. Mozzon-McPherson (2002) suggested providing instructors with hands-on workshops on use of language learning facilities.

Peer mentoring would assist in reducing the lack of confidence teachers may be reluctant to share. Fairhurst (2002) suggested peer observation of teaching as one of the elements to be employed to evaluate the quality of standards and teaching, and one which can contribute to continued improvement of instructors. Lynch (2002) believed that peer mentoring can help novice instructors benefit from the experienced online instructors where the latter become the primary personal support for the new instructor.

2.5.6.3 Providing faculty with written resources

The third aspect of faculty support indicates that instructors should be provided with written resources to deal with issues arising from students' use of electronically-accessed data (Phipps and Merisotis, 2000). Lee (2001) indicated that when faculty members are provided with the necessary written resources, their levels of motivation and dedication will increase.

2.5.6.4 Assisting faculty in the transition from offline to online class.

Instructors need to be assisted in the transition from the traditional classroom teaching to online instruction and should be assessed during the process (Phipps and Merisotis, 2000, Lynch, 2002). Palloff and Pratt (2001) explained that the transition to the online learning environment requires developing new approaches to education and new skills in its delivery. This necessitates that instructors attend training sessions to assist them in making the move to the online classroom. According to them, the key to well-developed classes is training, not only in the use of technology, but also in the art of online teaching. They stress that not all those who can teach in the face-to-face classroom well will be successful in teaching the online class.

2.5.7 EVALUATION AND ASSESSMENT

The evaluation and assessment benchmark consists of three important elements:

- Assessment of the programme's educational effectiveness and teaching/learning process;
- Data on enrollment, costs, and successful/innovative uses of technology are used to evaluate programme effectiveness;

- Intended learning outcomes are reviewed regularly to ensure clarity, utility, and appropriateness.

2.5.7.1 *Assessment of the programme's educational effectiveness and teaching/learning process*

The programme's educational effectiveness and teaching/learning process should be assessed through an evaluation process that uses several methods and applies specific standards (Phipps and Merisotis, 2000; Monske, 2004). Mohamed Amin and Azmi Abdul Latiff (2004) deemed that in the area of English language learning, the evaluation process will enable ESL teachers to determine whether it is important to find reliable ESL Websites that can be recommended to students. Excellent planning and evaluation processes enable institutions to avoid costly mistakes by developing realistic programmes that address student needs (Palloff and Pratt, 2001). In Monske (2004), the subjects of the online writing course were not satisfied with the policy of *evaluating the programme's educational effectiveness*. Harasim, Hiltz, Teles, and Turoff (1996) emphasized that "evaluation and assessment should be part of the learning-teaching process, embedded in class activities and in the interactions between learners and between learners and teachers" (p. 167). Palloff and Pratt, in their keynote address to the OTiS e-workshop (2000), pointed out that evaluation of student progress and performance should not be limited to the instructor alone.

2.5.7.2 Using data on enrollment and costs to evaluate programme effectiveness.

The evaluation and assessment benchmark concentrates on the need for evaluating the programme's educational effectiveness and teaching/learning process. This includes evaluating students learning outcomes, cost and effectiveness (Phipps and Merisotis, 2000; Hensrud, 2001; Monske, 2004). Several studies considered the use of statistics

to evaluate the programme's educational effectiveness and reviewing the learning outcomes as important elements to improve the quality of online programmes (Moore and Kearsley, 1996; Phipps & Merisotis, 2000, Palloff and Pratt 2001; Harasim et al, 1996). Moore and Kearsley (1996) identified two key criteria for programme evaluation: data collection methods and measures. They suggested using several measures to get a complete picture of how well the programme is working. According to them, student enrollment indicates the success of the programme.

2.5.7.3 Intended learning outcomes are reviewed regularly to ensure clarity, utility, and appropriateness.

Several studies suggested that intended learning outcomes should be reviewed regularly to ensure clarity, utility, and appropriateness (Phipps & Merisotis, 2000; Jolliffe et al, 2001; Lynch, 2002; Monske, 2004). This will result in quality online programmes. Several studies highlighted the importance of reviewing the programme intended outcomes to determine if they are met (Moore and Kearsley, 1996; Phipps & Merisotis, 2000, Palloff & Pratt 2001; Harasim et al, 1996). Jolliffe et al (2001) pointed out that the programme should be reviewed to ensure material appropriateness and its overall effectiveness.

2.6 Studies Conducted Using the IHEP Benchmarks

The presence of benchmarks such as the IHEP (2000) allows researchers to study the quality of online programmes without comparing them with a similar programme or the traditional mode of delivery. The first study was conducted by Hensrud (2001) who examined the degree to which the online programme of a university in Northwest Wisconsin met the IHEP 2000 benchmarks for quality online programmes. The

subjects in her study were 20 faculty members and instructors who were involved in the online educational programmes. The study utilized a 27- question survey using a Likert scale (1 = strongly disagree to 5 = strongly agree). Because of the small sample size, descriptive statistics were used to examine the data from the surveys. The reliability and validity of the instrument were not reported. The findings indicated that the programme under examination easily met four benchmarks out of the seven. They were: teaching and learning; course structure; student support; and institutional support while the quality standards for faculty support, evaluation and assessment, and course development did not fully meet the quality criteria.

While Hensrud's study was based strictly on the quality measures established by the IHEP, she realized that the Northwest Wisconsin Programme may have some additional factors that should be addressed to ensure that a quality programme is realized. Thus, she suggested several areas for further research:

- The faculty reward process for online courses.
- Administrative support for online distance education.
- A comparison between Extended Degree Programme and courses offered independently by faculty.

(Hensrud, 2001: 138)

In a combination of quantitative and qualitative study, Sparrow (2002) examined the state universities in Florida to see if they met the IHEP 2000 benchmarks for quality online learning. Data was collected from nine state universities in Florida, offering online courses. Quantitative and qualitative data were collected. The reliability and validity reading of the instrument were not reported. The study revealed that most of the state universities in Florida met the IHEP institutional controlled benchmarks. The quantitative analysis indicated that most of the

universities were providing the necessary support services to students to meet the IHEP 2000 benchmarks. The study also revealed that there was no statistically significant relationship between the instructor's attainment of the benchmarks and the retention rate in the course.

Jurczyk, Benson, and Savery (2002), in a pilot study presented at MWERA (Mid-Western Educational Research Association. Columbus, Ohio), October 2002, measured the attitudes of graduate students and the instructor before, during and after a Web-based course. The measurements are based on 24 of the benchmarks identified in the IHEP report. To collect student data, printed questionnaires were mailed to 21 students at three times during a Web-based, introductory graduate-level education research methods course at a Midwestern university. Based on a subgroup of the IHEP benchmarks, a 44-item questionnaire was distributed to the students and instructors in three stages: prior to the course, during the course, and at the conclusion of the course. The questionnaire examined the respondents' agreement level with the benchmark as well as the perceived importance of the benchmark along with the norms published in the IHEP report. The only difference is that the authors chose only three categories for this study (Teaching/Learning, Course Structure, and Student Support). Their justification was to keep the questionnaire to a reasonable length and to focus its content on those directly relevant to the learners. For the first 44 items respondents were asked to indicate their agreement with the corresponding benchmark using a 7-point Likert scale (from1 = strongly disagree to 7 = strongly agree). Respondents were then asked to rate the same 22 questions using a 5-point scale to indicate the importance of the attribute identified in the benchmark with a scale ranging from 1 = not Important to 5 = very important. The authors found that the IHEP benchmarks could be used as a feedback tool for

online educators as they would be able to identify the attitude of the students. The authors noted that because of the small sample size and its source (a single graduate research methods course), no generalizibility of this tool was implied in this study. For further research, the authors suggested expanding the questionnaire to include aspects from the Institutional Support, Course Development, and Evaluation and Assessment benchmarks.

Yeung (2001) examined the perspective of academic staff who had been involved in Web-based courses in tertiary institutions in Hong Kong. The aim of the study was to answer the following questions:

- Are the quality benchmarks identified in the literature valid in the higher education sector in Hong Kong?
- Are the benchmarks taken seriously by the higher education institutions?
- To what extent have the benchmarks being incorporated into institutions' Web-based learning operation?
- Are there additional benchmarks that are not found in the literature but are being used by the practitioners that can contribute to the quality assurance of Web-based learning?

The questionnaire listed the 24 IHEP quality benchmarks and requested each respondent to rank each benchmark on two criteria. First, to what extent is the benchmark important to ensure quality for Web-based learning (ranked from 1 = not important to 5 = very important)? Second, to what extent is the benchmark present in the institution (ranked from 1 = strongly disagree to 5 = strongly agree). Participants were identified and sampled from several universities that use online delivery. A total of 50 questionnaires were distributed to the selected participants. A total of 34

questionnaires were collected and used for analysis. This study generally revealed that the benchmarks for quality assurance of Web-based learning were considered important and the participating institutions attempted to integrate them into their policies, practices and procedures. However, there were few benchmarks that did not have consensus among the respondents and in some instances were not even considered mandatory in ensuring quality for Web-based learning. The author concluded that the quality benchmarks identified in the literature can be considered valid in the higher education sector in Hong Kong. Since there was no response or feedback for the open-ended question of the survey, the author concluded that there would not be any additional benchmarks that need to be included into the model. Finally, he recommended conducting a study on student's perception on this issue and incorporate the results with the perception of academic staff to form a more complete picture of the whole quality assurance model in order to have an effective quality assurance model for Web-based learning.

Of the most recent studies that utilized the IHEP was by Scanlan (2003) in which he reported the results of a Technology Task Force (TTF) which aimed to evaluate a school overall distance learning programme and to check the reliability and validity of a student scale for assessing the quality of online courses. The TTF reviewed each IHEP benchmark. They were:

- feasibility and the appropriateness of its review;
- applicable data sources; and
- data collection methods.

The TTF adopted a triangulation method to obtain data from students, faculty, and support personnel. Student data were collected through surveys while faculty and

COURSE STRUCTURE BENCHMARKS mean 0.008

support personnel data were obtained through focus interviews and individual interviews. The results of the psychometric analysis of the benchmark scale indicated high reliability and good content, construct and criterion-related validity. Based on this finding, it was recommended that this tool be incorporated or adapted by colleges and universities as one of the means used to assess the quality of their online programmes.

To sum up, online learning has exerted a significant impact on education. The IHEP benchmarks have been widely adopted to monitor the quality of online learning. These benchmarks or guidelines or criteria for good practice aim to improve the quality of online education. The literature reviewed is in line with these benchmarks. The adoption of benchmarks such as the IHEP may help to ensure that the delivered courses are of high quality. The literature review revealed that several studies utilized the IHEP 2000 benchmarks to evaluate online programmes. However, there were no studies conducted on language programs using them.

CHAPTER THREE

METHODOLOGY

3.0 INTRODUCTION

The present chapter discusses the population and sample, instruments for data collections, pilot testing of the questionnaires, data collection and data analysis procedures. Both qualitative and quantitative methods were employed in this study. Researchers have long debated the relative value of qualitative and quantitative inquiries. Quantitative and qualitative research methods of inquiry were utilized to complement each other in producing reliable and valid results in this study.

3.1 Participants

The study was conducted at the International Islamic University Malaysia and the data was collected during semester 2, 2003-2004. The focus of this study is the English for Academic Writing (EAW) course as it is the only course that integrates online learning at the Centre for Languages and Pre-University Academic Development (CELPAD) at the International Islamic University Malaysia (IIUM). There were 37 online sections and 30 instructors in semester 2, 2003/04. Because of the relatively small number of instructors involved in teaching the online course, the questionnaires were distributed to all of them. Twenty-eight instructors of the EAW course completed the questionnaires. The instructors who participated in the interviews were those who had more than one year experience in teaching online. There were altogether fifteen of them. This means that 50 percent of the instructors participated in the interviews. The student population comprised those students who were enrolled in the 37 online EAW sections. Their number was

around 900. The researcher used the stratified sampling method, taking into consideration that the sample should represent the various faculties, nationalities, and gender (see Appendix 11 for the breakdown of the figures). A total of 30 students were selected for the interviews. The quantitative data collected from both students and instructors was triangulated with the qualitative data collected through the interviews.

3.2 Triangulation

Triangulation facilitates a more comprehensive assessment of a concept by bringing together data from different sources. Combining these sources results in a much richer picture. In this study, triangulation was established through the following data collection techniques:

- Questionnaires
- Interviews

Triangulation of the data was attempted through matching common themes, found in questionnaires with emergent themes from other data collection points, such as interviews and document analysis. This results in a better research design, and more valid and reliable findings. Moreover, inadequacies of individual methods could be minimized.

Mason (2002: 190) opined that triangulation "Encourages the researcher to approach their research questions from different angles and to explore their intellectual problems in a more rounded, multi-faceted way". Triangulation thus allows new light to be shed on topics and allows different aspect of the problems to be investigated. Therefore, the combination of different methods has its merits. In the present study, triangulation was used to combine the advantages of both qualitative and quantitative research techniques.

3. 3 Quantitative Data

The emphasis of quantitative research is on numerical data, and measurable variables. In quantitative research, data is collected under controlled conditions in order to rule out the possibility that variables other than the one under study account for the relationships identified (Jacobsen, 2003). The quantitative data for this research was collected through two sets of questionnaires.

3.4 Questionnaires

Two sets of questionnaires were used in the study: one for the students and the other for the instructors.

3.4.1. Development of the Student Questionnaire

The student questionnaire was developed based on the IHEP benchmarks and the guidelines that were set by an online article entitled *Quality Assurance for Whom? Providers and Consumers in Today's Distributed Learning Environment* (see Appendix 3). The items are structured according to the IHEP benchmarks, with the only exception being two of the IHEP benchmarks, namely "Faculty Support" and 'Evaluation and Assessment") which were dropped since they were not really relevant to the students. One additional category of interest to students ("Value" and "Flexibility and Convenience") was added (http://www.center.rpi.edu/PewSym/mono3.html). The adapted version of the student questionnaire was subjected to a lot of modifications and rewording of the statements (see Appendix 6). Thus, it was necessary to conduct a pilot study to elicit suggestions from those who had knowledge of the topic and of questionnaire construction.

3.4.2 Pilot Study of Student Questionnaire

The student questionnaire was piloted in Semester One 2003 to ascertain its reliability and validity. The initial questionnaire consisted of 40 items on six benchmarks. A total of 60 questionnaires were distributed to a random sample of students (see Appendix 6). Fifty-three returned questionnaires were subjected to analysis. The demographic information of the participants for the pilot study is shown below:

Table 3.1

Distribution of Students for the Pilot Study (n=53)

Characteristics	n	Percentage
Gender		
Female	31	58.5
Male	21	39.6
Missing	1	01.9
Faculty		
IRKHS	17	32.1
Economics	7	13.2
Engineering	8	15.1
ICT	6	11.3
Law	10	18.9
Science	3	5.7
Architecture	2	3.8
Attended computer course		
Yes	37	69.8
No	16	30.2

As Table 3.1 shows, 58.5 of the respondents were female. The respondents came from different faculties. Around 30% of them did not attend computer courses. Appendix 9 provides the details of other information obtained from the pilots study's questionnaire pertaining to students.

3.4.2.1 Reliability of Questionnaire in the Pilot study

The reliability coefficient of each scale in the pilot study is tabulated in Table 3.2.

Table 3.2

Reliability Analysis – Scale (Alpha)

No	Benchmarks	Number of Items	Alpha Value
1	Institutional Support	4	0.74
2	Course Development	9	0.88
3	Teaching /Learning	9	0.90
4	Course Structure	6	0.89
5	Student Support	7	0.90
6	Value, Flexibility and convenience	5	0.92
Overall		43	0.96

Table 3.2 shows that the overall Cronbach Alpha Coefficient of the pilot study's instrument is high (r = 0.96) indicating a high degree of internal consistency, and therefore a considerably reliable instrument.

3.4.2.2 Content Validity of the Student Questionnaire

Content validity aims to guarantee that the content of the test is pertinent and relevant to its purpose (Kline, 1993). The content validity of the questionnaire is examined against the degree to which the scale of items reflected student related dimensions of quality in online learning. The Institute of Higher Education Policy validated the benchmarks for their content validity by compiling 45 guidelines on online delivery. The IHEP arrived at its 24 benchmarks after eliminating the statements that had no consensus among the institutions surveyed. Some other items were combined since they addressed the same issue. The content validity in this study was validated by

getting two content experts in CALL to assure that each statement in the benchmark was applicable for a Likert scale student response.

3.4.2.3 Construct Validity

In order to check the construct validity a factor analysis test was conducted. A summary of the factor's loading is given in Table 3.3. After using a minimum factor loading of 0.45 (Hair, Anderson, Tathan, and Black 1998; Nunnally and Bernstein, 1994), a meaningful six-factor solution emerged.

Table 3.3

Factor Loading of Benchmarks in the Pilot Study

	Scale Items	1	2	3	4	5	6
1	CELPAD has measures to ensure quality standards.	.61					
2	CELPAD has electronic security measures to ensure the integrity and validity of information.	.68					
3	The technology delivery system is highly reliable.	.68					
4	The level of content difficulty is was appropriate to me.		.82				
5	The course content is relevant for me to fulfill the academic writing in my Kulliyyah.		.74				
6	The technology being used to deliver course content is based on learning outcomes.		.82				
7	The Instructional materials are previewed periodically to ensure that they meet programme standards.		.56				
8	The students are required to engage themselves in analysis, synthesis, and evaluation as part of their course and programme requirements.		.61				
9	The instructional methods used in the 2-hour online sessions help me learn the subject matter. Note: Instructional methods may include discussions, group work, etc.		.68				
10	The assessment activities (tests, quizzes, essays, presentations, etc.) contribute to my confidence in writing an argumentative paper.		.67				
11	The course content is delivered with appropriate media.		.60				
12	I receive sufficient help from the instructor when I need it.			.65			
13	The instructor provides enough examples to allow me to better understand the subject matter.			.65			

Continued Table 3.3

14	The online instructor encourages proper communication among students.			.64			
15	There was sufficient feedback from the online facilitator to help me achieve my learning goals.			.55			
16	There is sufficient interaction with other students to meet my needs.			.58			
17	The instructor made efficient use of class time			.53			
18	The instructor encouraged students to think for themselves.			.68			
19	There is sufficient interaction with the online instructor to meet my needs.			.60			
20	The course activities contribute to my learning goals.			.72			
21	Before starting an online programme, students are advised about the programme to determine (1) if they possess the self-motivation and commitment to learn online and (2) if they have access to the minimal technology required by the course design.				.46		
22	I was provided with supplemental course information that outlines course objectives, concepts, and ideas				.54		
23	Learning outcomes for the course are summarized in a clearly written, straightforward statement.				.48		
24	I have access to sufficient library resources that may include a "virtual library" accessible through the World Wide Web (online tutorials or libraries, content-related Web sites, etc.).				.60		
25	The assignments and learning activities were clear.				.60		
26	Evaluations of the paper and the outline were fair?				.75		
27	I received information about policies, procedures, and support services (registration, payment procedures, financial aid, etc.) that I needed.					.67	
28	My questions were answered accurately and promptly when I had questions.					.63	
29	My complaints to the online instructors were addressed adequately.					.73	
30	There was easily accessible technical assistance available to me thorough the duration of the course /programme.					.81	
31	I could retrieve course materials according to the schedule?					.47	
32	I was guided on how to access online resources throughout the course.					.48	
33	I was provided with hand-on training and information to aid them in securing material through electronic database, interlibrary loans, government archives, news services, etc.					.64	
34	I am enjoying the online sessions.						.63

Continued Table 3.3

35	I talked with other students about the online sessions and received positive feedback.						.65
36	The course provided a valuable learning experience						.61
37	I recommend this course to other students.						.66
38	The course is flexible enough to meet my needs.						.55

The first factor consisted of items 1-3. The statements fall under the institutional support benchmark in the IHEP benchmarks. The second factor consisted of items 4-11. All of the statements belong to the course development benchmark. The third factor consisted of items 12-20 which happen to be under the teaching and learning benchmark. The fourth factor which consisted of items 21-26 belong to course structure benchmark. The fifth factor consisted of items 27-33 and they came under the student support benchmark. Finally, items 34-38 fall under the value and flexibility and convenience benchmark. Originally, they were not in the IHEP but were recommended by the Pew Symposium 2001 (http://www.center.rpi.edu/ PewSym/mono3.html). Two items did not load under any of the six factors thus they were subjected to vigorous analysis by three experts in instrument construction. Some items were deleted and some statements were reworded and a new instrument was produced (see Appendix 7 for the adapted instrument).

There were also changes made in the demographic questions. The questionnaire consisted of two parts: 43 items (Likert Scale), and seven demographic questions. The pilot study reflected that the 43 item questionnaire was supportive of the seven benchmarks that were suggested in the Pew Symposium 2001. The student questionnaire thus examined six criteria: (a) institutional support; (b) course

development; (c) teaching and learning; (d) course structure; (e) student support; (f) and value, flexibility and convenience.

Table 3.4 summarizes the six benchmarks in the student questionnaire and the number of items under each benchmark.

Table 3.4

Breakdown of Benchmarks and Items for Students' Questionnaire

No	Benchmarks	Number of Items
1.	Institutional Support	3
2.	Course Development	8
3.	Teaching /Learning	11
4.	Course Structure	9
5.	Student Support	6
6.	Value, Flexibility and convenience	6
Total		43

All items were supportive of the research question: To what extent does online programme meet the benchmarks for online learning? The demographic data was used to portray the population of the study. The demographic data included: gender, age, year of study, current CGPA, Faculty, nationality, and computer literacy. The 43 item questionnaire utilized a five–point Likert scale for rating the respondents from 1 = (Strongly disagree) to 5 = (Strongly agree). The pilot study indicated that it would take less than 15 minutes to complete each questionnaire.

3.4.3 Development of the Instructor Questionnaire

Regarding the instructor questionnaire, the researcher maintained the general framework that was suggested in the IHEP 2000 benchmarks (see Appendix 2), that is, the same seven benchmarks that were suggested by the IHEP were used with the only exception being the splitting of some of the items to ensure that the respondents'

replies correspond to only one point, resulting in 33 items, instead of 24 (see Appendix 8).

These changes were done as a measure to assure the reliability and validity of the research instrument (Kline, 1993, Bachman, 1995). For example, under institutional support the first benchmark '*A documented technology plan that includes electronic security measures (i.e., password protection, encryption, back-up systems) is in place and operational to ensure both quality standards and the integrity and validity of information*' was divided into two items in the questionnaire as shown in Table 3.5:

Table 3.5

Changes to Item 1 in Institutional Support Benchmark

1.	CELPAD has measures to ensure quality standards.
2.	CELPAD has electronic security measures to ensure the integrity and validity of information.

The first benchmark under course development category '*Guidelines regarding minimum standards are used for course development, design, and delivery, while learning outcomes—not the availability of existing technology-determine the technology being used to deliver course content*' was also divided into two statements. They are given in Table 3.6:

Table 3.6

Changes to Item 1 in Course Development Benchmark

1.	Guidelines exist regarding minimum standards of course development, design and delivery.
2.	The technology being used to deliver course content is based on learning outcomes.

The teaching and learning benchmarks are divided into five items instead of three as shown in Table 3.7. The benchmark '*Student interaction with faculty and other students is an essential characteristic and is facilitated through a variety of ways, including voice-mail and/or e-mail*' was divided into two statements:

- Student interaction with faculty is facilitated through a variety of ways;
- Student interaction with other students is facilitated through a variety of ways.

The second benchmark '*Feedback to student assignments and questions is constructive and provided in a timely manner*' was divided into three statements:

- Feedback to student assignments is provided in a timely manner;
- Feedback to student questions is provided in a timely manner; and
- Feedback to students is provided in a manner that is constructive and non-threatening.

The third benchmark '*Students are instructed in the proper methods of effective research, including assessment of the validity of resources*' was maintained. Table 3.7 shows the benchmarks that were examined based on the modifications:

Table 3.7

Changes to Teaching and Learning Benchmark

1.	Student interaction with faculty is facilitated through a variety of ways.
2.	Student interaction with other students is facilitated through a variety of ways.
3.	Feedback to student assignments is provided in a timely manner.
4.	Feedback to student questions is provided in a timely manner.
5.	Feedback to students is provided in a manner that is constructive and non-threatening
6.	Students are instructed in the proper methods of effective research, including assessment of the validity of resources.

The course structure benchmark of the IHEP benchmarks are maintained with only one exception, that is, '*Students are provided with supplemental course information that outlines course objectives, concepts, and ideas, and learning outcomes for each course are summarized in a clearly written, straightforward statement*'. This benchmark was divided into two as shown in Table 3.8:

Table 3.8

Changes to Item 2 in Course Structure Benchmark

1.	Students are provided with supplemental course information that outlines course objectives, concepts, and ideas.
2.	Learning outcomes for the course are summarized in a clearly written, straightforward statement.

For benchmarks under the student support category no changes were deemed necessary. They were maintained as they are (see Table 3.9):

Table 3.9

Items of Student Support Benchmark

1.	Students receive information about programmes, including admission requirements, tuition and fees, books and supplies, technical and proctoring requirements, and student support services.
2.	Students are provided with hands-on training and information to aid them in securing material through electronic databases, interlibrary loans, government archives, news services, etc.
3.	Easily accessible technical assistance is available to all students throughout the duration of the course /programme.
4.	Questions directed to student service personnel are answered accurately and quickly, with a structured system in place to address student complaints.

In the case of faculty support category, one benchmark had to be restated into two statements as it consists of more than one point. The benchmark concerned was '*Instructor training and assistance, including peer mentoring, continues through the progression of the online course*' (see Table 3.10):

Table 3.10

Changes to Item 3 in the Faculty Support Benchmark

1.	There are peer monitoring resources available to faculty members teaching online courses.
2.	Online instructor training continues throughout the progression of the class.

Finally, under evaluation and assessment benchmark one of the items namely, '*The programme's educational effectiveness and teaching/learning process is assessed through an evaluation process that uses several methods and applies specific standards*' was divided into two items for the same reason as the above. They are shown in Table 3.11:

Table 3.11

Changes to Item 1 in Evaluation and Assessment Benchmark

1.	The programme's educational effectiveness is measured using several methods.
2.	An evaluation process is used to improve the teaching/learning process.

After the changes had been made, the total number of items examined in the instructor questionnaire was 33. They fall into seven criteria: (a) institutional support; (b) course development; (c) teaching and learning; (d) course structure; (e) student support; (f) faculty support (g) and evaluation and assessment.

The seven benchmarks for the instructor questionnaire are given in Table 3.12. Each benchmark consists of four to six items (see Appendix 8 for Instructor Questionnaire).

Table 3.12

Breakdown of Benchmarks and Items for Instructors' Questionnaire

No	Benchmarks	Number of Items
1.	Institutional Support	4
2.	Course Development	4
3.	Teaching /Learning	6

Continued Table 3.12

4.	Course Structure	5
5.	Student Support	4
6.	Faculty Support	5
7.	Evaluation and Assessment	5
Total		33

All items were supportive of the research question: To what extent does the online programme meet the benchmarks for online learning? The questionnaire utilized a five–point Likert scale from 1 (Strongly disagree), to 5 (Strongly agree).

The questionnaires also included a section for demographic data. The demographic data was used to get the background of the population of the study which included: gender, and computer literacy. It was estimated that about ten minutes would be needed to complete the questionnaire.

3.4.4 Administration of the Questionnaires

The questionnaire was distributed to the students and the instructors at the end of semester two of the academic year 2003/4. The researcher approached the Head of the English Division in CELPAD in writing and explained to her the nature of the research. Verbal permission was granted to him by the Head. The coordinator of the course was very cooperative. She provided the researcher with the list of classes and the name of the instructors. The researcher approached the instructors and asked for their permission to distribute the questionnaires. With the cooperation of the instructors the researcher was able to distribute around 600 questionnaires. The total number of questionnaires collected in three weeks was 421.

The instructor questionnaire was distributed to all the instructors teaching the online course. Since the number of instructors was relatively small, the whole

population was included in the study. Thus, all the instructors who taught the online course were approached to participate in the study. A total of 30 questionnaires were distributed. Some of the questionnaires were given personally to the instructors, while others were put in their mailing boxes. After four weeks, 28 questionnaires were collected. All were used for analysis.

3.5 Qualitative Data

Qualitative research, generally defined, means any kind of research that produces findings not arrived at by means of statistical procedures or other means of quantification. Qualitative studies must meet the same criteria for completeness that quantitative studies do, that is, they must be able to describe in sufficient detail the methods and procedures used, to permit the replication of the study (Rudestam & Newton 1992). Qualitative research emphasizes observation and interpretation, and data are collected within the context of their natural occurrence. Qualitative design focuses on a holistic view of what is being studied (via documents, case histories, observations and interviews).

In a review of educational research methods, Hoepfl (1997) suggests that educators should make use of research that investigates profound understanding, rather than probing surface features. She posits that qualitative methodologies are powerful tools for enhancing our understanding of teaching and learning.

The qualitative data from this study was gathered from interviews conducted with the students and the instructors involved in the online programme at the language center (CELPAD) in IIUM.

3.5.1 Interviews

Qualitative interviews are generally used either as a primary strategy for data collection, or in conjunction with observation, document analysis, or other techniques. In the interview, the participants were free to give their views. The information obtained can complement the quantitative data collected through questionnaire surveys. Interviewing is a form of questioning, characterized by verbal questioning as its principal technique of data collection. Interviews can be used in quantitative or qualitative research.

Interviews are characterized by a degree of formality ranging from structured to unstructured or semi-structured interviews. In the structured interview, the agenda is totally predetermined by the researcher. In the unstructured interview, the agenda is guided by the responses of the interviewee. In the semi-structured interview, the researcher has a general idea about the interview but he does not enter the interview with a set of predetermined questions (Nunan, 1995). The semi-structured interview enables the researcher to gain more information from the participants. There is disagreement about the most appropriate means for recording interview data. Some researchers say that a tape recorder is essential (Patton, 1990). Others do not recommend recording, except for exceptional circumstances (Lincoln and Guba, 1985). While there is an advantage in both positions, tape-recording appears to ensure that what is said is what is recorded. Interviews in this study were audiotaped and transcribed, where appropriate and possible.

In this study, both students and instructors were interviewed on aspects related to the IHEP benchmarks. Details of the interview conducted in this study are discussed below:

3.5.2 Conducting the Interviews

In this study, a semi-structured interview was employed, in an attempt to broaden the range of responses of the participants to answer the research questions of this study. The questions that were asked in the interviews were complementary to the ones used in the questionnaire. In other words, the interview questions revolved around the IHEP benchmarks.

The researcher interviewed a number of instructors and students and asked them for their perceptions of the online sessions and their practices and activities. The researcher used the questions that were suggested by the Pew Symposium 2001 (see Appendix 3) as a guide for the interview with the students (see Appendix 4 for the interview questions for the students and Appendix 5 for the interview questions for the instructors). Both the students and instructors were interviewed to develop detailed descriptions of their insights regarding the online programme. The details of the interviews with the instructors and the students are given in the following sections.

3.5.3 Interviews with Instructors

The interviews with the instructors were designed to provide a deeper understanding of information related to the instructors' practices. The seven benchmarks served as a guide in the semi-structured interviews. The instructors were free to answer the questions and give their opinions. The interviews provided in-depth information on the seven benchmarks and an overview of their experience in teaching the online classes. The instructors were asked whether the online programme met the institution's missions and goals and it was hoped that the interviews would reveal the instructors' perspective on the future of online learning.

The interview sessions were conducted throughout the second semester of the academic year 2003/4 which started in early November and ended in the middle of March 2004. The researcher first approached the Head of the English Division for permission to interview the instructors. Verbal permission was given and the researcher was requested to see the course coordinator of the programme to get further information regarding those who were involved in the programme and their names, contact numbers, and approximate level of experience. The total number involved in teaching the course concerned for that semester was 30. The course coordinator was on maternity leave and therefore could not be included as one of the participants. The new course coordinator declined to be interviewed owing to her lack of experience. She suggested interviewing only those who had more than one year experience in teaching the online course to get more information on the programme. Thus, only twelve instructors were interviewed. In addition to the twelve instructors who agreed to be interviewed, the researcher interviewed three academic administrators who also taught the online programme.

Conducting the interviews was a very demanding task. The researcher approached the participants at the beginning of November 2003, but most instructors were not able to set the time for the interview because of their busy schedules and preparation for the new semester. Due to this, the interviewing process took a period of one semester. By the end of April, the researcher was able to conclude his interviews with the instructors, instructors holding key administrative positions, and the Head of the English Language Division.

The total number of interviews conducted was fifteen. Eight interviewees agreed that the interview be audiotaped, the others declined. Data from the audiotaped interviews were transcribed (for a sample of a transcript, see Appendix 10). A note-

taking technique was used in the other interviews. Follow-up interviews were conducted with some instructors in order to get further clarification on some of the issues and to explore emerging themes.

3.5.4 Interviews with Students

The interviews with the students were conducted within a reasonable period of time. The researcher employed stratified sampling methods, ensuring that the students represented the different faculties, gender, and nationalities. The total number of students interviewed was 30. The researcher met some difficulties with some of the participants who did not come on time but the number of cases was reasonable and endurable. Despite the students' heavy schedules and preparation for the final examination, the ones who agreed to be interviewed were committed to the dates that they had chosen. Most of the interviews were conducted in the Meeting Room of the English Department while others were conducted in the library, and some in the cafeteria. The researcher offered every participant a calendar as an appreciation for his or her participation. The researcher took less than one month to complete the interviews. Each interview took around 30 to 45minutes.

In reporting the data from the interviews in Chapter Four, each interviewee will be assigned a number. For example, when reporting instructors, interviewee number one will be reported as instructor 1, and when reporting students, interviewee number one will be reported as student 1 etc.

3.6 Data Analysis

The quantitative data was coded and keyed into the *SPSS*. Then, the data was converted to a fixed ASCII file in order to make it suitable to be analysed by the

WINSTEPS software. The analyses were carried out based on the Rasch Model using WINSTEPS version 3.48 (Linacre, 2004). Subsequently, the quantitative analysis of the questionnaire data was triangulated with the information obtained from the questionnaire survey. The qualitative data collected from the interviews were transcribed and analysed.

3.7 Rasch Analysis of the Quantitative Questionnaire Data

The Rasch Model was developed by psychometricians as a new measurement system to address the limitations of Classical Test Theory (CTT) measurement (Bachman, 1995, Hambleton, Swaminathan, and Roger, 1991 and McNamara, 1996). An important difference between the Rasch Model and CTT is that Rasch analysis is probabilistic in nature (Hambleton, 1989, Henning, 1987 and McNamara, 1996).

In Rasch analysis each item is defined by a difficulty or location parameter. It presumes that the probability of a certain respondent (person) to respond to a particular item is a logistic function of the relative distance between the item location parameter and the respondents location parameter (Bond and Fox 2001). Bond and Fox (2001: xix) state that the Rasch model is based on the idea that data must conform to some reasonable hierarchy of less than/more than. The model is based on a simple idea that all respondents are more likely to endorse easy items than difficult items. Thus, according to the Rasch model, items that receive lower ratings are more difficult to endorse than items that receive higher ratings.

In Rasch analysis output, persons and items are located on a line that represents the variable together with the standard error. Items are located by the number of persons who agree with them and persons by how many items are agreed with by persons. A precision about the test can be noticed by how well-separated the

items and persons along the line are. Sufficiently separated items enable researchers to identify the direction and meaning of the respondents' answers.

In order to understand the scope of Rasch use in the present study, there is a need to explain the basic concepts or principles in Rasch, namely: validity, unidimensionality, item fit, difficulty/ability estimation and error**,** and reliability.

3.7.1 Validity Using Rasch

Rasch analysis relies on the concept of unidimensionality and item fit to determine the validity of a set of measures (Bond and Fox 2000). The Rasch model provides a mathematical framework that enables researchers to compare their data. This mathematical framework is based on the idea of *unidimensionality* which means "the examination of only one human attribute (e.g. length, width, weight, temperature, etc.) at a time on a hierarchal "more than/less than line of inquiry" (Bond & Fox, 2001, Wright & Masters, 1982). For example, when researchers measure the height of a table, they are not describing the whole table, but only that attribute which has been measured. Likewise, when we measure attitudes, only one characteristic of the attitude should be described by the measurement (Wright & Masters, 1982). If other attributes are included in the measure, the results will be less meaningful. In short only one construct is validated. Construct validity is a central concept in the Rasch model. Bond and Fox (2001: 26) point out:

> Construct validity focuses on the idea that the recorded performances are reflections of a single underlying construct: the theoretical construct as made explicit by the investigator's attempt to represent it in items or observations and by human ability inferred to be responsible for those performances. The data matrix that relates the items and the persons together in a coherent, integrated way is more likely to represent (i.e., fit) the construct under examination satisfactorily than one in which the relations appear serendipitous.

Item fit can be used to examine the construct validity of an instrument (Wright & Masters, 1982). Bond and Fox (2001: 26) remark that Rasch analysis presents demonstrations of "how well each item fits within the underlying construct". This fit enables researchers to assess the meaning of the unidimensional construct. In other words, it helps researchers to determine if "the assumption of unidimensionality holds up empirically." The misfitting items are those which deviate from the predicted ability/difficulty pattern. In other words, misfitting items within an instrument may be an indication that the items are measuring other constructs that the instrument is meant to measure.

3.7.2 Difficulty/Ability Estimation and Error

A second basic concept in Rasch analysis that is relevant to be discussed in this study is the *difficulty/ability estimation and error.* According to Bond and Fox (2001), Rasch analysis software programmes present logarithmic conversion on the person and item data to transfer ordinal data to interval data. They explain:

> These transformations represent the estimation of person ability and item difficulty detected in the data set (i.e., item and person placement along the single line of inquiry). Actual item and person performance probabilities determine the interval sizes. They are not introduced as prior assumptions of the investigator, or of the analytical algorithm.
>
> (Bond and Fox, 2001: 29)

According to them, the extent of adherence of the set of observations to Rasch's mathematical model of expectation is held to be unidimensional (i.e., the single difficulty/ability continuum is sufficient to explain the patterns of item/person performances). When the person ability and item difficulty are subjected to a log

transformation, they are displayed in computer output along a *logit* (log odds unit) scale.

A Rasch model produces the relative difficulty of items on a Likert scale in which the respondent is required to tick a response on disagree-agree scale, demonstrating the degree of difficulty to which the item is endorsed. Thus, each item is given a difficulty estimate.

A demonstration of how the instructors' questionnaire is analyzed in the present study is deemed necessary. The questionnaire used in this study will be employed to show how the analysis is done. Most versions of Rasch analysis software produce output tables like Table 3.13 in which each item number, the estimate of item difficulty, and its accompanying error estimate in logits are given. As each item difficulty corresponds to an error estimate, Rasch offer better precision in estimating the items. Table 3.13 gives the item statistics for the instructors:

Table 3.13

Item Statistics Questionnaires to Instructors (n=28)

Item	Difficulty Estimate	Error Estimate	Infit Mean Square	Outfit Mean Square
32	1.02	0.23	0.91	0.92
02	0.92	0.23	0.85	0.9
25	0.86	0.23	1.24	**1.82***
04	0.86	0.23	0.74	0.74
03	0.81	0.23	0.79	0.80
24	0.75	0.23	0.79	0.80
22	0.75	0.23	0.93	0.86
28	0.70	0.23	0.95	1.05
27	0.64	0.23	0.77	0.82
26	0.64	0.23	1.10	1.22
15	0.64	0.23	0.97	0.91
29	0.53	0.24	0.89	1.00
23	0.53	0.24	0.77	0.75
30	0.42	0.24	1.09	1.20

Continued Table 3.13

07	0.30	0.24	0.99	1.09
01	0.30	0.24	0.76	0.70
31	0.18	0.25	1.15	1.30
33	0.12	0.25	0.81	0.75
20	-0.18	0.26	0.57	0.65
06	-0.20	0.26	1.11	1.21
05	-0.20	0.26	**1.71***	**1.58***
21	-0.25	0.27	**1.72***	**1.86***
10	-0.57	0.28	1.24	1.16
14	-0.82	0.3.0	0.97	0.91
19	-0.90	0.3.0	0.78	0.73
16	-0.90	0.3.0	1.24	0.99
12	-0.90	0.3.0	0.79	0.76
09	-0.90	0.3.0	1.38	1.20
18	-1.00	0.31	0.75	0.70
17	-1.00	0.31	1.23	1.02
08	-1.00	0.31	1.29	1.24
13	-1.10	0.31	0.72	0.75
11	-1.10	0.31	0.72	0.73

* misfitting items

When items are found misfitting, they are either deleted or examined again. When King and Bond (1996) used Rasch analysis to examine a computer anxiety person survey, they decided to delete the misfitting items and perform a second analysis with the aim of getting more valid person computer anxiety measures from the Computer Opinion survey responses. Wright and Masters (1982:15) stated that it is essential to identify and delete the ambiguous items from the final questionnaire citing Thurnstone (1928) saying that "ideally the scaling method should be designed so that it will automatically throw out of the scale any statements which do not belong to its natural sequence" (Thurnstone: 1928: 417).

Bohling, Fisher, Masters and Bond (1998:607) argue that "Assuming that the original pool of items is selected to fully represent the content of interest, how does one ensure that content validity is maintained throughout the process of test development when dropping items simply because they do not fit the Rasch model?" The recommended range for the fitting items carries the value of 0.7 to 1.3 (Bond and Fox, 2001).

Another Rasch analysis output that is relevant in this study is the items by person map. Rasch analysis represents person and item relations in meaningful pictorial, or map form. The logit scale, which is the measurement unit common to both person ability and item difficulty, is displayed down the middle of the map in Figure 3.1. Logits are used to convey the item difficulty estimates as well as person's ability to endorse items. A logit value of 0 is arbitrary set as a mean of the item difficulty estimates. Logit above 0 indicates how difficult it is for a person to agree with the item and logit below 0 indicates the extent of ease by which the items are perceived by the person.The Rasch model can also produce item-person map shown as Figure 3.1, in which the items are indicated by the item number, and each respondent is represented by an X. Since the scale is an interval one, the equal distances on the scale have equal values. Thus, item 32, as shown in Figure 3.1, is much more difficult than item 20 and item 20 is more difficult than item 17. Persons and items are located on the map according to their ability and difficulty estimates, respectively. The mean of the item difficulties is adopted by default at the 0 point. Figure 3.1 shows that the majority of the items are located in the band between +1 and –1 logits.

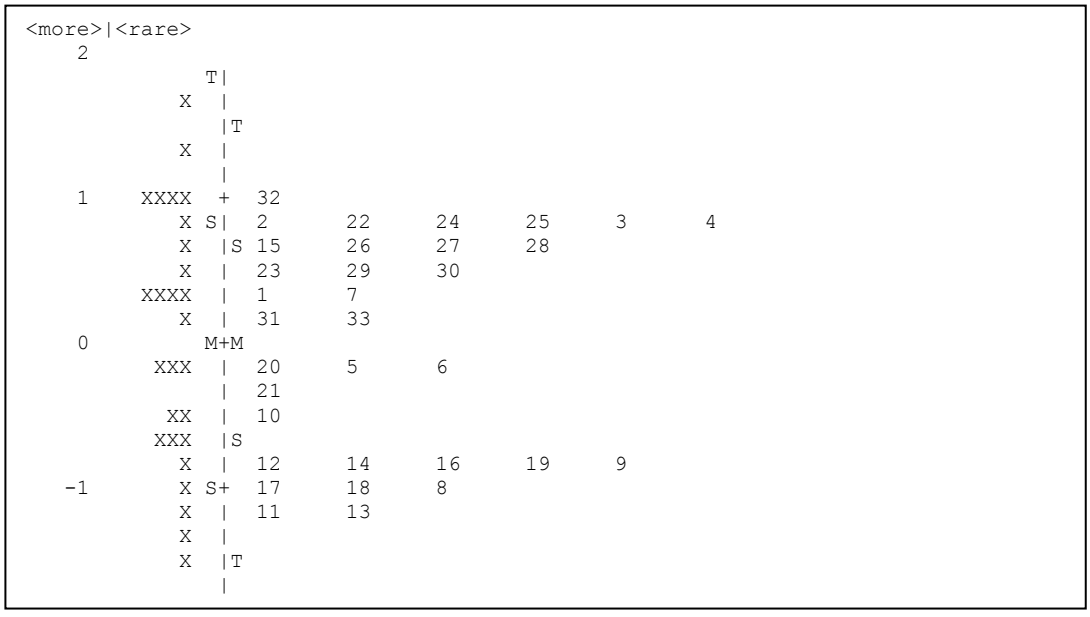


Figure 3.1. Person-item-map.

A few observations can be made from Figure 3.1. There are easy items to endorse, not so-easy items, more difficult items, and even more difficult items to endorse. For example, items 11 and 13 are at the easy end and item 32 is extremely difficult in comparison to others, whereas items 20, 5, 6, 31, and 33 are very close to the midpoint (0) on the item difficulty scale. It is worth observing that the extremely easy items to endorse (11, 13, 8, 17, and 18) have the least precise error estimate, whereas the error estimates for the most difficult items (32, 2, and 4) are relatively quite small. Moreover, Figure 3.1 reveals that the item difficulty spans between almost -1 to +1 logit zone. This indicates that researchers could have a great deal of confidence if they had to make important decisions relating to the items which are rated within the -1 to +1 logit zone.

With Rasch, the output can be requested with the items listed in item difficulty order rather than the order in which they appeared in the questionnaire (i.e., item 1 to item 33). This helps the researcher to look at the top of the table and at the bottom of the map to check correspondences between the difficulty estimates and item locations.

In order to interpret the person-item map further, it is important to clarify the concept of reliability which is a basic concept in Rasch analysis.

3.7.3 Reliability Using Rasch Analysis

Bond and Fox (2001) warn that unless we have enough information about the items and the persons, we cannot make reliable judgments. According to them, more good items give more precise locations than fewer good items. The Rasch model enables researchers to examine whether there are enough items spread along a line of inquiry and enough spread of ability among persons (Wright and Masters, 1982). Person

reliability and item reliability are both important when interpreting scales derived from the Rasch model. The person reliability index indicates how well a set of items spreads out along the logit ability range. The item reliability index indicates how well a sample of respondents spread out the items (Bond and Fox, 2001). Consequently, a high person reliability indicates the development of a scale in which some persons score higher and others score lower. According to Bond and Fox (2001), the researcher can place confidence in the consistency of his inferences. On the other hand, the *item reliability index* indicates "the replicability of item placement along the pathway if these same items were given to another sample with comparable ability levels". The lack of information on certain items may result in larger errors. Two observations can be inferred from high item reliability: a) that a line of inquiry has been developed in which some items are more difficult than others, and b) confidence can be placed in the consistency of these inferences (Bond and Fox, 2001).

Tables 3.14 and 3.15 summarize the reliability estimates of the present study.

Table 3.14

Summary of Items Estimate (n=33)

	Estimate	Error	Infit mean Square	Outfit mean Square
Mean	0.00	0.26	1.01	1.00
S.D.	0.73	0.03	0.32	0.35
Max.	1.02	0.31	1.72	1.86
Min.	-1.10	0.23	0.57	0.55

Reliability of Estimate: 0.85

For items and persons, we have the following information that is useful. As seen in Table 3.14, the reliability of the item difficulty estimate is 0.85. However, the person difficulty estimates is very high at 0.92 as seen in Table 3.15.

Table 3.15

Summary of Person Estimate (n=28)

	Estimate	Error	Infit mean Square	Outfit mean Square
Mean	-0.05	0.24	0.99	1.00
S.D.	0.96	0.04	0.57	0.62
Max.	1.63	0.34	2.72	2.91
Min.	-2.58	0.21	0.20	0.18

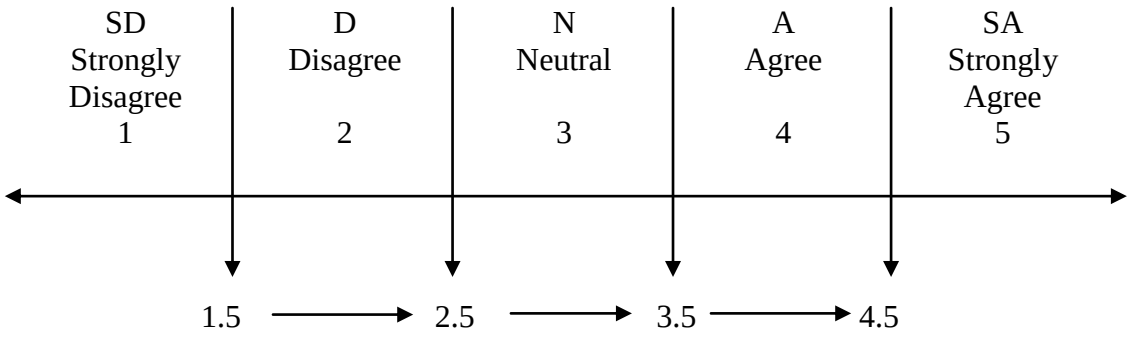
Reliability of Estimate: 0.92

Rasch analysis produces a reliability index which is analogous to Cronbach Alpha Coefficient (Bond and Fox, 2001, Fox and Jones, 1998, Wright and Masters, 1982). The reliability of the person difficulty estimates is very high at 0.92. The reliability of the item difficulty estimate is high at 0.85, which is not as high as the person estimate; however, it is more than acceptable (Bond and Fox, 2001: 47). The higher the reliability, the more confidence we have in the replicability of the results of item locations when given to other samples for which it is suitable. In the current analysis, we have more good information about the persons than we do about items, so the person estimates are more reliable. In other words, the performance of the 33 items gives us more information about the 28 persons than the 28 persons give about the 33 items.

3.8 A Procedure for Identifying the Met Benchmarks

Setting a criterion and standards is like plunging into a welter of confusing uncertainties, becoming mired in ethics and politics, and to be forced into resolutions of irreconcilable ambiguities (Wright, 2000). In order to find a procedure to decide which benchmarks have been met and those which have not been met, the researcher consulted a number of statisticians. The procedure employed in this study was suggested by Linacre (2005) (University of Sydney, Australia). This procedure treats

the interval data as a dichotomous one in order to decide the benchmarks that are met and those which are not met.



As the Likert scale in this study consisted of five categories from 1 = (Strongly Disagree), 2 = (Disagree), 3 = (Neutral), 4 = (Agree), to 5 = (Strongly Agree), it is necessary to identify the points along the agreement/disagreement that separated each category.

The point that separates adjacent categories would be the point between those categories. For example, the point that separates Category 1 = (Strongly Disagree) and Category 2 = (Disagree) would be the average/mean of these two categories which is 1.5. Two suggested approaches could be taken:

- The first approach is a *conservative* one in the sense that it treats only point 3.5 and above as met since it is the point that separates category 'Neutral' (3) and 'Agree' (4). According to this view, only the respondents who chose (Agree and Strongly Agree) are considered to have explicitly agreed.
- The second approach is a *liberal* one in the sense that it treats items with average rating of 2.5 and above as met since it is the point that separates category 'Disagree' (2) and 'Neutral' (3). According to this view, the respondents who chose "Neutral’ are considered not to have disagreed, and so to have tacitly agreed.

COURSE STRUCTURE BENCHMARKS mean 0.008

The first measure is considered a stricter one and has been employed by the Teaching and Learning Committee during a meeting on the Survey Quality Assurance Committee in Sydney University (2000) www.econ.usyd.edu.au/download.php?id=977.

The decision as to whether to “certify competence” or “certify incompetence” is similar to that encountered in other standard-setting situations, e.g., “How to set standards” by Wright and Grosse (1993) and “How to set standards” Wright (2000). According to Wright (2000: 740), "our choice of standard is always a qualitative decision. No measuring system can decide for us at what point "short" becomes "tall". Expert judgment is required".

In this study, it is necessary to identify which of the benchmarks are met and which are not met. The stricter measure was employed to be the criterion for deciding the met benchmarks for several reasons as these are benchmarks for quality, and high-stake decisions would be made based on the result. Actions could then be taken to improve the quality of the online programme standard.

3.9 Conclusion

This chapter has outlined the methods used in this study: sample and population, instrument development, data collection, and data analysis. It also discussed how the IHEP 2000 was adapted. The results of the pilot study done on the student questionnaire indicate that the changes made were justified. The rationale for using Rasch analysis was presented along with an explanation of the major concepts related to Rasch's use in the present study, namely: validity, unidimensionality, item fit, difficulty/ability estimation and error**,** and reliability. Finally, a procedure for deciding the met benchmarks was also presented.

CHAPTER FOUR

DATA ANALYSIS AND RESULTS

4.0 INTRODUCTION

This chapter presents the results of the study. Each benchmark is discussed in the light of the instructors' and students' perceptions as detected in the questionnaire as well as their opinions as expressed in the interviews. The information collected from the interviews is used to support the quantitative data.

4.1 Sample of the Study

Students pursuing the English for Academic Writing course at IIUM and instructors teaching the course made up the sample of this study. A total of 600 questionnaires were distributed and 421 questionnaires were completed by the students and used in the analysis. A total of 30 questionnaires were distributed to the instructors. Out of these, 28 sets were completed and returned to the researcher. Fifteen instructors and 30 students participated in the interviews.

The majority of the respondents were females (see Table 4.1) which reflects the overall population of the International Islamic University Malaysia. Details of gender breakdown are given in Table 4.1.

Table 4.1

Gender of Respondents

Variables	Male	Female	Missing	Total
Instructors	10 (35.7%)	18 (64.3%)	-	28 (100%)
Students	132 (31.4)	285 (67.7%)	4 (0.9%)	421(100%)
Total	142 (31.6%)	303 (67.5%)	4 (0.9%)	449 (100%)

As Table 4.1 shows, the overwhelming majority of instructors (64.3%) were females and 35.7% were males while the overwhelming majority of students (67.7%) were females, 31.4% were males, and 4 (0.9%) students did not indicate their gender.

As the study concerns an online course, it is also interesting to see the instructors' computer skills. Questions on whether they had attended courses in computer literacy and Computer Assisted language Learning (CALL) were included in the questionnaire. The questionnaire also included questions related to: their overall skill in using computers; the training courses used to teach the online course and other related courses. The results are shown in Table 4.2.

Table 4.2

Computer Literacy of Instructor Respondents (n=28)

Characteristics	Options	n	%
Computer literacy	Yes	13	46.4
	No	15	53.6
Computer Assisted Language Learning (CALL)	Yes	16	57.1
	No	12	42.9
Training courses to teach online EAW	Yes	22	78.6
	No	6	21.4
Others (Web design, Networking, multimedia, courseware, IT)	Yes	3	10.7
	No	25	89.3
How do you rate your skill in using the computer?	Very Good	3	10.7
	Good	11	39.3
	Average	14	50

Table 4.2 shows that almost 13 (46.4%) of the instructors reported that they had not attended any formal courses related to computer literacy, and 53.6% reported that they had attended such courses. Of the 28 instructors who participated in the questionnaire, 16 (57.1%) of the instructors reported attending CALL courses, while 12 (42.9%) had not attended such courses. Regarding attendance at training courses to teach EAW, 22 (78.6%) of the instructors reported that they had attended workshops and training courses to teach EAW and 6 (21.4%) reported that they had not attended such courses. When the instructors were asked if they attended other computer courses, only 3 (10.7%) reported that they had participated in other computer studies courses such as multimedia design, Web design, courseware, IT, and networking, while others had not. Finally, when the instructors were asked to assess their computer skills, 14 (50%) reported that they possessed average computer skills and three (10.7%) reported very good computer skills. Eleven (39.3%) of the instructors reported good computer skills.

The students were also asked whether they had taken any computer-related courses. The study showed 111 (26.4%) respondents reported that they had not taken computer related courses, whereas the number of students who reported having taken computer-related courses was 310 (74.6%) as shown in Table 4.3. (For a detailed description of the demographic information of the instructors and students, please see Appendices 11 and 12 respectively).

Table 4.3

Students' Attendance of Computer Courses (n=421)

Characteristics	Options	n	%
Computer courses	Yes	310	74.6
	No	111	26.4

4.2 Reliability and Validity of the Instruments

Two sets of questionnaires were used: one for students (see Appendix 7) and the other for instructors (see Appendix 8). As the questionnaires were meant to measure the perceptions of the students and their instructors, it is important to report to what extent they are reliable and valid.

4.2.1. Reliability of the Instructors' Questionnaire

The reliability of the instructors' questionnaire is reported based on Rasch analysis procedures. As depicted in Table 4.4, the reliability estimate of items was 0.85, which is an acceptable value in the Rasch Model of measurement (Bond & Fox, 2001).

Table 4.4

Summary of the Instructor Items Estimate (n=33)

	Estimate	Error	Infit mean Square	Outfit mean Square
Mean	0.00	0.26	1.01	1.00
S.D.	0.73	0.03	0.32	0.35
Max.	1.02	0.31	1.72	1.86
Min.	-1.10	0.23	0.57	0.55

Reliability of Estimate: 0.85

Rasch measurement also calculates a person reliability estimate. As depicted in Table 4.5, the reliability of the person difficulty estimate is very high at 0.92 (Bond & Fox, 2001). This means that the measures produced by using the instrument are reliable.

Table 4.5

Summary of the Instructor Person Estimate (n=28)

	Estimate	Error	Infit mean Square	Outfit mean Square
Mean	-0.05	0.24	0.99	1.00
S.D.	0.96	0.04	0.57	0.62
Max.	1.63	0.34	2.72	2.91
Min.	-2.58	0.21	0.20	0.18

Reliability of Estimate: 0.92

4.2.2. Reliability of the Students' Questionnaire

Tables 4.6 and Tale 4.7 show the reliability of the students' questionnaire. As depicted in Table 4.6, the reliability of the item difficulty estimates is a very high 0.97 on a 0 to 1 scale. This indicates that this order of estimates could be counted on to be replicated when the questionnaire is given to other samples for whom it is suitable.

Table 4.6

Summary of the Student Item Estimates (n=43)

	Estimate	Error	Infit mean Square	Outfit mean Square
Mean	0.00	0.07	1.01	1.02
S.D.	0.44	0.00	0.19	0.20
Max.	1.13	0.08	1.57	1.60
Min.	-0.78	0.06	0.69	0.67

Reliability of Estimate: 0.97

Table 4.7 shows the reliability of the person ability estimate. As depicted in Table 4.7, the reliability of the person ability estimate is high at 0.92, indicating very high reliability.

Table 4.7

Summary of the Student Person Estimate (n=421)

	Estimate	Error	Infit mean Square	Outfit mean Square
Mean	1.23	0.22	1.03	1.02
S.D.	0.87	0.03	0.54	0.54
Max.	4.55	0.44	3.65	3.65
Min.	-1.47	0.17	0.10	0.09

Reliability of Estimate: 0.92

When the instructors' questionnaire is compared with the students' questionnaire, it is observed that the reliability index in the student questionnaire is found to be higher than that of the instructors'. This is expected since the sample size

of the students' questionnaire (n=421) is higher than that for the instructors' questionnaires (n=28).

4.2.3 Validity of the Instructors' Questionnaire

The validity of a set of measures is determined in the Rasch model by unidimensionality and *item fit*. Three items were found to be misfitting (5, 21, and, 25) since their infit and outfit mean square values fall outside the recommended range of 0.7 to 1.3 as seen in Table 4.8 (Bond & Fox, 2001).

Table 4.8

Item Statistics Questionnaires to Instructors (n=28)

Item	Difficulty Estimate	Error Estimate	Infit Mean Square	Outfit Mean Square
32	1.02	0.23	0.91	0.92
02	0.92	0.23	0.85	0.90
25	0.86	0.23	1.24	**1.82***
04	0.86	0.23	0.74	0.74
03	0.81	0.23	0.79	0.80
24	0.75	0.23	0.79	0.80
22	0.75	0.23	0.93	0.86
28	0.70	0.23	0.95	1.05
27	0.64	0.23	0.77	0.82
26	0.64	0.23	1.10	1.22
15	0.64	0.23	0.97	0.91
29	0.53	0.24	0.89	1.00
23	0.53	0.24	0.77	0.75
30	0.42	0.24	1.09	1.20
07	0.30	0.24	0.99	1.09
01	0.30	0.24	0.76	0.70
31	0.18	0.25	1.15	1.30
33	0.12	0.25	0.81	0.75
20	-0.18	0.26	0.57	0.65
06	-0.20	0.26	1.11	1.21
05	-0.20	0.26	**1.71***	**1.58***
21	-0.25	0.27	**1.72***	**1.86***
10	-0.57	0.28	1.24	1.16
14	-0.82	0.30	0.97	0.91
19	-0.90	0.30	0.78	0.73
16	-0.90	0.30	1.24	0.99
12	-0.90	0.30	0.79	0.76
09	-0.90	0.30	1.28	1.20
18	-1.00	0.31	0.75	0.70
17	-1.00	0.31	1.23	1.02
08	-1.00	0.31	1.29	1.24
13	-1.10	0.31	0.72	0.75
11	-1.10	0.31	0.72	0.73

* misfitting item

The misfitting items fall under three benchmarks as seen in Table 4.9.

Table 4.9

Table of Misfitting Items

	COURSE DEVELOPMENT
5.	Guidelines exist regarding minimum standards of course development, design and delivery.
	STUDENT SUPPORT
21.	Students are provided with hands-on training and information to aid them in securing material through electronic databases, interlibrary loans, government archives, news services, etc.
	FACULTY SUPPORT
25.	There are peer monitoring resources available to faculty members teaching online courses.

The misfitting items in the Rasch model do not necessarily mean that they have to be dropped. On the contrary, they mean that they should be examined again to see the extent to which they represent the domain as originally intended (Bond & Fox, 2001; Wright & Stone 2004). Wright and Stone (2004: 32) ask researchers not to "remove substantively crucial items solely on the basis of misfit". Instead they recommended thinking twice before discarding items for statistical reasons especially if the item contains meaning that is essential to the intent.

Probing the misfitting items revealed that theoretically they are important in ensuring the content validity of the benchmarks concerned. For example, item 5 is an integral part of the course development benchmark. It is necessary to know whether there are guidelines regarding minimum standards of course development, design and delivery. Similarly, it is equally necessary to know if students received hands-on training and information to aid them in securing material through electronic databases, interlibrary loans, government archives, news services, etc. since they receive instructions through the online mode. Finally, the availability of peer monitoring

resources to faculty members is important for instructors who teach online courses. As the three misfitting items represent important aspects of the three benchmarks, removing them would mean that there will not be adequate items to address important issues that need to be raised regarding course development, student support and faculty support benchmarks, respectively. These items were therefore retained.

4.2.4 Validity of the Students' Questionnaire

Table 4.10 gives the summary statistics of the items in the student questionnaire. All of the items are found to fall within the recommended range of 0.7 to 1.3 for infit and outfit mean square values (Bond & Fox, 2001).

Table 4.10

Item Statistics Questionnaires to Instructors Students (n=421)

Item	Difficulty Estimate	Error Estimate	Infit Mean Square	Outfit Mean Square
35	1.13	0.06	1.06	1.08
32	0.93	0.06	1.18	1.20
25	0.86	0.06	1.21	1.23
34	0.80	0.06	1.01	1.04
33	0.75	0.06	0.98	1.03
36	0.47	0.06	0.81	0.83
43	0.37	0.06	1.26	1.30
38	0.35	0.06	1.00	1.01
37	0.35	0.06	1.12	1.14
04	0.34	0.06	1.01	1.05
02	0.27	0.06	0.92	0.99
01	0.21	0.06	0.84	0.88
41	0.15	0.06	0.87	0.87
31	0.09	0.07	0.95	0.95
09	0.08	0.07	0.99	1.02
06	0.04	0.07	0.91	0.97
05	0.02	0.07	0.73	0.82
24	0.02	0.07	0.93	0.95
29	0.01	0.07	0.70	0.72
23	-0.04	0.07	0.81	0.81
08	-0.04	0.07	0.93	0.95
42	-0.07	0.07	1.00	0.99

Continued Table 4.10

03	-0.08	0.07	0.94	0.96
10	-0.12	0.07	1.21	1.22
30	-0.14	0.07	0.71	0.72
26	-0.15	0.07	1.07	1.16
14	-0.17	0.07	1.06	1.06
40	-0.17	0.07	1.13	1.11
07	-0.17	0.07	1.18	1.29
18	-0.18	0.07	1.14	1.18
27	-0.25	0.07	0.77	0.75
21	-0.3	0.07	0.93	0.91
16	-0.31	0.07	0.98	0.97
28	-0.33	0.07	0.7	0.71
22	-0.36	0.07	0.85	0.82
17	-0.40	0.07	0.99	0.99
11	-0.40	0.07	1.07	1.10
39	-0.44	0.07	0.88	0.83
13	-0.51	0.07	1.12	1.10
15	-0.57	0.07	0.94	0.89
20	-0.57	0.07	1.20	1.15
19	-0.72	0.08	1.05	1.02
12	-0.78	0.08	1.15	1.07

This means that all the items measure the concepts that they are meant to measure. This provides evidence of the validity of the instrument in measuring the perceptions of the students and instructors.

4.3 General Perception of Instructors and Students

The general perceptions of instructors and students are presented separately in the subsequent sections. Each item in the instructors and student questionnaires is arranged in the logit continuum according to the perceived degree of meeting the benchmarks. Figure 4.1 represents each of the seven benchmarks that were included in the instructors' questionnaire.

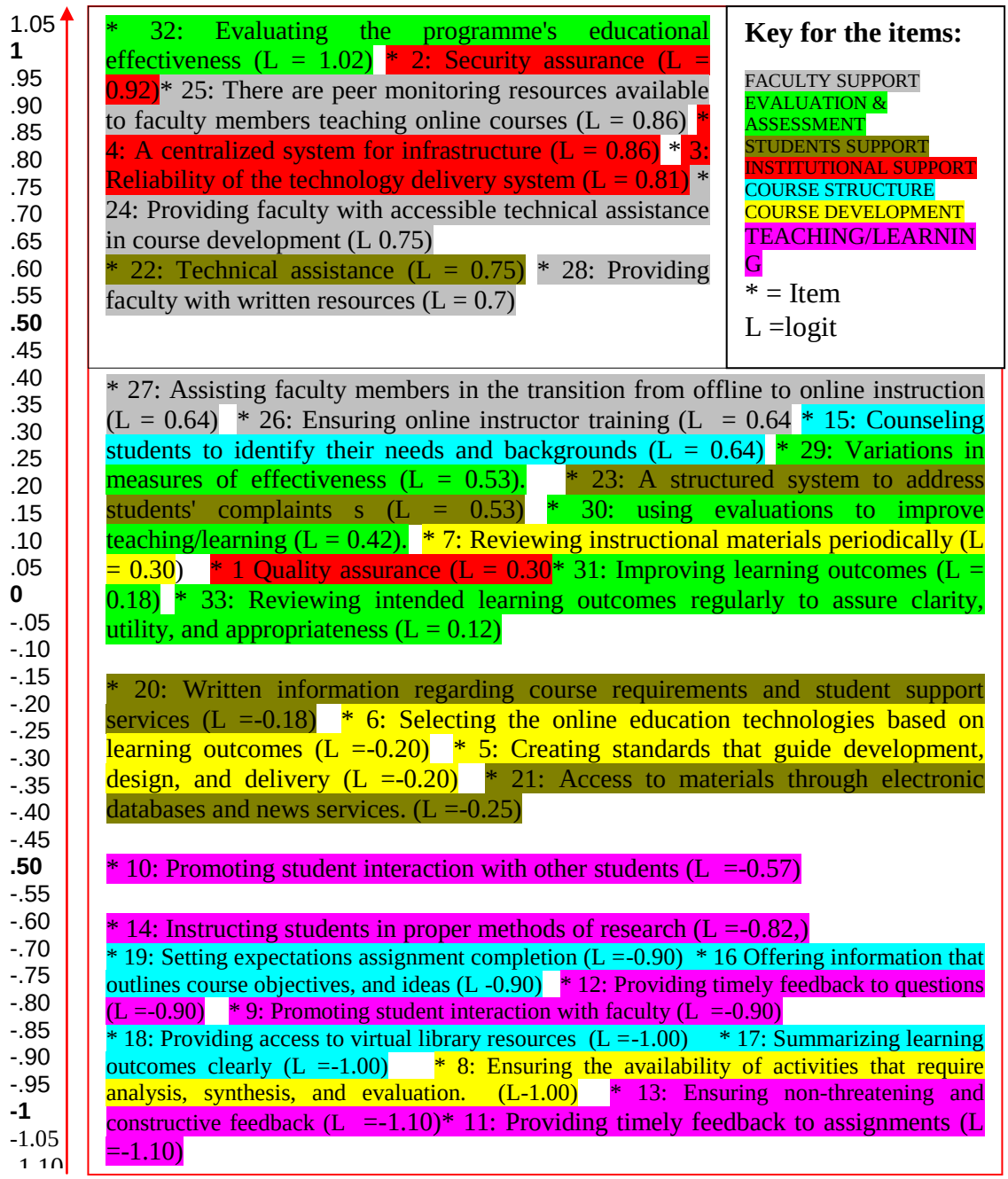


Figure 4.1: Ordering of Items in terms of Difficulty Estimates (Instructors)

As far as the students were concerned, Figure 4.2 represents the order of the items and the degree of difficulty to endorse with high logit value items are placed at the top and items with low logit value are placed at the bottom of the map.

Each category consists of items that describe the aspect of the category (see Chapter 3). It can be seen that the range of the 33 items is from 1.02 logit to -1.10. Items with high logit value are placed at the top of the scale and items with low logit value are placed at the bottom of the map. For example, item 32 has the highest logit value (1.02), thus it is placed at the top of the map - indicating that it is the most difficult item to agree with, while item 11 has the lowest logit value, and it is thus placed at the bottom of the map - indicating that it is the easiest item to agree with. In order to understand how the items are clustered, colour coding is used. Thus, red is used to represent aspects of the institutional support benchmark, gray is used to represent aspects of faculty support benchmark, olive is used to represent aspects of student support benchmark, green is used to represent aspects of evaluation and assessment benchmark, purple is used to represent aspects of teaching and learning benchmark, yellow is used to represent aspects of course development benchmark, and turquoise is used to represent aspects of course structure benchmark. It is observed that the items are clustered generally in accordance with the benchmarks they represent.

Figure 4.2: Ordering of Items in terms of Difficulty Estimates (Students)

Similar to Figure 4.1, the six benchmarks in Figure 4.2 also include the attributes that fall under each category (which ranges from 3 – 11 items). It can be seen that the range of the items is from 1.13 logit to -0.78. This means that the items

are spread between 1.91 logits. Color coding is used in Figure 4.2 to show how the items are clustered. The red coding is used to represent aspects of the institutional support benchmark, olive is used to represent aspects of student support benchmark, green is used to represent aspects of value, convenience, and flexibility benchmark, purple is used to represent aspects of teaching and learning benchmark, yellow is used to represent aspects of course development benchmark, and turquoise is used to represent aspects of course structure benchmark. It is observed generally that the items are grouped under the benchmarks they represent. For example, the items under teaching and learning benchmarks are clustered together at the bottom of the logit scale and the student support items are clustered together at the top of the scale.

After looking at how each item for all benchmarks are perceived, it is necessary to look at how each benchmark is met. In order to do this, the Rasch analysis allows for the calculation of the average logit of the items of every benchmark. The average logit of each benchmark is arranged along the benchmark that is given high rating (easiest benchmark to meet) to the benchmark that is given low rating (most difficult to meet benchmark). The higher logits indicate that the benchmark is met with difficulty while the lower logits indicate that the benchmark is met easily. The general perceptions of instructors and students of the extent to which the online EAW course fulfils the (seven and six respectively) benchmarks of online learning obtained from the questionnaire data are presented in the logit continuum from the Rasch analysis. Figure 4.3 presents the overall perceptions of instructors of the seven benchmarks.

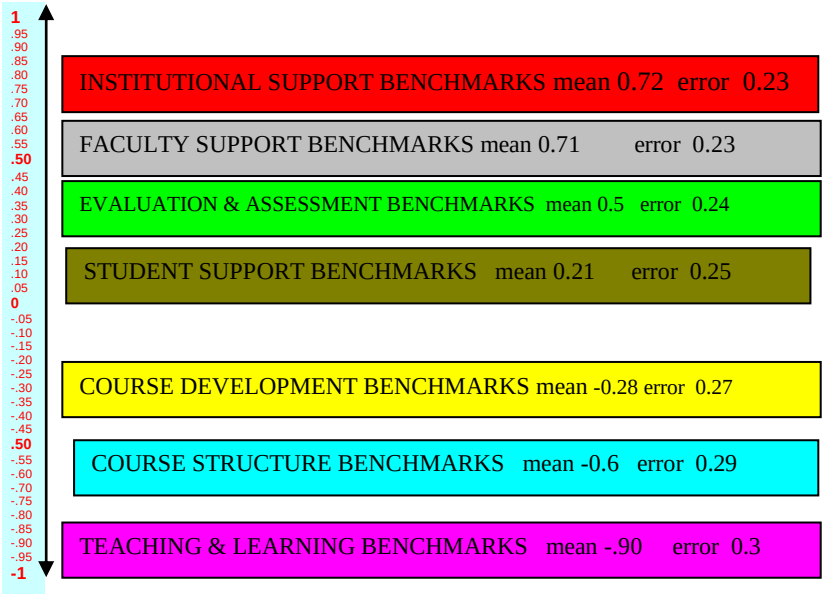


Figure 4.3: Overall Perception of the Presence of Benchmarks by Instructors

The mean logit of each benchmark is given with the mean error estimate. From Figure 4.3, it can be seen that of the seven benchmarks, the instructors felt that teaching and learning was the most met benchmark (mean = -0.90, error = 0.3) followed by course structure (mean = -0.63, error = 0.29) and course development (mean = -0.28, error = 0.27) benchmarks. Institutional support was perceived as least met (mean = 0.72, error = 0.23).

The overall perceptions of students of the six benchmarks of online learning are given in Figure 4.4.

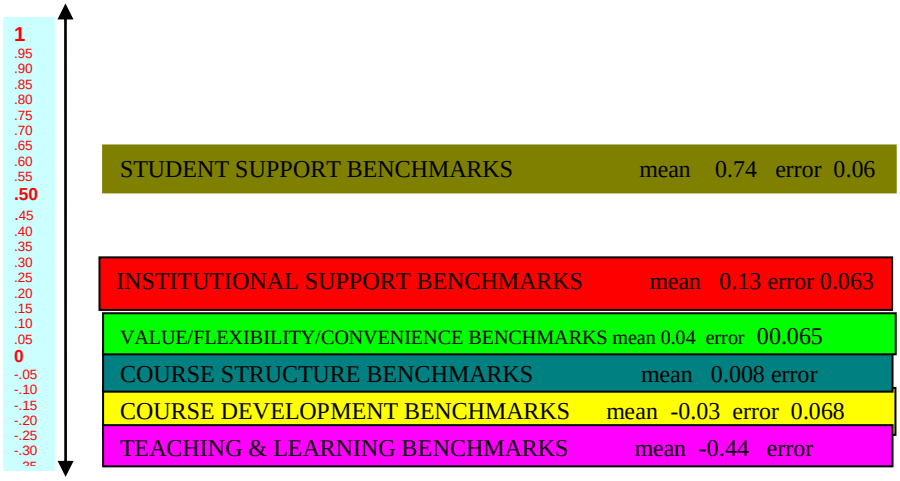


Figure 4.4: Overall perception of the presence of benchmarks by students

Similar to what was perceived by the instructors, the teaching and learning benchmark (mean = -0.44, error = 0.07) was felt to be the most met by students followed by the course development benchmark (mean = -0.031, error = 0.068). However, the student support benchmark was given a very low rating by the students (mean = 0.74, error = 0.06) as compared to support from the institution (the IIUM). This is the opposite of the instructors' perception who felt that there was more student support given than institutional support.

Where teaching and learning were concerned both students and instructors agreed that the benchmarks were met easily. However, it appears that the instructors and students did not see the institution as being supportive of the institutional, faculty, and student support benchmarks. Further analysis of the findings is provided in the following sections along with results gathered from the interviews.

4.4 Discussion of Each Benchmark

The discussion of each benchmark begins with reporting the reliability of the subsection of the instrument that measures the relevant benchmark. The reliability value is reported based on *SPSS* output.

Within the true score method of statistical analysis, reliability is often expressed in terms of Cronbach Alpha Coefficient and the like. Those values are included here merely for the convenience of the reader. Reliability indicators derived from the Rasch model are the preferred estimates for the current research, as modern test theory has stricter standards for assessing reliability, and Rasch model reliability indicators contain more relevant statistical information than traditional indicators do (Bond & Fox, 2001; Wright & Master, 1982; Andrich, 1988).

This section presents a thorough discussion of each benchmark according to students and instructors. The quantitative analysis is supported by the results gathered from the interviews.

4.4.1 Institutional Support

Four attributes were included in this benchmark:

- Security assurance;
- A centralized system for infrastructure;
- Reliability of the technology delivery system; and
- Quality assurance;

In the instructors' questionnaire, a Cronbach Alpha Coefficient was produced for this benchmark and was found to be at 0.84 as seen in Table 4.11. This is relatively high since the minimum for a good test is 0.7 (Kline, 1993).

Table 4.11

Reliability of Institutional Support Benchmark (Instructors)

Item No.	Institutional Support Benchmarks	Logit
1	CELPAD has measures to ensure quality standards.	0.30
2	CELPAD has electronic security measures to ensure the integrity and validity of information.	0.92
3	The technology delivery system is highly reliable.	0.81
4	Support for building and maintaining the online education infrastructure is addressed by a centralized system.	0.86

Number of Items = 4 Cronbach Alpha Coefficient = 0.84

A similar analysis was conducted on the three institutional support items in the students' questionnaire and, as seen in Table 4.12, the benchmark had a good reliability reading at 0.73

Table 4.12

Reliability of Institutional Support Benchmark (Students)

Item No.	Institutional Support Benchmarks	Logit
1	CELPAD has measures to ensure quality standards.	0.21
2	CELPAD has electronic security measures to ensure the integrity and validity of information.	0.27
3	The technology delivery system is highly reliable.	-0.08

Number of Items = 3 Cronbach Alpha Coefficient = 0.73

As Figures 4.5 (Instructors) and 4.6 (Students) show, most of the attributes in this benchmark were given low rating by both students and instructors.

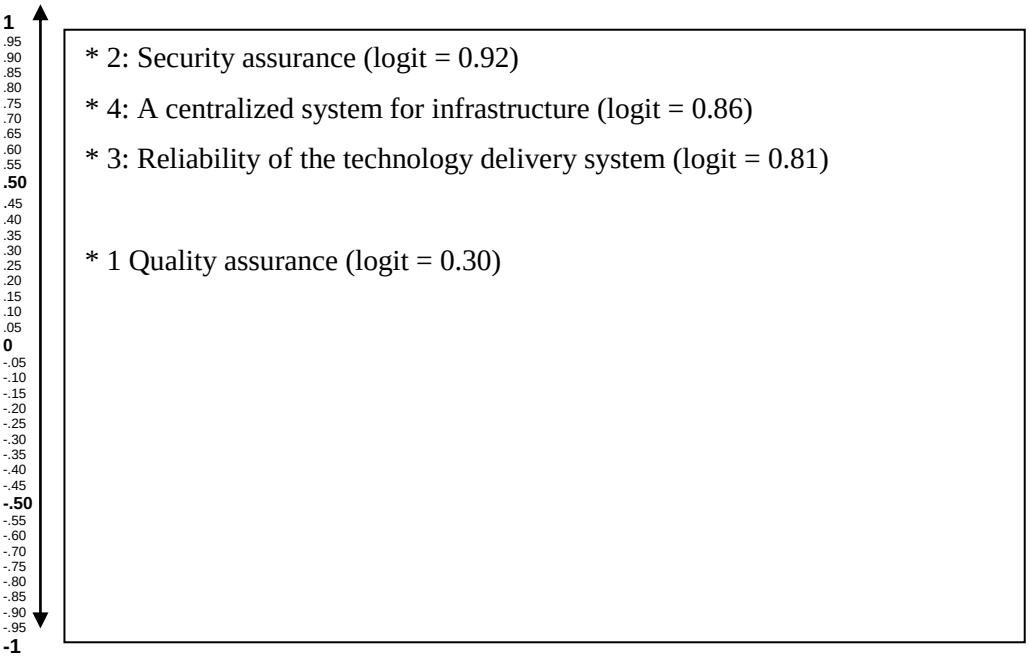


Figure 4.5. Institutional Support Benchmark (Instructors)

Figure 4.5 shows that the instructors perceived some items as more difficult than others. Almost similar perceptions were felt by the students as seen in Figure 4.6

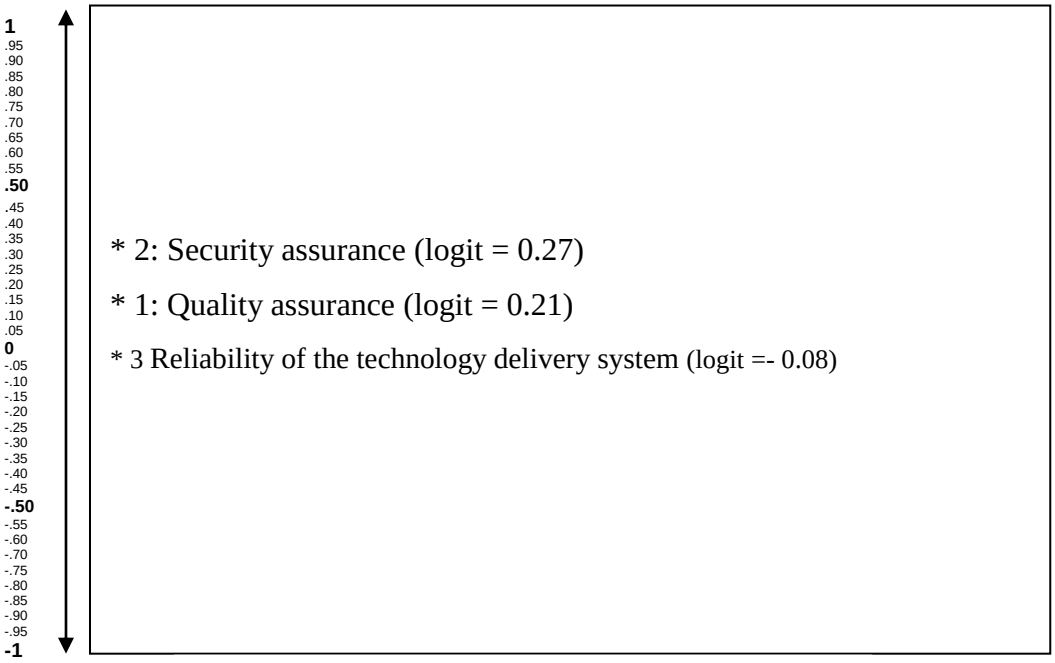


Figure 4.6 Institutional Support Benchmark (Students)

The findings of each element in the benchmark will be presented in detail. The elements that were given very low rating will be presented first followed by the attributes that received higher rating.

4.4.1.1 Security assurance

As far as the instructors were concerned, they felt that of the four procedures of the institutional support benchmark, CELPAD provided assurance for quality standards more than assurance for security. Similar findings were found in the students' responses as seen in Figure 4.6. The students' comments in the course of the interviews were similar to their instructors'. Out of 15 instructors interviewed, ten complained about the security measures. In fact, one of the interviewees (the course developer) was very concerned about the lack of security measures:

> Well, in terms of security, I do not think we have any. In terms of the password, nobody should be allowed to enter the chat room unless he has the password. The password should be the name of the section and

> the teacher. Look! Now the chat room is set up on Yahoo which means that anybody out there can come into the chat rooms. Let us just have a look. I want to go to the chat room. These instructors should not be here. Brother Khairul is there, but he is not supposed to be there, it is lunch-time and students are not around. Ok let us contact him. He's not there but his name is there.

The course developer claimed that the chat room was not well-protected and most instructors did not know how to use it.

4.4.1.2 A centralized system for infrastructure

Infrastructure was also given a very low rating as Figure 4.5 shows. The interviews revealed that several reasons could have contributed to this result. For example, unreliable functions, administrative problems, and lack of commitment were among the reasons mentioned. This was explained by instructor 5:

> We do not really have a body to look into this online learning concept. It hasn't been taken seriously. We need financial resources to upgrade but there is no approval from the upper management. The work has been left on a voluntary basis.

Another possible reason was expressed by instructor 7 who believed that the top management was committed to the idea but the problem was how to implement it. According to him, the authority did not have enough knowledge and left things without proper monitoring:

> I think CELPAD does give support to such programmes and the Dean is very encouraging but he leaves the things to the heads to do their business without monitoring and they do not give him a clear picture as of what is going on (sic). The middle management (Head of English Division) does what she thinks is right …

This shows that the staff were not sure (or not fully informed) of the decisions made by the management.

While Instructor 8 reported that he got some support at first but there was no ongoing commitment. Instructor 11 remarked that CELPAD gave some support to such programmes but that more commitment was actually needed. Instructor 12 was very pessimistic about the status of the course:

> Sad to say this is done in haste. This is why it is not working in the way we expect it to work. We are not prepared as instructors and programmers and the outcome is not as we expected. It is not a carefully planned programme.

Finally, the instructors were asked if there was a clear, well-understood process by which the online programme evolved from conception to administrative authorization to implementation.

Only a few instructors gave their opinions, the others said that they were not aware of how the programme evolved. Instructor 5 said: "It was done in a rush so every part of the development was weak". Instructor 8 said that when he started the course there was no clear idea. It was just learning. The scheme of work was clear-cut but the implementation was not clear. Like several instructors, the Head of the Division was also vague about how the course evolved from conception into implementation. All of these are possible reasons why infrastructure was given a low rating.

4.4.1.3 Reliability of the technology delivery system

The reliability of the technology delivery system was also not rated highly by both instructors and students. They reported that the last virus attack (September, 2003) crippled technology and that it was a blow to the students who were in the middle of the process of writing their research papers. The students were not able to have full access to the system for more than one month. Moreover, students complained about the reliability of the links, describing them as dead links. They also reported that they

faced difficulties at the beginning of the semester. Some students complained about the software saying that they faced difficulties in submitting their projects on time due to malfunctioning of the folders and or the server provider. Student 3 said: "This can be a really great and useful way to teach a class, but then it can also be very frustrating when the servers are down or when there are technical problems". He added that the homepage had a lot of dead links. One of the students pointed out that the system was somehow confusing since they were not guided on how to convert a file or activate the chat room. However, after the first three weeks, he said that he started to cope with the course.

4.4.1.4 Quality assurance

Both students and instructors perceived that CELPAD has quality assurance measures. The quality assurance procedure was given a better rating in comparison to other items in this benchmark. This was supported by eight (53.3%) instructors in the course of the interviews. The instructors reported having regular meetings at the departmental level in order to ensure quality standards. However, the other seven instructors (46.7%) felt there was not enough commitment to ensure the quality standards of the online course as shown in Table 4.13.

Table 4.13

Instructors Response to Quality Assurance

Quality Assurance	n	%
Instructors who agreed that there was commitment to ensure quality standards.	8	53.3
Instructors who felt that there was not enough commitment to ensure quality standards.	7	46.7
Total	15	100

4.4.2 Faculty Support

This benchmark includes five services and activities that assist instructors in teaching online. Since these aspects are not relevant to students, they were not included in the student questionnaire or interviews. The following are the five services and activities:

- Availability of peer monitoring resources;
- Accessibility of technical assistance;
- Faculty provision with written resources;
- Online insurance of instructor training; and
- Faculty assistance in the transition from offline to online class.

As seen in Table 4.14, the Cronbach Alpha Coefficient is 0.80 and this is a high reliability reading.

Table 4.14

Reliability of Faculty Support Benchmark (Instructors)

Item No.	Faculty Support Benchmarks	Logit
24	Technical assistance in course development is available to faculty and they are encouraged to use it.	0.75
25	There are peer monitoring resources available to faculty members teaching online courses.	0.86
26	Online instructor training continues throughout the progression of the class.	0.64
27	Faculty members are assisted in the transition of classroom teaching to online instruction and are assessed in the process.	0.64
28	Faculty members are provided with written resources to deal with issues arising from the student use of electronically-accessed data.	0.70

Number of items = 5 Cronbach Alpha Coefficient = 0.80

Figure 4.7 presents the ordering of the instructors' perception of the services under the faculty support benchmark.

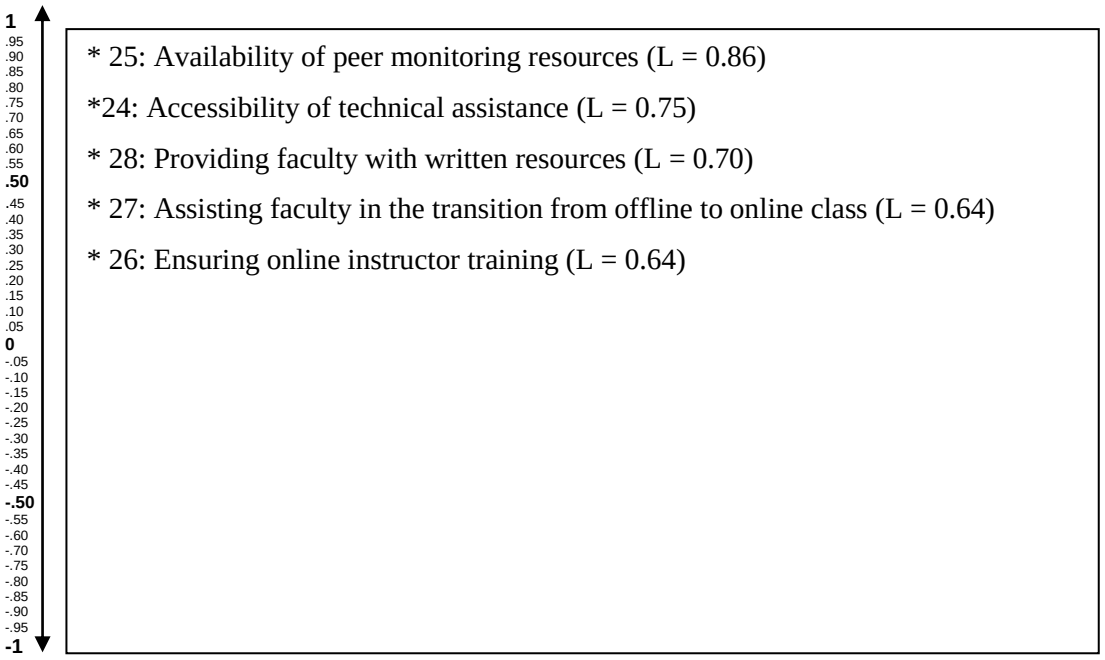


Figure 4.7. Faculty Support Benchmark (Instructors)

Of the five services examined, the instructors felt that CELPAD had difficulties in meeting two aspects of this benchmark: peer monitoring resources and technical assistance. The other three aspects: training, written resources and assistance in the transition from classroom teaching to online were also given low rating but not as low as the previous two as seen in Figure 4.7. The possibility is that many instructors were not aware of the availability of the various forms of support provided as indicated in the interview sessions.

The perceptions of the instructors pertaining to each of these aspects are presented in this section, beginning with the services that were given the least rating and then followed by the services that were given better rating.

4.4.2.1 Availability of peer monitoring resources

The instructors gave this procedure a very low rating (L = 0.86). The interviews revealed that there were no peer monitoring resources available to instructors. When

the instructors were interviewed, they expressed the lack of peer monitoring resources throughout the progression of the online course. They considered peer monitoring resources to be important especially for novice online instructors.

4.4.2.2 Accessibility of technical assistance

The instructors gave technical assistance a very low rating (L = 0.75). When they were asked about the degree to which technical assistance and other support services were available, ten instructors (66.6%) claimed a lack of technical assistance and support services whereas five instructors were satisfied as shown in Table 4.15.

Table 4.15

Instructors Response to Technical Assistance

Technical Assistance	n	%
Instructors who were not satisfied with the technical assistant.	10	66.6
Instructors who were satisfied with the technical assistant.	5	33.4
Total	15	100

The instructors who were not satisfied with the technical assistant they received complained about the technicians' performance. Instructor 13 said:

> When I need support, no one gives me such support. We are left alone. I am not satisfied at all with the technicians' work. Technicians just open and close the lab. When we complain to them about computers, they just take notes. Technicians should be taught attitude and management. They have the experience but they do not have the directives. They never stopped by to check any system failure.

Instructor 8 expressed the same opinion: "Most of the time the technicians are not there. You go out, cry, nobody comes". When the Head of the English Division was asked to comment on the technicians' failure to do their job properly, she pointed out

that CELPAD has a shortage of technicians and they were also assigned to do other tasks.

4.4.2.3 Faculty provision with written resources

The instructors gave written resources a low rating (L = 0.70). In the course of the interviews, five instructors reported having some written resources dealing with issues arising from the student use of online data whereas 10 instructors reported a lack of such resources as shown in Table 4.16.

Table 4.16

Instructors Response to Written Resources

Written Resources	n	%
Instructors who were provided with some written resources	5	33.4
Instructors who were not provided with written resources	10	66.6
Total	15	100

This could be the reason why some instructors felt that they were not properly guided in teaching the course online.

4.4.2.4 Faculty assistance in the transition from offline to online

Similarly, instructors gave the transition from offline to online a low rating though it was not as low as the previous aspects (L = 0.64). Five instructors (33.4%) mentioned that they had attended training courses to prepare them to move to the online mode of delivery. However, the majority (66.6%) reported that they were just asked to teach without being given any assistance as shown in Table 4.17.

Table 4.17

Instructors Response to Assistance in Online Delivery Transition

Faculty assisted the transition from offline to online	n	%
Instructors who felt that they were assisted	5	33.4
Instructors who felt that they were not assisted	10	66.6
Total	15	100

4.4.2.5 Online insurance of instructor training

Training was also given a low rating by instructors (L = 0.64). The qualitative data substantiated this finding. It was apparent that the course developer offered training courses and workshops for the instructors who were teaching the course. Most of the instructors were given a briefing on how to use the system, the course material, and training sessions on general computer use.

However, 11 instructors (73.3%) believed that training was not sufficient and they asked for more workshops and training sessions as shown in Table 4.18.

Table 4.18

Instructors Response to Online Training

Ensuring online instructor training	n	%
Instructors who attended training courses for online delivery.	11	73.3
Instructors who did not attend training courses for online delivery.	4	26.7
Total	15	100

Instructor 9 said, "in terms of sufficiency it is sufficient, but we have to continue doing it in order to feel comfortable". However, the course developer (instructor 10) had another opinion:

> Well, that is not sufficient and there is a kind of battle to win the hearts and minds of the instructors who have resistance to change. Nobody comes to the training programmes. We run workshops but who comes every Wednesday and Thursday! We have students who are much more knowledgeable than the instructors. Some instructors do not know how

> to fix technical problems, so they feel threatened. We are not teaching IT, we are teaching English. They do not get it. And you can see the attitude to the course in the way it is maintained. It is not maintained.

In fact, when the instructors were asked to comment on whether they had attended training programmes and whether they considered them appropriate and adequate, they reported that there were very few training programmes and workshops organized for them. Eleven (73.3%) instructors said that there was a training course to teach EAW but the problem was that it was not well attended. When the person (instructor 10) who was in charge of conducting the training courses was asked to comment on this issue, she confirmed that she conducted training courses on Wednesdays and Thursdays but few attended:

> At the beginning of every semester, I run a regular teacher training workshops for two hours every Wednesday and every Thursday. The maximum that I ever had turn up was three teachers and they usually came late. I can show you teachers here who have never been to training workshops, who had never got the course guidelines because it is with me and I know who is using it.

When one of the administrators was asked to comment on the poor attendance at such workshops, he said that sometimes some instructors did not attend the training courses for several reasons such as: time, interest, and clashed schedules. Instructor 7 said that he wanted to attend such courses but the time was not suitable and that it was held during the lunch hour. Instructor 2 said that the lecturers did not attend such workshops because they were not instructed by the Head of the English Division and that there was no monitoring. Some of the instructors considered the available facilities sufficient and they were satisfied with them.

4.4.3 Evaluation and Assessment

The evaluation and assessment benchmark includes those policies and procedures that address how the institution evaluates the online course. Since these aspects were not relevant to the students, they were not included in the student questionnaire or interviews. The following are the policies and procedures of evaluation and assessment:

- The programme's educational effectiveness;
- The various methods used to measure the programme's effectiveness;
- The evaluation process used to improve teaching/learning;
- The use of specific standards to compare and improve learning; and
- The review of intended learning outcomes to assure clarity, utility, and appropriateness.

As Table 4.19 shows, the evaluation and assessment benchmark consisted of five items. The Cronbach Alpha Coefficient was 0.86 reflecting a relatively high reliability reading.

Table 4.19

Reliability of Evaluation and Assessment Benchmark (Instructors)

Item No.	Evaluation and Assessment Benchmarks	Logit
29	The programme's educational effectiveness is measured using several methods.	0.53
30	An evaluation process is used to improve the teaching/learning process.	0.42
31	Specific standards are in place to compare and improve learning outcomes.	0.18
32	Data on enrolment, cost and successful/innovative uses of technology are used to evaluate programme effectiveness.	1.02
33	Intended learning outcomes are regularly reviewed to ensure clarity, utility, and appropriateness.	0.12

Number of items = 5 Cronbach Alpha Coefficient = 0.86

As Figure 4.8 reveals, evaluating the programme's educational effectiveness through data on enrollment, cost, and successful uses of technology was given a very low rating while the other aspects were given better ratings. It was noticed that improving and reviewing learning outcomes were the easiest to agree with.

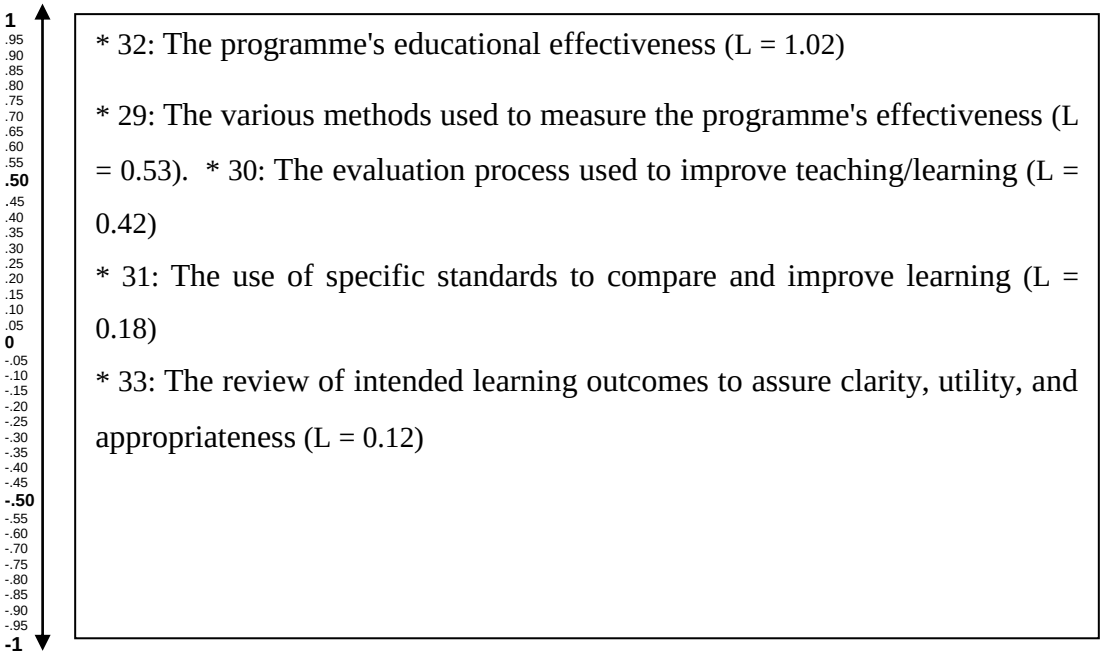


Figure 4.8: Evaluation and Assessment Benchmark (Instructors)

Each of the above-mentioned items will be discussed in greater details in the following sections.

4.4.3.1 The programme's educational effectiveness

Although the course has been in place since 2000, no formal study or evaluation has been attempted on the part of the administration. The findings of the questionnaire and the results of the interviews confirmed this. The qualitative data complemented this perception since the discussion with the instructors revealed that there were no measures taken by the institution to evaluate the programme's effectiveness. The instructors reported that no official studies had been conducted on the effectiveness of

the programme. Thirteen instructors (86.6) reported that institutionally there was no review of the programme but that there were a number of studies, and a number of instructors doing some research on the programme, comparing online and offline teaching (Mustapha & Anwar, 2002; Nuraihan and Ainol, 2005). It seems that the instructors were not aware of these two studies when the interviews were conducted. This indicates that the studies were not made widely known to the instructors. They reported that they had completed questionnaires and that they wondered why the institution had not briefed them about the results of the studies. Seven instructors (46.6%) expressed their interest to know the results of the questionnaires. They were interested to know the results and receive feedback. Since there was no formal review of the effectiveness of the course, there were no measurable results.

4.4.3.2 The various methods used to measure the programme's effectiveness

The instructors gave this statement a low rating (L = 0.53). Since they felt that there was no mechanism to evaluate the effectiveness of the programme, most of the respondents found it difficult to agree with this statement. The instructors reported that no formal evaluation was done other than the informal meetings and discussions.

4.4.3.3 The evaluation process used to improve teaching/learning

The instructors gave this statement a low rating. According to them, there was practically no such evaluation. In the interviews, while eight instructors (53.3%) said that they were not aware of such an evaluation, the others said that there was no evaluation at all for the online course as shown in Table 4.20.

Table 4.20

Instructors Response to Evaluation Process

Evaluation process used to improve teaching/learning	n	%
Instructors who were not aware of an evaluation process	8	53.3
Instructors who said that there were no such evaluation process	7	46.7
Total	15	100

4.4.3.4 The use of specific standards to compare and improve learning

The instructors gave this statement a low rating (L = 0.18). In the interviews, they pointed out that the institution called for regular meetings to discuss how to improve the learning outcomes. However, as shown in Table 4.21, seven instructors (46.6%) found it difficult to agree with the statement due to the fact that these meetings were meant for all courses offered in the Centre and were not only for the online course. No specific standards were mentioned in the meetings.

Table 4.21

Interview Data for Standards Used For Comparing and Improving Learning

The use of specific standards to compare and improve learning	n	%
Instructors who felt that there were specific standards to compare and improve learning.	8	53.3
Instructors who found it difficult to agree that there were specific standards to compare and improve learning.	7	46.7
Total	15	100

4.4.3.5 The review of intended learning outcomes to assure clarity, utility, and appropriateness

Though this statement was given a low rating (L = 0.12), it was perceived much better than all of the other statements in the benchmark. In the interviews, 12 instructors (73.3%) reported that they were satisfied with the performance of students whereas

the other three felt that their students' performance could be improved as shown in Table 4.22.

Table 4.22

Instructors Response to Students' Performance

Students' performance	n	%
Instructors who were satisfied with the students' performance.	12	73.3
Instructors who felt that the students' performance could be improved.	3	26.7
Total	15	100

After all, the aim of the course was to write a well-developed, argumentative research paper. Instructor 9 was very proud of the result:

> It is a good course and this university should be proud of what we have done. The materials are online. They work together. We have media labs those other institutions would say "wow we do not have multimedia labs like you have" (sic). We should be proud of this. This is actually an accomplishment. We actually produced a lot of materials and we have it. I think we are improving all the time.

4.4.4 Student Support

This benchmark includes those support services normally found in an educational institution. They include:

- Technical assistance;
- A structured system to address students' complaints;
- Written information regarding course requirements and student support services; and
- Access to materials through electronic databases, and news services.

Both students and instructors were asked to give their perception on this benchmark. As Table 4.23 shows, under the student support benchmark there were four items in the instructor questionnaire. A reliability analysis for the student support benchmark was conducted. It was found that the Cronbach Alpha Coefficient was 0.75, reflecting an acceptable reliability reading.

Table 4.23

Reliability of Student Support Benchmark (Instructors)

Item No.	Student Support Benchmarks	Logit
20	Students receive information about programmes, including admission requirements, tuition and fees, books and supplies, technical and proctoring requirements, and student support services.	-0.18
21	Students are provided with hands-on training and information to aid them in securing materials through electronic databases, interlibrary loans, government archives, news services, etc.	-0.25
22	Easily accessible technical assistance is available to all students throughout the duration of the course /programme.	0.75
23	Questions directed to student service personnel are answered accurately and quickly, with a structured system in place to address student complaints.	0.53

Number of items = 4 Cronbach Alpha Coefficient = 0.75

Similarly, a reliability analysis was conducted on the six student support items in the student questionnaire and, as seen in Table 4.24, the benchmark had an acceptable reliability reading of 0.70 considering the few number of items.

Table 4.24

Reliability of Student Support Benchmark (Students)

Item No.	Student Support Benchmarks	Logit
32	I received information about programmes, including admission requirements, tuition and fees, books and supplies, technical requirements, and student support services.	0.93
33	My questions to student service personnel are answered accurately and quickly, with a structured system in place to address student complaints.	0.75
34	My complaints to the online instructors were addressed adequately.	0.80
35	There was easily accessible technical assistance available to me throughout the duration of the course /programme.	1.13
36	I could retrieve course materials according to the schedule.	0.47
37	I was provided with hands-on training and information to aid me in securing material through electronic databases, interlibrary loans, government archives, news services, etc.	0.35

Number of items = 6 Cronbach Alpha Coefficient = 0.70

Figure 4.9 (Instructors) and Figure 4.10 (Students) show that the instructors and the students perceived this benchmark differently.

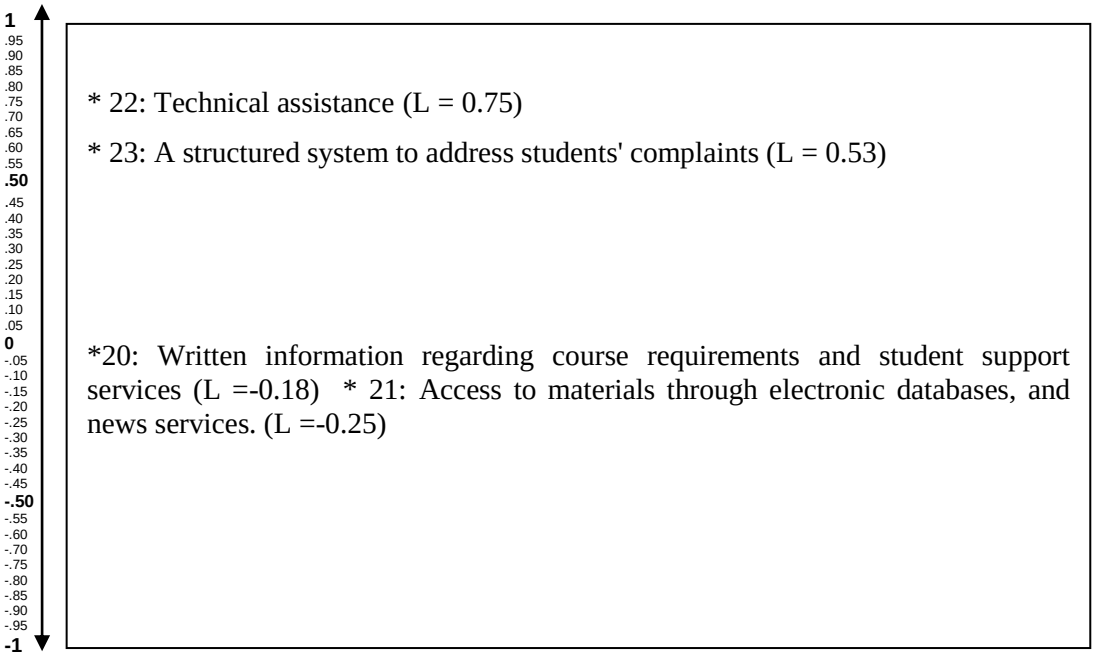


Figure 4.9: Student Support Benchmark (Instructors)

Figure 4.9 reveals that the instructors gave a very low rating to only two items in the benchmark, whereas the students, as shown in Figure 4.10, gave a very low rating to all the items in the benchmark. This indicates that there was a difference in the perceptions of the instructors and the students.

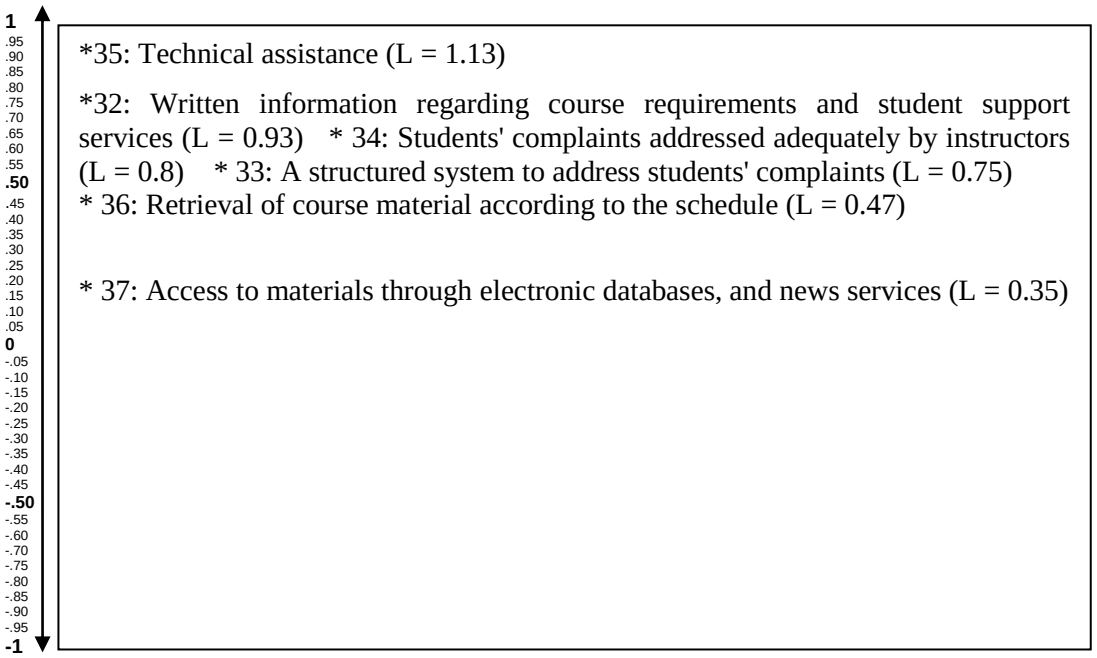


Figure 4.10: Student Support Benchmark (Students)

This section presents the services that were given a very low rating first followed by those given better ratings.

4.4.4.1 Technical assistance

As Figure 4.9 and Figure 4.10 show, the *technical assistance* was given an extremely low rating by both instructors (L = 0.75) and students (L = 1.18). In fact, both the instructors and students rated it as the lowest of the items examined in all of the benchmarks. This low rating shows that there was a very strong consensus in the perception of the students and their instructors. This consensus signifies that both

instructors and students agreed that there was a lack of technical assistance. This finding was supported by the qualitative data as well: the instructors admitted that there was no help desk available to students. However, one of the instructors (the course developer) said that there was a help desk but she doubted whether the instructors knew where it was. She added that the students had her email address and that the instructors were expected to spend the first week introducing the course to the students. The students should have the instructors' and technicians' email addresses.

The instructors who were aware of the availability of technical support pointed out that it was not an immediate support. The interview findings suggested that there is an indirect way if the students face a technical problem, the instructors report it to the technicians who in turn try to solve it at their convenience. Instructor 2 reported that the students did not have enough information regarding the use of computers. They did not even know how to access the Web. On the other hand, seven instructors (46.6%) of the 15 interviewed said that they did not think that the students needed a help desk. However, instructor 4 had a different opinion regarding this issue. He said: "some students might need some extra lessons in basic computing skills and on how to use the Internet". He wondered whether the instructors were supposed to teach them both in class. He reported that his job was to concentrate on language teaching and not to teach technology. He did not want to end up teaching computer literacy. He emphasized the role of the help desk. He pointed out that there was a shortage of technicians. They were around but instructors and students could not locate them.

In the course of the 30 interviews, 22 students (73%) showed that they were frustrated by the technical problems. For example, student 15 said: "I had trouble with the technical part of the Web; I could not download informational links given, nor print the assignments or save them." Student 18 reported that the server was very slow

and crashed during chat. Student 1 added: "I am finding that the system is slow to load or get connected to. I am also having problems sending assignments to my instructor in a format that he can open and read. It has been a frustrating class for these reasons." He claimed he did not receive technical assistance to overcome the problems he encountered.

4.4.4.2 A structured system to address students' complaints

This statement was given low rating by both instructors (L = 0.53) and students (L = 0.75), as shown in Figures 4.9 and 4.10 derived from statistical analysis of the questionnaires. For the second time, there was a strong consensus among the students and the instructors. Findings from the interviews supported the quantitative data. In the course of the interviews, the instructors said that there was no structured system to address students' complaints. When asked whether they were informed of the technology requirements and the required technological competence, the instructors said that they were not and when they were asked whether they should possess technological competence, Instructor 5 replied: "The students are in the dark when they register for the course." The implication is that many were not ready for online pursuit of learning. The instructors reported that the course was compulsory for all students and they assumed that the students possessed the necessary technological skills. However, they discovered that some of the students did not know the basics of computers. Many did not have even email addresses.

When the instructors were asked how they dealt with the lack of computer literacy among some students, they reported that they sought the help of the more competent students to teach their friends during the class.

Similar views were revealed in the course of the interviews with the students. Of the 30 interviewed, ten students (33.3%) reported that some instructors were not as helpful as others. For example, student 7 complained: "The thing about this programme that I truly hate is the fact that my instructor is very slow to answer, if she answers at all. She is very slow in communicating any information regarding our assignments." Student 12 pointed out that he had many questions that were difficult to ask and be answered through email. He found it very frustrating.

4.4.4.3 Written information regarding course requirements and student support services

Based on Rasch Analysis, this statement was given low rating by students (L = 0.53) though the instructors rated it higher (L = -0.18). The results are shown in Figures 4.9 and 4.10. This statement was given better rating by the instructors than the students. Because instructors assumed that students received such services and technical requirements. It was the students who really experienced this difficulty. They felt that the information provided were certainly not sufficient. This indicates there was a gap between instructors' and students' expectations.

The students were asked in the course of the interviews to comment on whether they had the necessary technological equipment and skills required for the course. As shown in Table 4.25, twenty-five students (83.3%) reported that they had some technological skills and they did not face problems in using the facilities. However, five (16.7%) out of the 30 students interviewed reported that they were not computer literate when they enrolled in the course and it took them some time before they were able to handle the Internet. The support they received was more from their classmates and friends than from the staff.

Table 4.25

Students Response to Technological Skills

Technology skills	n	%
Students who had some technological skills.	25	83.3
Students who were not computer literate when they enrolled in the course.	5	16.7
Total	30	100

They were also asked if they received adequate technical support when they encountered difficulties. On this the students were equally divided into two groups. One group reported that they had adequate technical support. The other reported that they faced difficulties in logging in and in overcoming other technological problems. They claimed that they did not receive help from the technicians. Most of the students who claimed that there was adequate technical support reported that the support was from their instructors and not from the technicians. Due to their lack of computer skills, some students (33.3%) felt that they were handicapped in acquiring the skills taught in the course.

4.4.4.4 Access to materials through electronic databases, and news services

The questionnaire based findings suggest that the instructors gave quite a moderate rating to this statement (L =-0.25). The information collected from the interviews also supported this finding. The instructors doubted whether their students made full use of the library resources. They could not tell how much their students used them and for what purposes. However, 13 instructors (86.6%) revealed that all of the online EAW students attended workshops on how to use the library facilities and the databases. This may be the reason why the instructors felt that the Centre had met the benchmark.

The students gave this statement a low rating. However, in comparison to other statements in the same benchmark, it was given a better rating by the students. This may be explained by the fact that the databases were available to the students but, as the instructors explained, it was not clear whether students made full use of them.

In addition to the four support services mentioned above, two other aspects were included in the student questionnaire: The two aspects were: *students' complaints addressed adequately by instructors* and *ensuring retrieval of course material according to the schedule*.

4.4.4.5 Students' complaints addressed adequately by instructors

As shown in Figure 4.10, this aspect was given a very low rating (L = 0.80) by the students. This means that the students' complaints were not addressed satisfactorily by their instructors. As shown in Table 4.26, among the students who were interviewed, 17 (56.7%) claimed that they sent emails and asked questions but the answers from their instructors were not adequate whereas the other students (43.3%) admitted that their complaints were addressed adequately.

Table 4.26

Students Response to Addressing their Complaints Adequately

Students' complaints	n	%
Students who believed that their complaints were addressed adequately.	13	43.3
Students who believed that their complaints were not addressed adequately.	17	56.7
Total	30	100

When the students were asked if their questions and complaints were answered accurately and in a timely fashion, most of them reported that if the questions were asked in the classroom, the instructors would answer them promptly. However, if the

queries were through emails, they were usually slow in responding and some instructors never replied to the students' emails.

4.4.4.6 Ensuring retrieval of course material according to the schedule

This aspect was given quite low to moderate rating (L = 0.47) by the students. The interviews with the students supported this finding because most of the students described the course as very demanding. They said they could not retrieve the course material according to schedule. Some students reported that the time limit for the assignments was sometimes very hard to meet due to technical glitches.

4.4. 5 Teaching and Learning

The teaching and learning benchmark includes those activities related to pedagogy or the art of teaching: They are:

- Promoting student interaction with other students;
- Instructing students in proper methods of research;
- Providing timely feedback to student questions;
- Promoting student interaction with faculty;
- Ensuring non-threatening and constructive feedback;
- Providing timely feedback to student assignments.

As Table 4.27 shows, six items were examined in the instructor questionnaire. Cronbach Alpha Coefficient was computed and it was found that the benchmark had a relatively high reliability reading of 0.87.

Table 4.27

The Reliability of the Teaching and Learning Benchmark (Instructors)

Item No.	Teaching and Learning Benchmarks	Logit
9	Student interaction with faculty is facilitated through a variety of ways.	-0.90
10	Student interaction with other students is facilitated through a variety of ways.	-0.57
11	Feedback to student assignments is provided in a timely manner.	-1.10
12	Feedback to student questions is provided in a timely manner.	-0.90
13	Feedback to students is provided in a manner that is constructive and non-threatening	-1.10
14	Students are instructed in the proper methods of effective research, including assessment of the validity of resources.	-0.82

Number of items = 6 Cronbach Alpha Coefficient = 0.87

The Cronbach Alpha Coefficient was also computed for the same benchmark in the student questionnaire and, as seen in Table 4.28, the benchmark had a high reliability reading at 0.90. It should be stated that in the student and instructor questionnaire this benchmark was found to be the most reliable.

Table 4.28

The Reliability of the Teaching and Learning Benchmark (Students)

Item No.	Teaching and Learning Benchmarks	Logit
12	The instructor provided me with sufficient help when I needed it.	-0.78
13	The instructor provided enough examples to allow me to better understand the subject matter.	-0.51
14	The instructor encouraged proper communication among students	-0.17
15	The instructor offered sufficient feedback to help me achieve my learning goals.	-0.57
16	The instructor's feedback to my questions is provided in a timely manner.	-0.31
17	The instructor's feedback to my assignments is provided in a timely manner.	-0.40
18	The instructor's feedback is offered in a constructive non-threatening manner.	-0.18
19	The instructor made efficient use of class time.	-0.72
20	The instructor encouraged students to think for themselves.	-0.57
21	There was sufficient interaction with the instructor to meet my needs	-0.30
22	The course learning activities contributed to my learning goals.	-0.36

Number of items = 11 Cronbach Alpha Coefficient = 0.90

The findings indicate that the teaching and learning benchmark was given a very high rating by both students and instructors as seen in Figure 4.11 and Figure 4.12. Most of the respondents agreed that the activities mentioned in this benchmark were available in the institution with some activities better met than others.

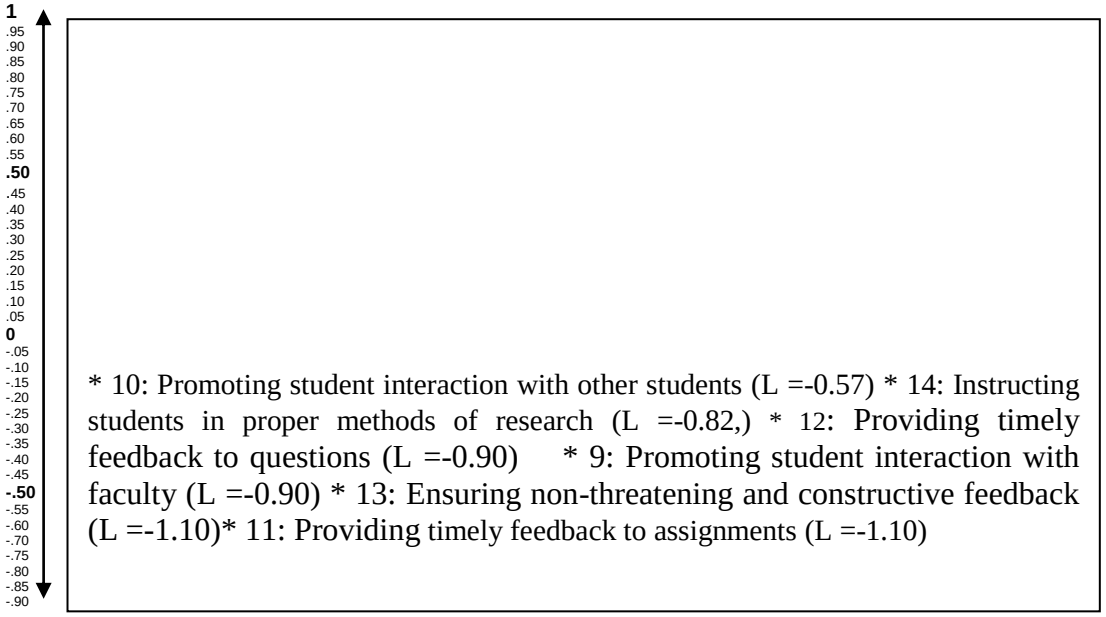


Figure 4.11. Teaching/Learning Benchmark (Instructors)

As shown in Figure 4.12, the teaching and learning benchmark items in the instructor questionnaire had six items, whereas the student questionnaire consisted of 11 items (see Figure 4.12). All of the items in the instructor questionnaire were given a very high rating. This means that as far as this benchmark is concerned, the instructors seemed to concur for each given statement. Moreover, as shown by Figure 4.12, the student questionnaire that consisted of 11 items also got high ratings.

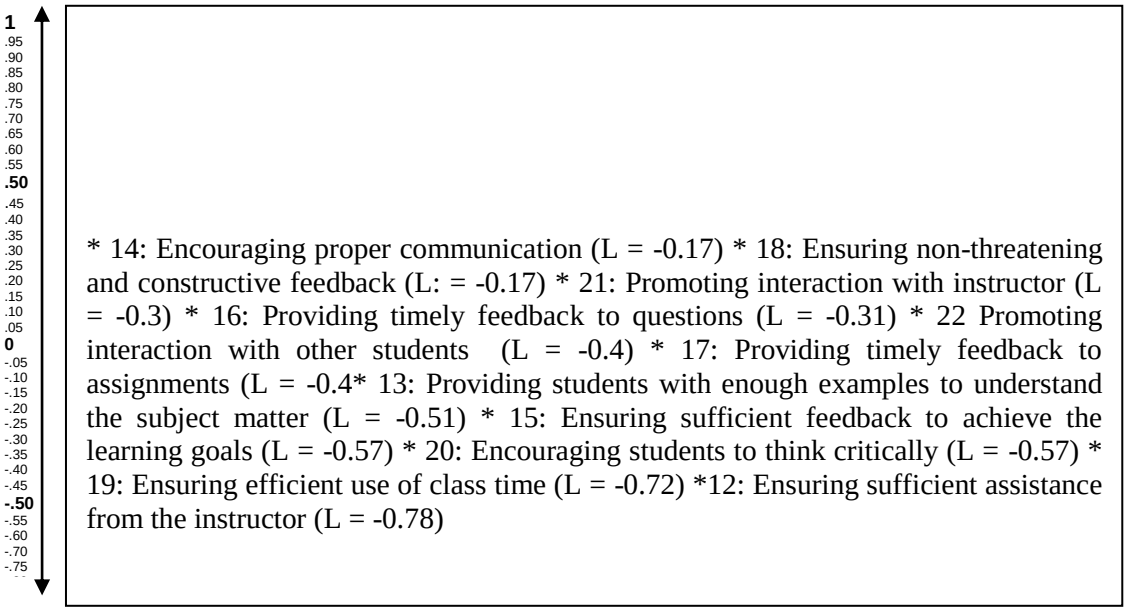


Figure 4.12. Teaching/Learning Benchmark (Students)

The findings relevant to each activity in this benchmark are presented in the following subsections.

4.4.5.1 Providing timely feedback to student assignments

This activity was given a very high rating (L = -1.10) by the instructors. In the course of the interviews, most of the instructors reported that they returned students' assignments on time. Though students agreed with this, their rating (L = -0.40) was not in as high as their instructors. In the course of the interviews, 21 students (70%) pointed out that they did not receive feedback on their assignments whereas 9 students (30%) pointed out that they received beneficial feedback as shown in Table 4.29.

Table 4.29

Students Response to Feedback on Assignments

Adequate feedback on assignments	n	%
Students who admitted that they received adequate feedback on their assignments.	13	43.3
Students who claimed that they did not receive adequate feedback on their assignments.	17	56.7
Total	30	100

Students believed that feedback was important for them. For example, student 28 explained: "We cannot learn from our mistakes in this online programme. When I submit my assignments I get a grade but no feedback. My opinion is that some instructors do not understand what it is like to learn this way." However, other students had other opinions since the instructors were not the same for all of the students. For example, student 10 was very satisfied with his instructor's feedback on his assignments. He added: "My instructor is very good at responding quickly to my assignments and giving beneficial feedback. This has assisted to lessen some of the worry I was feeling at the beginning of the course."

4.4.5.2 Ensuring non-threatening and constructive feedback

According to the instructors, their feedback to students was provided in a manner that was constructive and non-threatening. The students agreed with this activity but not in a manner similar to their instructors.

4.4.5.3 Providing timely feedback to student questions

Instructors gave a high rating (L = -0.90) for this activity. However, similar to feedback on assignment, the students' rating (L = -0.40) was not as high as their instructors. In the course of the interviews with the students, student 16 stated that he found difficulty in getting his instructor's feedback. Student 13 complained that his instructor never answered his email and that he found it very difficult to get in touch with her. However, 22 students (73%) did not share this opinion. Twenty-five students (83.3%) reported that there was sufficient feedback from their instructors regarding their learning goals. The students reported that this kind of feedback improved their

knowledge and helped them in their research. The feedback was given through the discussion board and the use of email.

4.4.5.4 Promoting student interaction with faculty and students

These two activities relate to interaction, and they were given quite a high rating by the instructors (L = -0.90) but a moderate rating by the students (L = -0.30). *Interaction with faculty* was given higher rating than *student interaction with other students* by instructors. In contrast, the students gave a higher rating to *student interaction with other students* than *interaction with instructors.*

When the students were asked about the nature of their interaction with their classmates and instructors, 26 (83.3%) of the students interviewed said that they interacted with each other but it was face-to-face and not through the chat rooms whereas, as shown in Table 4.30, four students pointed out that sufficient interaction did not take place.

Table 4.30

Students Response to Interaction

Interaction	n	%
Students who admitted having sufficient interaction.	26	86.7
Students who claimed that there was no sufficient interaction.	4	13.3
Total	30	100

The students emphasized the importance of interaction in the learning process. The rest revealed that they did not interact with their fellow students because they were not encouraged to do so by their instructors.

Where the interaction with the instructors was concerned, 25 students (83.3%) acknowledged that they did so inside the classroom. Student 7, however, felt that the

instructors did not seem to interact as much as they should have. He wished that they had interacted more. Six students (20%) mentioned that they tried the Internet facilities to communicate with their instructors but that not all attempts were successful. They claimed that the instructors rarely replied to their emails and this frustrated them. Most of the instructors did not read their students' emails and those who did normally give very brief replies. The lack of response dissatisfied the students. There were also instructors who read the emails and answered them face-to-face. Although some students seemed to think that feedback and help were fulfilled, the general impression created is that communication with the instructors was not that satisfying.

The students were also asked if they participated in online conversations with their online instructors and classmates during the course. As shown in Table 4.31, three types of responses were found: 12 (40%) students claimed that they participated in online conversation with their instructor and classmates during the course; eight (26.7%) students revealed they did so two or three times during the semester. The rest reported that they had never participated in online conversations with their instructors and classmates during the course.

Table 4.31

Students Response to Online Conversation

Online conversation	n	%
Students who admitted having online conversation.	12	40
Students who admitted having online conversation for two or three times.	8	26.7
Students who claimed that they never participated in online conversation with their online instructors and classmates during the course	10	33.3
Total	30	100

The students were asked to mention the activities that helped in their learning process. Twenty-five students (83.3%) said that the chat rooms and the discussion activities were the main activities that influenced their learning throughout the course. Yet not all of them used the facilities.

4.4.5.5 Instructing students in proper methods of research

This statement was given quite a high rating (L = -0.82). When the instructors were asked to explain the methods they used to maintain personal interaction (a) between themselves and the students and (b) between the students, almost all of them reported that they used different methods to maintain personal interaction with other students and instructors. The methods employed varied from one instructor to another. Of the 15 instructors interviewed, seven (46.6%) claimed that they used chat rooms or discussion boards through task-based activities to generate discussion, monitor the discussion, and communicate with their students. Other instructors said that since it was a blended learning approach, they discussed with the students face-to-face and dealt with the issue individually or in groups. Instructor 8 clarified:

> Okay, first students and myself: I look into their individual work (sic) I call them individually and ask about their progress. I entertain emails. Regarding the second part of the question, I encourage group work, chat room and pair and peer work. Students email each other, use chat rooms

Instructor 9 pointed out that he did not think that there was a clear-cut distinction between traditional and online classes in terms of student-teacher interaction. He explained:

> I think that making this clear distinction between traditional and online is not actually accurate. Actually, I do not see clear distinction between traditional classrooms and online ones. In the past we used similar methods but instead of saying "go to this Website", we say "open your

> books, for example, page 10". What is the difference? We say to our students "ok, we need this… go to your computers… Look at this… Talk about that and share with the class". If the teacher does that kind of thing in the traditional classroom, he is probably more inclined to do that kind of thing in the computer system lab.

The above instructor appears to feel less comfortable with the technology, and hence, argued for the traditional way of communicating with his students. Many others shared this view. However, instructor 10 said:

> Well, basically, in the teaching methodology, we have the welcoming message which outlines for the students that they have to go straight to the discussion room. The message outlines the aims of that particular session. I let them pay attention to me when we have certain problems and then I redirect them back to the steps that they are supposed to do that day. There are materials to be looked at, I have to monitor, and there is research that needs to be maintained. And do I check what is going on? There are tasks that students need to complete. And while they are doing them, I am going round the classroom. We go to chat rooms; we discuss a particular problem or issue for 20 minutes and then turn off the chat rooms.

It should be noticed that this instructor was the only one who reported that she used the online welcoming message to communicate with her students. Some other instructors were not aware that such a feature existed.

The instructors were also asked to mention the technologies they used for programme interaction. The majority of instructors suggested that they used emails, SMS (short messaging service), chat rooms and online discussion board as the means of communication. However, a lot of them declined to use them for technical reasons. The following were some complaints about the system. Instructor 1 said that "the problem with the discussion board is that it is always busy, full, and never serviced." He also complained that the online folders had the same problem. Instructor 11 observed that the server was sometimes down and that that made him feel uncomfortable. Instructor 3 did not believe in technology and thus had never used any

with his students and would never use it. According to him the traditional method did well and thus there was no need for the change.

Instructor 5 summarized the problem saying:

> We used discussion rooms, chat rooms, emails, online folders. The students used the online folders to submit their assignments. We used to correct and send back the comments both online and in hard copy. Nowadays we have a problem because we have only one server and it is sometimes down. The lecturers have problems with the online folders because they do not know or are not interested to know how to activate them (a technological problem). They do not know whom to ask. We need one more server. In the University where I am pursuing my PhD programme, they allocate budget for online things and the idea is more successful. Here, when I was assigned for the new position in ……, nobody replaced me and the situation deteriorated. I hear about some problems and no solutions. This is because of the conflict that I talked to you about at the beginning.

Instructor 12 confirmed the previous problem with the server saying:

> Students used the online folder to drop their assignments. But they have problems. Students couldn't go in. The server is very slow. It takes 5 minutes to open the folder. Imagine having 30 students. Time consuming. We use only one server.

From the above opinions, it is clear that most of the respondents were interested in using the interactive components of the programme but that their interest clashes with technical constraints. Some of them were competent in using computers and still used the interactive components. Others decided to give up using the interactive components due to the technical problems.

The instructors were also asked to assess the success of the programme's interactive component, as indicated by student and instructor questionnaires, comments, or other measures. The instructors who were able to cope with the technical problems found the interactive components to be very successful. However, those who did not use them were not able to comment. Instructor 1 reported that his students liked it and found it very motivating. Instructor 4 postulated that some

students felt a bit dissatisfied and that was a controversial issue since different lecturers did different things. Instructor 5 had the following opinion:

> I can say that 60% of lecturers who are not comfortable with technology will not be successful. When we were given the choice, things went well but then we encountered problems by the resistance of some reluctant instructors (sic).

The course developer (instructor 10) felt that the interactive components needed to be enhanced saying:

> We can't use the folders for more than two semesters. Two semesters ago everything was ok. The problem is that the students liked online work but the instructors did not like it. I enjoy it.

When she was asked about the reason for this resistance, she said:

> Okay, most of them do not know the technicality. They are not sure about the methodologies. They are so confident when they are speaking rather than when they are writing. They do not like to seek students' help. They feel that they are threatened and lose control. It depends on the individuals. We cannot say that the older ones are worse than the younger. The resistance may be found in both.

Instructor 7 was very optimistic about the success of the interactive components and the possibility of online learning. She was very motivated and this motivation was reflected in her students. It is a good idea to report what she thinks:

> Well, my students have liked it and found it very motivating. They loved the fact that I can do things like appointing the exams day (sic), saying to them "on Tuesday night I am going to open the chat room" and the result was very interesting, all of them in the chat rooms coming on the time very motivated (sic). I use online learning for all of my students even in other classes. They found it very interesting. Students like to email me especially if they are adult learners and they are shy to express themselves in the class. It is not embarrassing to email somebody. So I use emails

The interviews with the students enabled the researcher to ask questions pertinent to teaching and learning. When the researcher asked the students to comment on whether the course activities did contribute to their learning goals, most of the students acknowledged that the course contributed to their learning goals. When they were asked if collaborative problem solving was encouraged, most of the students reported it was but unfortunately, for most of the time it was done face-to-face and not through the discussion board or the chat rooms.

There were, however, students who gave a positive opinion about the activity. Student 30 said: "This is the first online course that I have taken and the instructor has been wonderful. I will definitely take more classes online and I can only hope other instructors will be similarly motivated". Student 4 said: "Our teacher did an excellent job of making sure we understand the online course. When we had problems she solved them as fast as she could and worked with us wonderfully. She was obviously highly organized and had tried to make the system easy to use without being complex"(sic).

4.4. 6 Course Structure

The course structure benchmark includes those policies and procedures that support and relate to the teaching and learning process. These include:

- Counseling students to identify their needs and backgrounds;
- Setting guidelines for assignment completion;
- Offering information that outlines course objectives, and ideas;
- Providing access to virtual library resources; and
- Summarizing learning outcomes clearly.

The Cronbach Alpha Coefficient, as depicted in Table 4.32, was 0.81 reflecting a very good reliability reading for the course structure benchmark of the instructor questionnaire.

Table 4.32

Reliability of the Course Structure Benchmark (Instructors)

Item No.	Course Structure Benchmarks	Logit
15	Before starting an online programme, students are advised about the programme to determine (1) if they possess the self-motivation and commitment to learn online and (2) if they have access to the minimal technology required by the course design.	0.64
16	Students are provided with supplementary course information that outlines course objectives, concepts, and ideas.	-0.90
17	Learning outcomes for the course are summarized in a clearly written, straightforward statement.	-1.00
18	Students have access to sufficient library resources that may include a "virtual library" accessible through the World Wide Web.	-1.00
19	Faculty and students agree upon expectations regarding times for student assignment completion and faculty response.	-0.90

Number of items = 5 Cronbach Alpha Coefficient = 0.81

In the student questionnaire, the Cronbach Alpha Coefficient showed a relatively high reliability reading of 0.84 (see Table 4.33).

Table 4.33

The Reliability of the Course Structure Benchmark (Students)

Item No.	Course Structure Benchmarks	Logit
23	Learning outcomes for the course are summarized in a clearly written, straightforward statement.	-0.04
24	I was provided with supplementary course information that outlines course objectives, concepts, and ideas.	0.02
25	Before starting an online programme, students are advised about the programme to determine (1) if they possess the self-motivation and commitment to learn online and (2) if they have access to the minimal technology required by the course design.	0.86

Continued Table 4.33

26	I have access to sufficient library resources that may include a "virtual library" accessible through the World Wide Web (online tutorials or libraries, content-related Web sites, etc.).	-0.15
27	The course objectives were clear.	-0.25
28	Faculty and students agree upon expectations regarding times for student assignment completion and faculty response.	-0.33
29	The course experience matched the expectations of the course.	0.01
30	The assignments and learning activities were clear.	-0.14
31	Evaluation of paper and outline were fair.	0.09

Number of items = 9 Cronbach Alpha Coefficient = 0.84

As shown by Figure 4.13 the instructors gave a high rating to the items of this benchmark indicating agreeability, with some items better met than others. However, they gave a very low rating to the activity pertaining to identifying the students' needs and backgrounds.

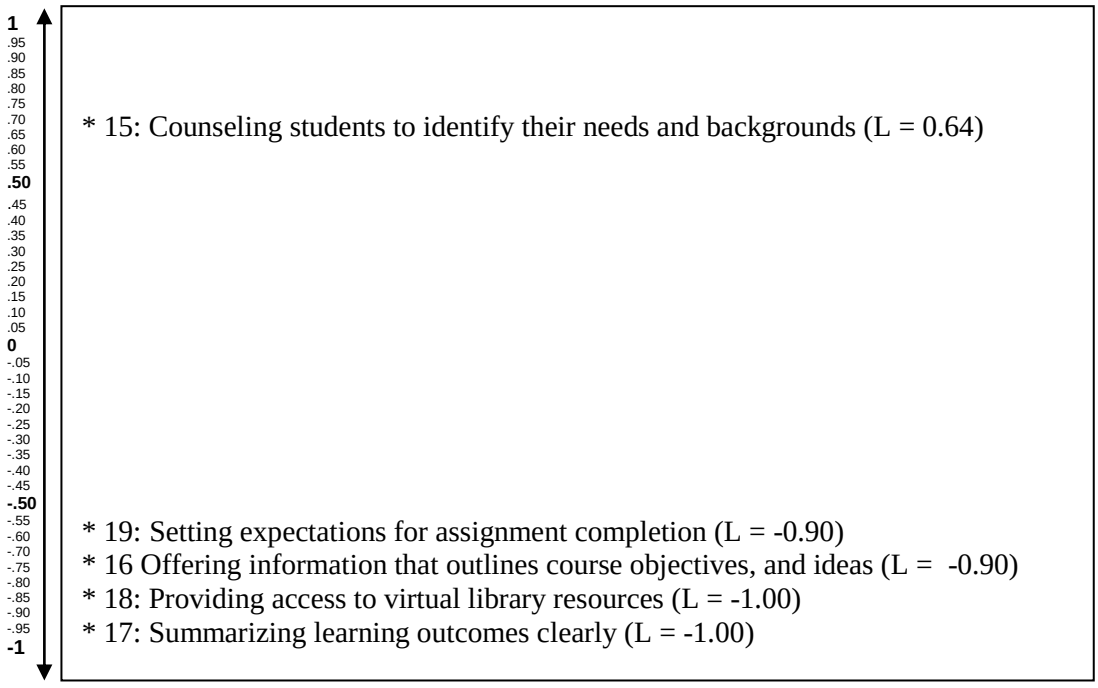


Figure 4.13: Course Structure Benchmark (Instructors)

The students gave a moderate to high rating to the items in this benchmark (see Figure 4.14). Like their instructors, they gave a very low rating to the activity pertaining to the identification of needs and backgrounds.

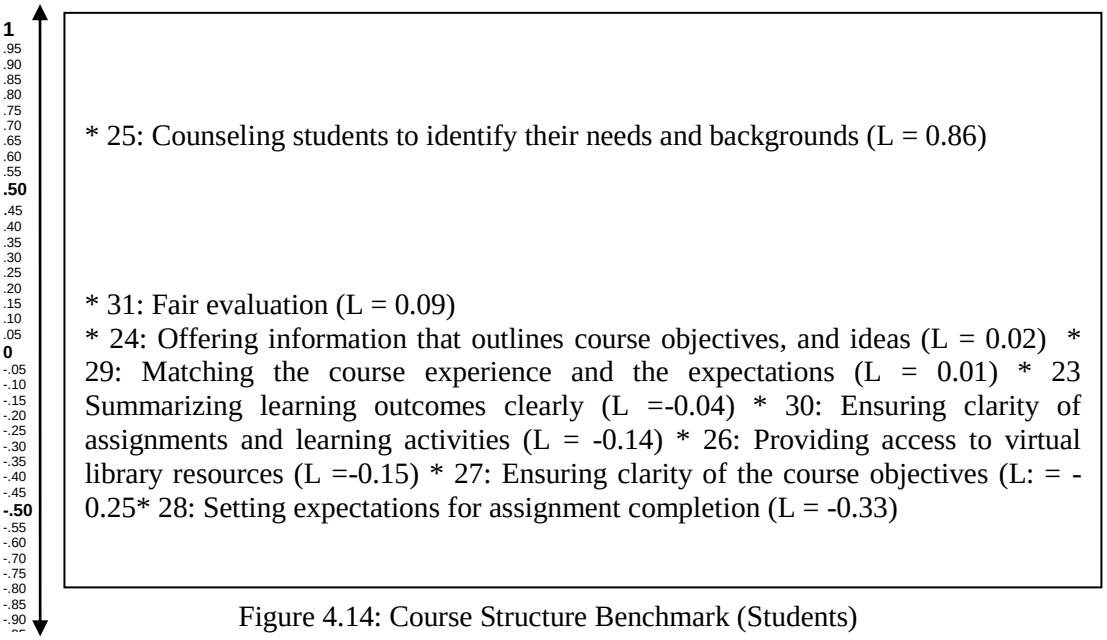


Figure 4.14: Course Structure Benchmark (Students)

The findings for this benchmark are presented in greater detail in the following subsections:

4.4.6.1 Counseling students to identify their needs and backgrounds

This statement was given a very low rating by both instructors (L = 0.64) and students (L = 0.86). The interviews revealed that there had been no needs analysis at the beginning of the course. The students had not been asked whether they possessed the self-motivation and commitment to learn online and whether they had access to the minimal technology required by the course design.

When the instructors were asked about how they identified the students' needs, some said that they tried to diagnose students' weaknesses and strengths at the beginning of every semester. Others noted that they modified the course according to

the needs of the students during the semester. The Deputy Dean then (interviewee 6) reported that the fact that they had this EAW was as a result of a Needs Analysis for the needs of the students in various faculties. He added that it was assumed that each instructor at the beginning of the course asked students to fill in a Needs Analysis form and this form was posted online to help the instructor to identify his students' weaknesses. He was not aware of whether the instructors had, in fact, asked their students to fill in the form.

4.4.6.2 Setting guidelines for assignment completion

This activity was given a very high rating by both the students (L = -0.33) and their instructors (L = -0.90). In the interviews, the instructors were asked if they had set specific guidelines for students with respect to the minimum amount of time per week for study and homework assignments, and whether the instructors were required to grade and return all assignments within a certain time frame. All of them said that they had. They also claimed that they graded and returned the assignments within a certain time since the administration gave them enough time to do so. Students expressed similar views in the course of the interviews indicating that the guidelines were clear.

4.4.6.3 Offering information that outlines course objectives and ideas

Instructors gave this activity a very high rating (L = -0.90) while the students gave it a moderate rating (L = 0.02). In the course of the interviews, the instructors were asked if they provided their students with supplementary course information which outlines course objectives, concepts and ideas, and the learning outcomes. All of them reported that they made sure that their students were given the course outline, course descriptions and assigned tasks, and the marking scheme. These were given at the

beginning of the semester. As the students switched on the computer, they would find a welcoming message about the course and what they were supposed to do.

When the instructors were asked if appropriate related instructional materials were readily accessible to students, they were divided in their opinion. Nine (60%) instructors agreed. However, those who disagreed explained that talking about interactivity should be highlighted. If we want to talk about paraphrasing, for example, we should have a video lecture where students can read and listen at the same time. They could access the lecture and move to links explaining the same topic. Other interviewees said some instructional materials were not readily accessible to them, for example, more exercises and discussions were needed. Instructor 13 opined: "We need articles to be included to provoke some kind of discussion for any discussion to take place."

The students were asked whether the course goals, learning objectives and outcomes had been made clear to them at the beginning of the course. They revealed that some lecturers had not discussed the course goals with their students and had left the students to discover by themselves throughout the progress of the course. As shown in Table 4.34, ten (33.3%) students reported that they were not aware of the goals of the course and that it was difficult for them to grasp what they were supposed to do and that they had only understood it two or three weeks after the course had started. The other 20 students (66.7%) reported that they had been fully aware of the goals of the course and what they were supposed to do.

Table 4.34

Students Response to Awareness of Course Goals

Course goals	n	%
Students who were aware of the course goals.	20	66.7
Students who were no aware of the course goals.	10	33.3
Total	30	100

4.4.6.4 Providing access to virtual library resources

Instructors gave this activity a very high rating (L = -1.00) while the students gave it a moderate rating (L = -0.15). The information collected in the course of the interviews with the students and instructors supported this finding. Thirteen (86.6%) instructors reported that students had sufficient access to learning resources such as the library and databases. Moreover, 24 (80%) students reported that they had been given briefing sessions on how to use the library resources and, especially the online resources at the beginning of the semester. However, six students (20%) admitted that they did not attend the briefing sessions that were conducted in the library as shown in Table 4.35.

Table 4.35

Students Response to Library Briefing Sessions

Library briefing sessions	n	%
Students who attended library briefing sessions.	24	80
Students who did not attend library briefing sessions.	6	20
Total	30	100

4.4.6.5 Summarizing learning outcomes clearly

The instructors gave this activity a very high rating (L = -1.00) while the students gave it a moderate rating (L = -0.04). In the course of the interviews both agreed that the course outcomes had been summarized in a clearly written, straightforward statement.

Finally, the instructors were also asked if the programme was "coherent and complete." Thirteen (86.6%) instructors agreed that the programme was coherent but they doubted whether it was complete. In fact, seven (46.6%) instructors said it was not complete since they had to adjust according to the students' abilities. "There is room for improvement. There are things to be added and other things to be dropped".

4.4.7 Course Development

The course development benchmark includes those activities meant for the development of courseware. These are:

- Periodical review of instructional materials;
- Selection of the online course technologies;
- Creation of standards that guide development, design, and delivery; and
- Ensuring the availability of activities that require analysis, synthesis, and evaluation.

Table 4.36 shows that the Cronbach Alpha Coefficient was 0.71 indicating an acceptable reliability reading.

Table 4.36

Reliability of the Course Development Benchmark (Instructors)

Item No.	Course Development Benchmarks	Logit
5	Guidelines exist regarding minimum standards of course development, design and delivery.	-0.20
6	The technology being used to deliver course content is based on learning outcomes.	-0.20
7	Instructional materials are previewed periodically to ensure that they meet programme standards.	0.30
8	Courses are designed to require students to engage themselves in analysis, synthesis, and evaluation as part of their course and programme requirements.	-1.00

Number of items = 4 Cronbach Alpha Coefficient = 0.71

In the student questionnaire there were eight items under the course development benchmark. The Cronbach Alpha Coefficient 0.71, as seen in Table 4.37, reflecting an acceptable reliability reading.

Table 4.37

Reliability of the Course Development Benchmark (Students)

Item No.	Course Development Benchmarks	Logit
4	The level of course content difficulty was appropriate to me.	0.34
5	The course content was delivered with appropriate media	0.02
6	The technology being used to deliver course content is based on learning outcomes	0.04
7	The content of the course helped me to fulfill the academic writing in my Kulliyyah	-0.17
8	Instructional materials are previewed periodically to ensure that they meet programme standards.	-0.04
9	Assessment activities (tests, quizzes, essays, presentations, etc.) contributed to my confidence in writing an argumentative paper.	0.08
10	Students are required to engage themselves in analysis, synthesis, and evaluation as part of their course and programme requirements.	-0.12
11	There was guidance on how to access online resources throughout the course.	-0.40

Number of items = 8 Cronbach Alpha Coefficient = 0.70

As Figures 4.15 and 4.16 show, this is one of the benchmarks that has been given moderate to high ratings.

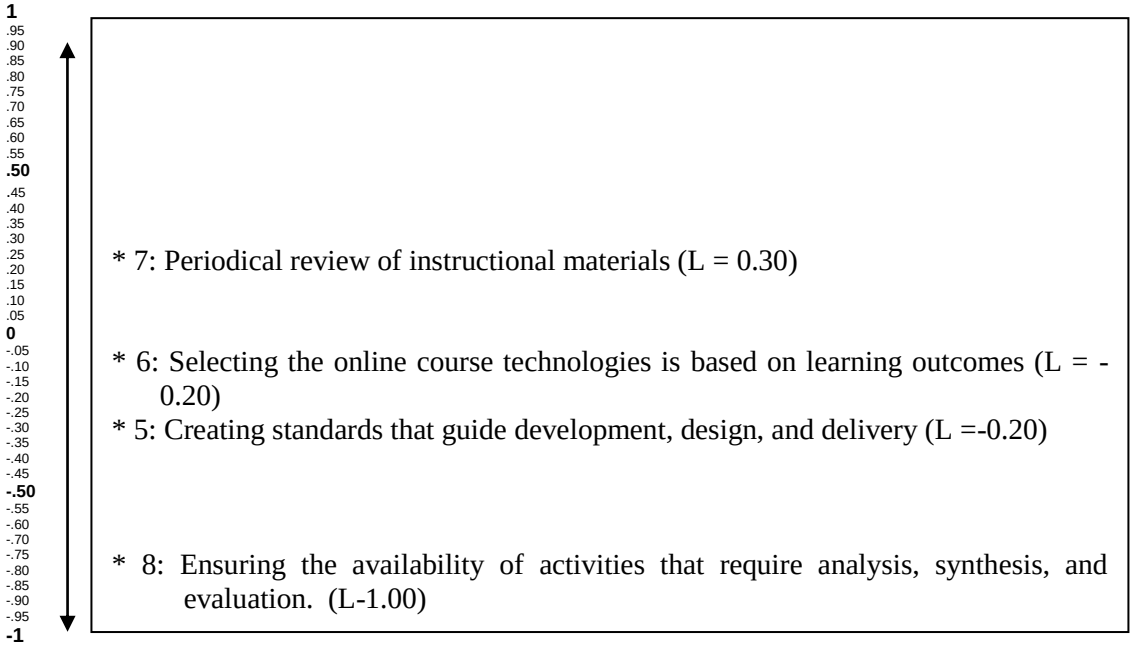


Figure 4.15: Course Development Benchmark (Instructors)

Figure 4.15 reveals that most of the items in the instructor questionnaire were given a moderate to quite high rating with *periodical review of instructional materials* being the exception.

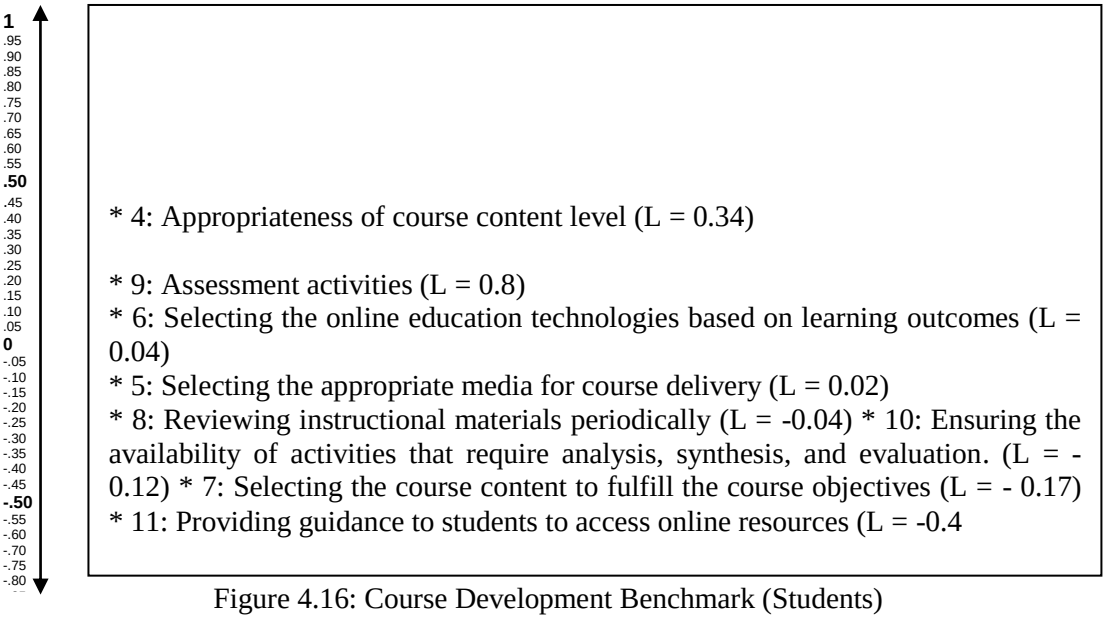


Figure 4.16: Course Development Benchmark (Students)

While Figure 4.16 shows that the students gave some items quite a low rating, some other items were given a moderate rating, and yet other items were given quite a high rating. The findings of this benchmark are presented in greater detail in the following subsections:

1.4.7.1 Periodical review of instructional materials

The instructors gave this activity quite a low to moderate rating (L = 0.30) while the students gave it quite moderate rating (L = -0.04). In the course of the interviews, five (33.3%) instructors reported modifying materials throughout course delivery to meet the needs of their students. Though the students agreed with this statement, it was not rated highly compared to other statements in the benchmark. Actually, due to students' lack of awareness of this review, this question might not have been relevant to them.

1.4.7.2 Selecting the online course technologies is based on learning outcomes

This statement was given quite a moderate rating by instructors (L = -0.20) and students (L = -0.04). In the course of the interviews some instructors expressed that they hope that there would be a team of instructors working on this online learning programme. In their opinion, this would improve the learning outcomes.

1.4.7.3 Creating standards that guide course development, design, and delivery

This aspect was included only in the instructor questionnaire and was given a quite moderate rating (L = -0.20) by the instructors. The interviews revealed that some instructors (40%) believed that the Centre was setting standards to guide course development and design. However, a majority (60%) doubted that that was the case as shown in Table 4.38.

Table 4.38

Instructors Response to Setting Standards to Guide Course Development/Design

Setting standards to guide course development and design	N	%
Instructors who believed that the Centre was setting standards to guide course development and design.	6	40
Instructors who doubted that the Centre was setting standards to guide course development and design.	9	60
Total	15	100

1.4.7.4 Ensuring the availability of activities that require analysis, synthesis, and evaluation.

The activity was given a very high rating by the instructors (L = -1.00) and a moderate rating (L = -0.12) by the students. In the interviews, some instructors remarked that the activities were designed with the aim of encouraging students to read critically,

synthesize and evaluate what they had read/written. However, others remarked that the course lacked the elements of critical thinking.

In addition to the previous activities, the students were asked if the course content was relevant to their educational and professional goals. The majority of the students said that the content helped in giving them the idea of how to write a research paper. They were able to explore the Net and search for information relevant to their assignments independently.

However, some students said that the content posted on the Net was not really relevant since the links were mostly meant for human science students. Generally, students of engineering, science and economics were not satisfied with the links. They added that it was not fair that human sciences students can access their information easily on the Net while they had to look for other resources.

When the students were asked in the interviews if the difficulty level of course content had been appropriate, most of them replied that it was appropriate. According to them, the course was quite difficult but appropriate and interesting. More specifically, the students noted that the course required a lot of work to be done. They had to read, synthesize and analyze. The students added that the course was challenging because that was their first experience of expository writing that required extensive research.

The students were also asked to comment on whether the course was up-to-date. The students had conflicting opinions. As shown in Table 4.39, sixteen students (53.3%) reported that it was very up-to-date but six students (46.7%) reported that the information was out of date and was not suitable for their research. They added that some of the links were no longer there and some had not been up-dated for a long

time. Eight (26.6%) students reported that the content was up-to-date but it needed slight improvement.

Table 4.39

Students Response to Up-To-Date Information

Up-to-date information	n	%
Students who believed that the information was up-to-date.	16	53.3
Students who believed that the information was up-to-date but it needs slight upgrading.	8	26.7
Students who believed that the information was out of date.	6	20
Total	30	100

Finally, in the interviews the instructors were asked whether they thought that the person responsible for course development was academically qualified and whether these qualifications could be considered appropriate to the responsibilities of this person. A majority of instructors, that is 12 out of the 14 interviewed, agreed that the course developer was competent and possessed the relevant experience of producing online courses. She was an academic in IIUM with considerable material writing experience as stated by instructor 8: "Yes, definitely, and has knowledge of what research writing is." Instructor 9 was very positive:

> It is a good course and this university should be proud of what we have done. The course developers are competent and qualified. They work together, we have media labs that other institutions do not have. We should be proud of this. This is actually an achievement. We actually produced a lot of materials and we have it. We have done it. I think we are improving all the time.

The Head of the English Division (Interviewee 15) pointed out that they had content specialists and IT specialists. Instructor 13 suggested that from the language point of view they were qualified but from the technical point of view they needed to attend training courses. When the instructors were asked about the qualifications that should be possessed by the course developers, they suggested the following:

experience in teaching in CELPAD, at least a master's degree in material production particularly online material, some knowledge of pedagogy, sound knowledge of computers, CALL programmes, familiarity with the technology, curriculum, syllabus, and expertise in curriculum development and assessment as well as educational qualifications. From this, it is clear that the instructors had high expectations of the online developers.

4.4.8 Value, Flexibility, and Convenience

The last benchmark was only included in the student questionnaire and it addressed issues like the value, flexibility, and convenience of the online course. As shown by Table 4.40, this benchmark consisted of six items. The Cronbach Alpha Coefficient was 0.83 reflecting a relatively high reliability.

Table 4.40

Reliability of the Value/Flexibility and Convenience Benchmark (Students)

Item No.	Value/Flexibility and Convenience	Logit
38	I talked with other students about the online sessions and received positive feedback	0.35
39	The course provided a valuable learning experience	-0.44
40	I recommend this course to other students	-0.17
41	The course was flexible enough to meet my needs.	0.15
42	I found learning the online sessions convenient and interesting.	-0.07
43	I could follow the course more easily than other courses.	0.37

Number of items = 6 Cronbach Alpha Coefficient = 0.83

As seen in Figure 4.17, this benchmark consists of 6 aspects: They are:

- Ensuring that students follow the course easily;
- Receiving positive feedback from other students;
- Ensuring Flexibility;
- Ensuring convenience and interest;

- Recommending the course to other students; and
- Ensuring a valuable learning experience.

Three of these six aspects were given quite a moderate to high rating and the others were given quite a low to moderate rating as shown by Figure 4.17

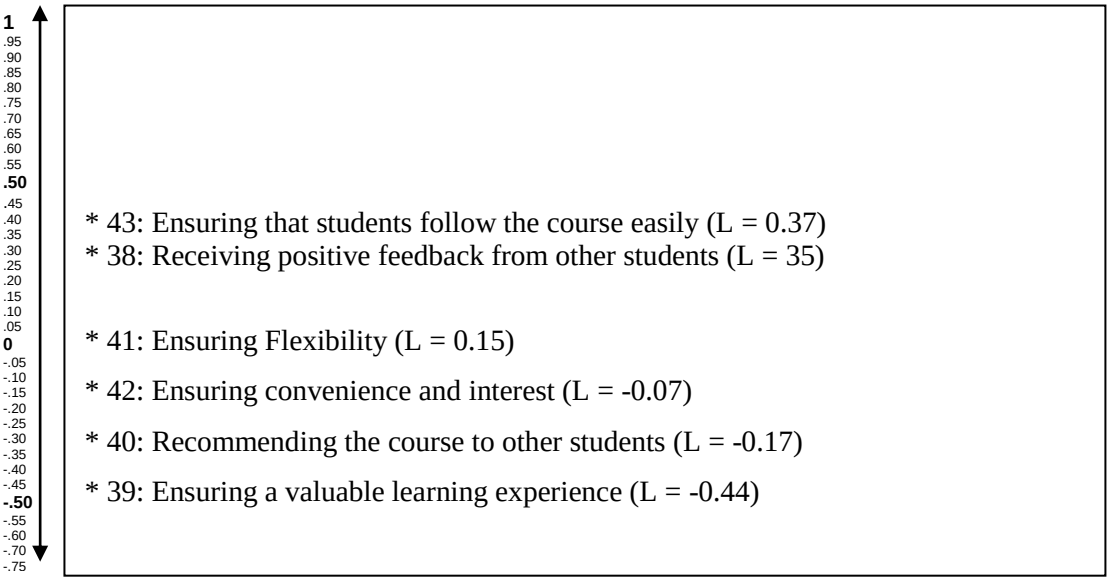


Figure 4.17. Value, Flexibility, and Convenience benchmarks (Students)

Each of the items is discussed in greater details in the following section:

4.4.8.1 Ensuring that students follow the course easily

Students gave quite a low rating (L = 0.37) for this statement. When asked, students stated that it was due to the lack of support. (This aspect is discussed in subsection of 4.4.4).

4.4.8.2 Receiving positive feedback from other students

Students gave quite a low rating (L = 0.35) to this statement. The interviews revealed that when previous students talked to their friends about this course, they conveyed to them the idea that the course was challenging and demanding.

4.4.8.3 Ensuring flexibility

Students gave a moderate rating (L = 0.15) for this statement. When asked, they were divided in their opinions on this issue. Some were satisfied with the flexibility of the course and others were not. The students who liked the course and its flexibility remarked that they enjoyed the online class for the flexibility it offered. They considered the fact that they were able to access the course during the holidays and semester break from their home made the course flexible. Student 4 said, "Overall I enjoyed and learned from this course. I really enjoy the online course. I find it to be less stressful and I feel that I actually learn more because I have the flexibility to decide the best time of day to work on the course".

4.4.8.4 Ensuring convenience and interest

Students gave a moderate rating (L = -0.07) to this statement. However, it was given a better rating than the previous statement. The findings from the interviews revealed that 17 (56.6%) students enjoyed the course because the instructors were interactive and found it to be convenient, informative, interesting, and challenging. Student 6 explained, "The online course suits my needs and is especially easy to move around in (sic). I am very comfortable taking my classes through the online format (sic)". The students who felt the course to be inconvenient stated technical glitches as the reason that hindered their learning experience and lessened their interest in the course.

4.4.8.5 Recommending the course to other students

Students gave this statement a moderate rating (L = -0.17). In the course of the interview, the students were asked to comment on the value, flexibility, and convenience of the course. Seventeen (56.6%) students enjoyed the course and

recommended it to other students. Student 10 pointed out that it was very convenient and he would go for Internet-assisted classes. Student 12 said "taking an online course enables me to retrieve assignments and post questions regarding the class at my convenience."

4.4.8.6 Ensuring a valuable learning experience

Students gave this statement quite a high rating. When asked, students felt that the course provided a valuable learning experience with some reservations. Student 7 said: "This can be a really great and useful way to have class, but then it can also be very frustrating when the servers are down or when there are technical problems (sic)." Student 19 pointed out that some instructors did not interact as much as they should. He added: "I wish that they would interact more (sic). I miss the interaction of the classroom when taking a course on the Internet, but I do like the convenience (sic)." This means that students do tend to find that the online course is a valuable learning experience.

Though there was no section about value and flexibility in the instructor questionnaire, they were asked during the interviews to comment on the value of the course, its strengths and shortcomings in comparison to the traditional classroom in terms of who performed better. The answers to this question varied. Some reported that online students did better, and others reported that offline students did better. They mentioned reasons such as technical problems. Supporters of online delivery reported the advantages and did not deny the shortcomings. Instructor 1 summarized his opinion about the strengths and weaknesses of the programme:

> Well, I think the real strength is that it is an online course where there is an ability to set students tasks which they can fulfil; we give them Internet based tasks. Writing tasks can be done on the Web and

> corrected; using the word processor is also a main advantage. Instructors and students can interact more freely. The shortcoming, perhaps, because it is partially online, it seems a bit strange to chat to people whom you see physically. But we hope that we are practising for a fully online course one day.

Instructor 11 admitted that she was not competent in computer use and she postulated that her students were also afraid of using computers. Instructor 12 added that offline students had the advantage of the personal touch that did not exist in online classrooms and she claimed that there was nothing special in the online classroom. In her opinion, the students were just motivated because of the novelty of the idea.

Finally, the instructors were asked to suggest some elements that would be necessary for students' success, and whether online classes required special skills. Instructor 9 reported that "the initial input of the online course supported by the hard copy and a good shooter are some of the elements that are necessary for students' success (sic)". Other instructors reported other elements such as fluency in writing, language, attitude, attendance, hard work, using chat rooms and discussion, reading widely and discussing things among themselves, and building up confidence as independent learners. The instructors identified library searching skills, using the library and the online databases, computer skills, willingness to accept change in the technology, and being comfortable with using the technology to be important factors to the success of the online programme. When they were asked to comment on whether their students had the necessary skills to use computers, the majority reported that their students did have such skills.

4.5 Overall Consolidation of Results

This section presents the overall perception of teachers and students on whether the benchmarks had been met or not based on the procedure suggested in the previous chapter (c.f. Chapter Three). According to this procedure, an index of 3.5 is used as the criterion of the met benchmark. The mean for each benchmark was calculated whether the benchmark was met or not. Table 4.41 presents the summary of the results of benchmarks as perceived by instructors.

Table 4.41

Summary of the Instructors' Perception of the Attainment of the Seven IHEP Benchmarks

No	Benchmark	Mean	Met at 3.5
1	Institutional Support	2.80	X
2	Course Development	3.37	X
3	Teaching /Learning	3.67	√
4	Course Structure	3.52	√
5	Student Support	3.20	X
6	Faculty Support	2.80	X
7	Evaluation and Assessment	2.97	X

A tick (√) means the benchmark is met and a cross (X) means that the benchmark was not met. As Table 4.41 shows, five of benchmarks did not meet the IHEP 2000 benchmarks. These benchmarks include: institutional support, student support, faculty support, course development, and evaluation and assessment. The other benchmarks: course structure, and teaching and learning were found to be met as perceived by the instructors.

Table 4.42 presents the benchmarks that had been met and those which had not been met as perceived by students.

Table 4.42

Summary of the Students' Perception of the Attainment of the Six IHEP Benchmarks

No	Benchmark	Mean	Met at 3.5
1	Institutional Support	3.78	√
2	Course Development	3.85	√
3	Teaching /Learning	4.04	√
4	Course Structure	3.82	√
5	Student Support	3.37	X
6	Value, Flexibility and Convenience	3.80	√

As Table 4.42 shows, the students felt that only one benchmark did not meet the IHEP 2000 benchmarks. Institutional support, course development, course structure, teaching and learning, and value, flexibility and convenience benchmarks were met. However, the student support benchmark did not meet the IHEP benchmarks.

4.6 Discussion

This analysis revealed that five of the seven benchmarks, that is, *evaluation and assessment, faculty support, institutional support, student support,* and *course development* were given a low rating by the instructors. A number of studies on quality online learning have also reported that institutions have difficulties in meeting some of the benchmarks. Studies conducted at eight tertiary institutions in Hong Kong (Yeung, 2001), nine state universities in Florida (Sparrow, 2002), and a comprehensive university in Northwest Wisconsin (Hensrud, 2001) show that they did not meet the quality standards for some benchmarks.

Each of the benchmarks will be discussed in relation to other studies in the following subsections:

4.6.1 Course Development

Some aspects of the *course development* benchmark were given a low rating and this is almost similar to other studies. Studies conducted in Hong Kong by Yeung (2001) and in Florida by Sparrow (2002) on teachers show that their institutions did not meet the same benchmark. Having personnel who are not only competent in their subject area but also have know-how in developing the curriculum focusing on technology integration may be a problem for many institutions. This may be the reason why certain institutions have problems in meeting this benchmark as observed in this study.

Designing an online language course with elements of analysis, synthesis, and evaluation can be challenging to some course designers. Yet these are considered to be important factors in the general design principles of online courses (Kearsely, 2000; Hensrud, 2001; Yeung, 2001, Shigemitsu, 2004; Schafersman, 1991). As found in this study, some instructors reported that the English for Academic Writing course seemed to lack the elements of critical thinking. They agreed that instructional materials and course design should be improved to strengthen the quality of the course.

Periodic review of the instructional materials is another important process in ensuring the quality of the online programme (Phipps and Merisotis, 2000; Rayan et al 2000; Palloff and Pratt, 2001; Yeung, 2001; Buchanan, 2002; Shigemitsu, 2004). It was found in this study that a review at the institutional level had yet to be conducted. Some instructors, however, had modified the materials themselves. This can be viewed positively as they have taken the initiative to explore the media and update the resources. Such a step can ensure some measure of an effective and efficient use of different learning spaces (Mozzon-McPherson, 2002). The next step for CELPAD is

to review the programme at the institutional level to ensure that the support is holistic (Dunkin, 2000).

4.6.2 Institutional Support

The aspects under the *institutional support* benchmark were given a low rating and this is almost similar to other studies. For example, one of the aspects under this benchmark is *security measures. Security measures* are considered very important by many researchers (Dooley & Murphrey, 2000; Jolliffe et al, 2001; Lynch, 2002; Choy et al, 2002; Rekkedal and Qvist-Eriksen, 2004; Rowe, 2005; Maguire, 2005). Yet not all institutions ensure that *security measures* are well-taken care of (Choy et al, 2002; Lee, 2004). As observed in this study, *security measures* were lacking and some of the instructors felt that not much effort was taken to protect the servers and materials.

Another important aspect of the benchmark is *quality assurance*. The importance of this aspect is realized in this study and those of others (Hensrud, 2001; Yeung's, 2001; Harman & Meek, 2000; Shigemitsu, 2004). Most of the respondents in this study reported regular meetings to ensure the quality of the programme offered.

A third aspect under institutional support is *the reliability of the technology delivery system.* Several studies warned that the lack of reliability may result in impeded learning experience (Berge, 1998; Betts, 1998; Bonk, 2001; 2002; Rekkedal and Qvist-Eriksen, 2004; Shigemitsu, 2004). In this study, this aspect was given a moderate rating by the students and a low rating by the instructors. The difference in the opinion between the two groups of respondents may be due to their familiarity with the technology with the students being more familiar with it compared to the instructors hence their lower expectation of it.

The last aspect under institutional support is *a centralized system for infrastructure*. Several studies emphasized the importance of this aspect and warned of the negative consequences that may result from the absence of such a system (Pallof & Pratt, 2001; Jolliffe et al, 2001; Lynch, 2002; Shigemitsu, 2004). Other studies raised doubt about inadequate infrastructure, hardware, and software (Berge, 1998; Betts, 1998; Bonk, 2001). This study has shown that the Centre's failure to provide a good help-desk service among other factors demotivated some instructors from using the technology.

4.6.3. Student Support

The Centre studied did not meet the quality standards for *student support*. Similar findings were made in other studies (Yeung, 2001; Hensrud, 2001).

Four aspects of the *student support* benchmark are: *technical assistance; a structured system to address students' complaints; written information regarding course requirements and student support services;* and *access to materials through electronic databases, and news services*. Although student support is a very important aspect of online learning (Phipps and Merisotis 2000; Stick & Ivankova, 2004; Kennedy & Duffy, 2000; Scheuermann et al , 2000; Lolliffe et al, 2001; Fairhurst, 2002; Palloff and Pratt, 2003; Kenny, 2003; Rekkedal and Qvist-Eriksen, 2004; Lee, 2004), the Centre appeared to have problems in offering it adequately. Both students and instructors felt that the Centre did not provide enough help to learners. This, however, is not unique to this institution only. The lack of technical support was a common problem in many other language institutions (Felix, 2001; Shigemitsu, 2004; Lee, 2000; Shiao-Chuan & Tun-Whei, 2002; Suhaila and Ridwan 2005). Similarly, *technical problems*, *lack of skill in using the technology*, and *server breakdown* were

found to have a negative effect on the learners (Felix, 2001; Suhaila and Ridwan, 2005; Rekkedal and Qvist-Eriksen, 2004; Lee, 2004). This information can be used by the institution concerned to improve the programme.

Other services received mixed responses from the students and instructors. For example, *access to materials through library databases* was given quite a high rating by the instructors and a modest rating by the students, whereas *supplying students with written information* was given a very low rating by the students while the instructors gave this service a very high rating. Studies on instructors by Felix (2001), Rekkedal and Qvist-Eriksen (2004), and Lee (2004) indicate that they were satisfied with the library resources. We can see a mismatch between students' and instructors' expectations here in that the students expected to have greater access to the materials through library resources.

4.6.4 Faculty Support

As in some other institutions (Hensrud, 2001; Yeung, 2001), the Centre studied also failed to meet the *faculty support* benchmark. One of the aspects under this benchmark is *technical support*. It is interesting to note that although several studies considered *technical support* for faculty as an important factor in online learning (Phipps and Merisotis, 2000; Lee, 2000; Felix, 2001), yet many institutions failed to provide the necessary support to their students (Nuraihan, 1994; Singhal, 1997; Warschauer and Healey, 1998; McMeniman and Evans 1998; Tucker, 1999; Lee, 2000, Egbert et al, 2002; LeLoup and Ponterio, 1995; Shigemitsu, 2004). The lack of administrative support and lack of resources may inhibit language teachers from integrating computers in language teaching (Egbert et al, 2002). In language institutions, there is a

dire need for faculty support as instructors are language teachers and not technology experts.

4.6.5 Evaluation and Assessment

Overall, this benchmark received a low rating from the instructors in this study. However, a few aspects were given moderate rating. This includes *reviewing intended learning outcomes*. Instructors in some other institutions also had a similar opinion of their institutions where this aspect is concerned (Hensrud, 2001; Yeung, 2001; Monske, 2004; Shigemitsu, 2004). In this study, instructors mentioned discussing learners' outcomes in their meetings. This might be the case in other institutions. It is common that students are the main agenda in academic staff meetings. Hence, it is to be expected that the learning outcomes of the programme are discussed there.

Another policy under evaluation and assessment is *using data on enrollment and costs to evaluate programme effectiveness*. Several studies considered this policy to be an important element in improving the quality of online programmes (Moore and Kearsley, 1996; Phipps & Merisotis, 2000; Palloff & Pratt 2001; Harasim et al, 1996). This item was, however, given a very low rating in this study and also in some other studies (Hensud, 2001; Sparrow, 2002; Yeung, 2001). Cost benefit is in fact important in measuring the effectiveness of a programme.

A third aspect under evaluation and assessment is *assessment of the programme's educational effectiveness and teaching/learning process*. Several studies emphasized the importance of *evaluating the programme's educational effectiveness* (Harasim et al, 1996; Phipps and Merisotis, 2000; Monske, 2004). As found in this study and other institutions studied (Hensud, 2001; Sparrow, 2002; Yeung, 2001; Monske, 2004) the respondents did not give encouraging feedback.

Overall, it seems that the Centre in this study, as well as other institutions mentioned in other studies, are facing some challenges in meeting some aspects of this benchmark. Many institutions appear to pay more emphasis on having a course rather than concentrating on aspects that could provide measurable results.

4.6.6 Teaching and Learning

The *teaching and learning* benchmark addressed an array of activities related to pedagogy such as students' interaction with the faculty and other students and prompt feedback. Overall, the respondents were in strong agreement with the activities that addressed this benchmark with slight differences in the perceptions of the students and the instructors. The Centre in this study was shown to have the important elements for quality online programme where teaching and learning are concerned. As the online programme is a writing course and a process approach is stressed, meeting the benchmarks under this category is crucial for enhancing learning. Since students are required to write a number of drafts, prompt feedback from the instructors is important as emphasized in several studies (Chickering and Ehrmann, 1996; Chamberlain, 1999; Little, 2000; Hacker and Niederhauser, 2000; Alexander & Boud 2001; Felix, 2001; Rekkedal and Qvist-Eriksen, 2004; Altun, 2005).

Where this benchmark is concerned, many institutions mentioned in other studies also met the benchmark (Chamberlain, 1999, Sparrow, 2002; Choy et al, 2002; Jurczyk et al, 2002). There were also studies that show that this benchmark was not fulfilled (Altun, 2005). In Felix's study (2001) inadequate feedback, interaction, speaking practices, and absence of teacher were listed among the disadvantages of the online language course.

COURSE STRUCTURE BENCHMARKS mean 0.008

In this study, both students and instructors gave quite a high rating to *instructing the students in the proper methods of effective research*. The high rating given for this benchmark by both the students and instructors reflects that the Centre was successful where teaching and learning benchmarks are concerned.

4.6.7 Course Structure

The *course structure* benchmark addressed the policies and procedures that support teaching/learning process. Overall, the respondents gave a moderate rating to the elements that were addressed in this benchmark. Regarding *the availability of library resources*, both the instructors and students in this study rated it highly as in many other online environments (Felix, 2001; Lee, 2000). The finding of this benchmark matches other studies in similar learning contexts (Hensrud, 2001; Yeung, 2001; Sparrow, 2002; Jurczyk et al, 2002). This implies that there is a need for academic institutions to have policies and procedures that support teaching and learning**.**

4.7 Conclusion

This study shows that like many other findings in benchmarking of tertiary level courses, not all benchmarks were met. However, differences in opinion between instructors and students with regard to the quality online benchmarks were found. The different role that they play in the institutions and their knowledge and skills in the subject matter and also in the technology may have influenced their views on each of the benchmarks studied. In fact, most of the problems mentioned are shared with other institutions that were assessed for its quality. This exercise itself forms part of such an assessment. It provides the necessary information to the Centre to help it improve its English for Academic Writing programme.

CHAPTER FIVE

CONCLUSION AND RECOMENDATIONS

5.0 INTRODUCTION

This chapter concludes the overall findings of the study. It consists of three sections. The first section presents the extent to which each benchmark has been met. The second provides some recommendations for Centres that plan to incorporate online learning in their teaching. The third section concludes with recommendations for future studies.

5.1 The Extent to which the Benchmarks Are Met

This study investigated the extent to which the adapted version of the IHEP 2000 benchmarks were met by a language institution based on the perceptions of its staff and students. Of the seven IHEP benchmarks, the instructors felt that only two were met: *teaching and learning*, and *course structure*. The instructors felt that the online course failed to meet the other five benchmarks. The least met benchmark *Institutional support* was followed by *faculty support, student support, evaluation and assessment,* and *course development*.

The students felt that the Centre met all the six benchmarks except for the *student support* benchmark. The benchmarks that were met are in descending order: teaching and learning, course development, course structure, value, flexibility and convenience, institutional support.

The following subsections summarize the findings of the benchmarks, namely: teaching and learning, course structure, course development, evaluation and

assessment, institutional support, faculty support, student support, and value/flexibility and convenience.

5.1.1 Teaching/Learning

Overall, the respondents strongly agreed that the Centre met the standards for *teaching and learning*. In comparison to other benchmarks, *teaching and learning* was found to be the most met benchmark. From the respondents' responses and from the comments made during the interviews, it was clear that this benchmark met the standards for quality online learning. A majority of the instructors felt that various methods were used to communicate with students. As it was an online course, that was conducted on campus, this may be considered an obvious aspect because face-to-face meeting/s could easily be arranged) other than the online communication The instructors, however, also mentioned other means of communication used by the students and instructors which included SMS and email. The teachers also felt that students received appropriate feedback from them in a timely manner, and that the feedback was constructive and non-threatening. These views were confirmed by the students who felt that the instructors had helped them in many ways to understand the course content. The other teaching and learning aspects that were sufficiently met by the Centre were: *sufficient feedback*, *efficient use of class time*, *encouraging proper communication,* and *interacting with the students*.

5.1.2 Course Structure

Both students and instructors agreed that the *course structure* benchmark was met. Both the students and instructors perceived this benchmark to be the second most met benchmark. Though, there were some differences in their opinion regarding the extent

to which some of the aspects of the benchmark were met, both instructors and students agreed that they *set expectations for assignment completion* and that *the students were offered information that outlines course objectives and ideas*. Moreover, the instructors agreed that students had *access to virtual library resources* and that the *learning outcomes were clearly summarized*. One item that was found to be problematic to both students and instructors was *identifying students' needs and backgrounds*. Although the questionnaire for this is available on the site concerned, it was not fully utilized by the instructors. A top-down approach may have to be taken here, so that the Centre can require instructors to ask students to fill in the questionnaires, and identify the weaknesses in students' computer skills before going to the content area.

5.1.3 Course Development

Based on the instructors' perception, the Centre failed to meet the *course development* benchmark. From the instructors' responses to the questionnaires and from comments made during the interviews, it was clear that a majority of the respondents perceived that this benchmark did not meet the quality standards. Though this was the case, the rating given was not that low compared to other benchmarks. The least met aspects in this benchmark were: *periodical review of instructional materials*, and *creating standards that guide development, design and delivery based on learning outcomes.* Despite this, both students and instructors agreed that the English for Academic Writing course had *activities that require analysis, synthesis and evaluation* with slight difference in their opinions.

5.1.4 Evaluation and Assessment

This benchmark was only rated by the instructors. According to them, the evaluation and assessment benchmark was not met. As a whole, it was clear from the instructors' responses and from the comments made during the interviews that a majority of them perceived this benchmark as being very difficult to meet. The Centre has yet to measure the effectiveness of the English for Academic Writing course. This study can be a step towards an evaluation process as an international standard is used as the benchmark for the evaluation exercise.

5.1.5 Student Support

Both students and instructors strongly agreed that the *student support* benchmark was not met. The lack of support was related to *technical assistance* and a *structural system to address students' complaints* and both students and instructors strongly agreed that these two aspects were not available. They also agreed that, there was no *written information regarding course requirement and student support services,* and that there was *lack of access to materials through electronic databases and news services*. As the areas of weaknesses pertaining to *student support* have been identified the findings could enable the Centre to improve its English for Academic Writing programme in this respect.

5.1.6 Faculty Support

Only the instructors were asked to rate this benchmark**.** Overall, they strongly agreed that the *faculty support* did not meet the standards established by the IHEP 2000**.** They strongly disagreed that the five aspects of this benchmark had been met, indicating that the online programme failed to achieve the quality standards in accordance with

the expectations of the instructors. The instructors felt that there was a *lack of peer monitoring of resources* and that *technical assistance was hardly ever provided to them*. They also felt that they were not provided with *written resources* and *sufficient training*. What is important is that a great majority of them felt that they were not *assisted in the transition to online teaching*. The above mentioned support services are important aspects that the Centre needs to improve to facilitate teaching and learning.

5.1.7 Institutional Support

Institutional support is a very important element of an online programme, yet this study revealed that most of the instructors and students felt that the Centre failed to meet this benchmark. Although there were some differences in their opinion regarding some of the items making up this benchmark, they agreed that this was the least met benchmark. The consensus in opinions points to a need for the Centre to look seriously into this aspect. Greater emphasis needs to be given to *security assurance* and *a centralized system for infrastructure* as these two aspects were found to be the most problematic and other two factors of no lesser importance are *quality assurance* and *reliability of the technology delivery system.* All these call for major action from the Centre to ensure that a quality online programme is offered.

5.1.8 Value, Flexibility, and Convenience

Only the students were asked to rate this benchmark. According to them, the online programme met the aspects under this benchmark although with some variations in the students' opinions. For example, in comparison to the other aspects, the students were not able to *follow the course easily* and they also felt that they did not *receive positive feedback from other students*. Despite this, they felt that the course was *flexible,*

convenient and interesting, and *offered a valuable learning experience*. Most of them said that they would *recommend the course to other students*.

5.2 The Relevance of This Study to Other Institutions

The findings of this study show that there is an imperative need for an evaluation to be done to assess the strengths and weaknesses of an institution's online programme. An internationally accepted benchmark helps to inform the institution of the extent, to which the programme that it is offering is effective based on international standards. The results of an evaluation programme may be used by the Centre to identify what corrective measures need to be taken and which aspects *need* to be improved.

To show that the institution is serious about the online programme that it is offering, there is a need for it to take *security measures* to ensure its *reliability*. It is common knowledge that where campuses are connected to the internet they are exposed to virus attacks; however, measures can be taken by the institution concerned to reduce the likelihood of this happening. All these call for a good centralized system, passwords can be provided only to the person concerned to help protect the network and servers from virus attacks. Apart from computer virus, speed is another important consideration where an online programme is concerned, a slow downloading time would frustrate students and teachers alike.

To improve the content of the course, it needs to be reviewed from time to time. A review of the programme is practical after a course has been offered for a period of time. In this study such a review has not been taken yet probably because the course has been introduced only recently, i.e. four years ago. It is suggested that a team consisting of an instructional designer, content developer, and one or more

instructors be identified for each course development process. The team would have to design courses which are geared towards fulfilling the learning outcomes.

To improve *teaching and learning*, *interaction* needs to be encouraged, not only between teacher and student but also between students as interaction is an essential element in the learning process. The ability to provide constructive criticism is an important step towards developing critical thinking skills. Non-threatening and prompt *feedback* from teachers would help in facilitating the learning process.

To begin with, the teachers may want to assess students' level of motivation and their computer skills as this information can help the teacher in planning the lesson. A different approach may be needed to be used to deal with the less-motivated students, and those who lack the relevant computer skills. As it is an online course, providing easy access to supplemental course information and sufficient library resources would help facilitate the learning process. The course may also need to include as many links as possible to help students follow the course.

Student support is another area that needs to be given special attention. Among the kinds of support that can be provided to the students are hands-on training, technical assistance, and information to aid them in securing materials from electronic databases. A helpdesk that is easily accessible to the students not only during the day but also in the evening is a great help especially in overcoming technical problems. Institutions may form a team consisting of members of the technical staff and instructors to improve the technical support services and find solutions to emerging student complaints. The team may take proactive action whereby problems are identified in advance, and solved before they hamper students' rate of learning.

Apart from satisfying students' needs, an institution would also have to oversee the needs of the faculty members. *Technical assistance* is of utmost importance

especially in cases where the faculty members are not familiar with the technology. Continuous training will also have to be provided to assist the staff to keep abreast of developments in the technology and the discipline. The extra effort that staff may need to put in when teaching an online course may be rewarded.

Evaluation and assessment is important for all academic programmes in order to examine the effectiveness of such programmes. In evaluating the programmes, specific standards may have to be established to improve learning outcomes. The use of an internationally recognized evaluation format helps to inform the institution of the quality of the programme offered. Claims can then be made about the effectiveness of the programmes if the standard procedures have been observed.

In this study, the use of the IHEP benchmarks helps to show whether the Centre has met the standard benchmarks, and identifies areas which should be improved.

5.3 Future Research

This study aimed at investigating whether the Centre for Languages and Pre-University Academic Development (CELPAD) of the International Islamic University, Malaysia (IIUM), met the IHEP benchmarks for quality online learning. The results indicated that the Centre met some of them and did not meet others. Many issues needing further research were identified. Firstly, the study showed that some instructors resisted change and preferred not to use the online facilities provided. Secondly, further study should be done to identify not only the reasons for the resistance, but also how to change the attitudes of the instructors to make them more favourable towards the integration of the Internet into teaching. The background of the instructors seems to be an important factor influencing their behaviour. Such a

study could use the information to fill in the gaps where factors such as academic qualifications are concerned. Thirdly, as any programme, the online mode has its own strengths and weaknesses. Studies should be conducted to find ways of overcoming the weaknesses of such programmes and enhancing their strength. Fourthly, the study revealed that the support given to the students and instructors was lacking. A study that can identify the kind of support to be provided specifically for language instructors and students would help language schools to prepare themselves for providing such services when the online option is adopted. Finally, the use of a standardized benchmark has been shown to help in identifying the areas needing attention, and also those areas that the Centre was good at. The presence of an online benchmark that is specific to language learning and teaching would, however, be of greater help for language schools. As no such benchmark exists, a study to establish such a benchmark is timely with the rapid increase in the number of online language programmes.

BIBLIOGRAPHY

Alexander S., & Boud, D. (2001). Learners still learn from experience when online. In Stephenson, J. (Ed.). *Teaching and learning online: pedagogies for new technologies*. (pp. 3-16). London: Kogan Page Limited.

Altun, A. (2005). Toward an effective integration of technology: Message boards for strengthening communication. *The Turkish Online Journal of Educational Technology - TOJET 4 (1), article 9*. Retrieved July 30, 2005. http://www.tojet.net/articles/419.htm

Amenta-Shin, R. R. (2000). Teachers' Perceptions of Change in Instructional Practice and Use of Technology: An Evaluation of the Instructional Proficiency Institute (California). Unpublished EdD thesis. Pepperdine University.

American Federation of Teachers (AFT) (2000). *Distance Education: Guidelines for good practice*. A report prepared by the Higher Education programme and Policy Council of The American Federation of Teachers. Retrieved January 15, 2003. http://www.aft.org/higher_ed/downloadable/distance.pdf

Andrich, D. (1988). *Rasch Models for Measurement* (Vol. 68). Newbury Park, CA: Sage Publications.

Bachman, L. F. (1995). *Fundamental Considerations in Language Testing*. Oxford: University Press.

Berge, Z.L. (1998). *Barriers to Online Teaching in Post-Secondary Institutions: Can Policy Changes Fix It?* Retrieved May 19, 2003. http://www.westga.edu/~distance/Berge12.html

Berge, Z. L. (2000). Components of the online classroom. In Renée E. Weiss, Dave S. Knowlton, and Bruce W. Speck (Eds.), *Principles of effective teaching in the online classroom* (pp. 23 – 28). San Francisco: Jossey-Bass Inc..

Betts, K.S. (1998). An institutional overview: Factors influencing faculty participation in distance education in postsecondary education in the United States: An institutional study. *Online Journal of Distance Learning Administration*. Retrieved May18, 2003. http://www.westga.edu/~distance/betts13.html

Bielman, V. A. (2000). Building Community in a Virtual Classroom: Construction of Classroom Culture in a Postsecondary Distance Education Class. Unpublished EdD thesis. University of Nevada, Las Vegas.

Blackboard. Inc. (2000). *Educational Benefits of Online Learning*. A Blackboard Tip Sheet. Retrieved January 15, 2003. www.blackboard.com/resources/ictraining/Online_Learning_Benefits.pdf

Boehler, T. (1999). A Design Plan for Online Distance Learning Programme Delivery. Unpublished EdD thesis. Pepperdine University.

Bohling, M., Fisher W.P. Jr., Masters G.N., Bond, T. (1998). *Content Validity and Misfitting Items*. Rasch Measurement Transactions 12:1 p.607. Retrieved January 15, 2005. http://www.rasch.org/rmt/rmt121f.htm#Misfit

Bond, T. G., & Fox, C. M. (2001). *Applying the Rasch Model: Fundamental measurement in the human sciences.* London: Lawrence Erlbaum Associates, Publishers.

Bonk, C. J. (2001). *Online teaching in an online world.* Retrieved May 10, 2003. http://www.courseshare.com/reports.php

Bonk, C. J., Kirkley, J., Hara, D., & Dennen , V, P. (2001). Finding the instructor in post-secondary online learning: pedagogical, social, managerial, and technological locations. In Stephenson, J. (Ed.). *Teaching and Learning Online: Pedagogies for New Technologies.* (pp. 76-97). London: Kogan Page Limited.

Buchanan, E. (2002). Institutional and Library services for distance education courses and programmes. In R. Discenza, C. Howard , and K. Scheenk (Eds.), *The Design and Management of Effective Distance Learning Programmes* (pp 141-154). Hershey, PA: Ideal Group Publishing.

Canada, M. (2000). Students as seekers in online courses. In Renée E. Weiss, Dave S. Knowlton, and Bruce W. Speck (Eds.). *Principles of effective teaching in the online classroom*. (pp. 35 – 40). San Francisco: Jossey-Bass Inc..

Cereijo, P M. V. (1999). Factors Influencing How Students Value Asynchronous Web-based Courses. Unpublished PhD thesis. University of North Texas.

Chamberlain, C. A. (1999). Student Evaluation of Online Teaching and Teachers. MS thesis. Utah State University. UMI Dissertation Services. Printed in 2003 by digital Xerographic process. Bell and Howell Information and Learning.

Chickering, A., and Ehrmann S. C. (1996). *Implementing the Seven Principles: Technology as Lever.* Retrieved January 15, 2003. http://www.tltgroup.org/programmes/seven.html

Choy, S., McNickle, C., & Clayton, B. (2002). *Learner expectations and experiences: An examination of student views of support in online learning*. Retrieved January 05, 2005. www.ncver.edu.au/research/proj/nr0F02.pdf

Cotton, K. (2001). *Teaching Thinking Skills*. Northwest Regional Educational Laboratory. School Improvement Research Series (SIRS). Retrieved January 05, 2005. http://www.nwrel.org/scpd/sirs/6/cu11.html

Council of Regional Accrediting Commissions (C-RAC) (September 2000). *Statement of the Regional Accrediting Commissions on the Evaluation of Electronically Offered Degree and Certificate Programmes and Guidelines for the Evaluation Of Electronically Offered Degree and Certificate Programmes.* Retrieved January 15, 2003. http://www.wcet.info/resources/publications/guidlines/pdf

Council of Regional Accrediting Commissions (2001). *Best Practices for Electronically Offered Degree and Certificate Programmes.* Retrieved January 15, 2003. http://www.wiche.edu/telecom/Accrediting%20-%20Best%20Practices.pdf

Dooley, K.E. & Murphrey, T.P. (2000). *How the Perspectives of Administrators, Faculty and Support Units Impact the Rate of Distance Education Adoption*. Retrieved May 15, 2004. http://www.westga.edu/~distance/ojdla/winter34/dooley34.html

Dunkin, R (2000). *Developing On-line Tutors: The Institutional Support Perspective*, Keynote paper within the OTiS e-Workshop, May 2000. Retrieved May 10, 2005. http://otis.scotcit.ac.uk/eworkshop.htm#keynotes

Education Criteria 2003: Core Values, Concepts, and Framework. Retrieved January 20, 2004. http://www.learn-live.com/0-Profile.htm

Egbert, J., Paulus, T. M., & Nakamichi, Y. (2002). The impact of call instruction on classroom computer use: A foundation for rethinking technology in teacher education. *Language Learning and Technology* 6 (3), 108-126. Retrieved July 26, 2005. http://llt.msu.edu/vol6num3/egbert/default.html

Evaluating online courses using "SELT". Learning and Development Unit. The University of Adelaide. Australia. Retrieved September 10, 2004. www.adelaide.edu.au/itdu/staff/evaluation/eval_online.html

Fairhurst, J. (2002). *Quality Assuring an Electronically Delivered Distance Learning Programme.* 17th BILETA Annual Conference. April 5th - 6th, 2002. Free University, Amsterdam. Retrieved March 20, 2004. http://www.bileta.ac.uk/02papers/fairhurst.html

Felix, U. (2001). A multivariate analysis of students' perspectives of Web based learning. *Australian Journal of Educational Technology* 17(1), 21-36. Retrieved July 26, 2005. http://www.ascilite.org.au/ajet/ajet17/felix.html

Feenberg, A. (1999). *Distance Learning: Promise or threat*? Retrieved March 20, 2004. http://www-rohan.sdsu.edu/faculty/feenberg/TELE3.HTM

Fitri Suraya Mohamad (2000). *Guiding teachers in Web based technologies*. Reteived May 10, 2005. http://otis.scotcit.ac.uk/casestudy/mohamad.doc

Flowers, J. M. (2000). Factors that Contribute to the Progress of High School Students in a College Distance Education Course**.** Unpublished EdD thesis. University of Nevada, Las Vegas.

Fox, C., M., and Jones, J. A. (1998). Uses of Rasch modeling in counseling psychology research. *Journal of Counseling Psychology*, 45 (1), 30-45.

Godwin-Jones, B. (2005). Messaging, gaming, peer-to-peer sharing: language learning strategies & tools for the millennial generation. *Language Learning and Technology* 9 (1), 17-22. Retrieved July 26, 2005. http://llt.msu.edu/vol9num1/emerging/default.html

Good, M. (2001). On the way to online pedagogy. In Stephenson, J. (Ed.). *Teaching and learning online: pedagogies for new technologies*. (165-174). London: Kogan Page Limited.

Hacker, D. J., and Niederhauser, D. S. (2000). Promoting deep and durable learning in the online classroom. In Renée E. Weiss, Dave S. Knowlton, and Bruce W. Speck (Eds.), *Principles of effective teaching in the online classroom*. (pp. 53 – 64). San Francisco: Jossey-Bass Inc..

Hackett, L. (1996). The Internet and email: useful tools for foreign language teaching and learning. *ON-CALL* 10 (1), 15-20.

Hair, J.F., Anderson, R.E., Tathan, R.L., and Black, W.C. (1998). *Multivariate data analysis (5th ed.)*. Upper Saddle River, New Jersey: prentice Hall.

Hambleton, R. K., Swaminathan, H., and Roger, H. A. (1991). Principles and Selected Applications of Item Response Theory**.** Londaon: SAGA Publications.

Harman, G. & Meek, V.K. (2000). *Repositioning quality assurance and accreditation in Australian higher education*. Department of Education, Training and Youth Affairs. Retrieved 06 June, 2001. www.dest.gov.au/archive/highered/eippubs/eip00_2/fullcopy00_2.pdf

Hassan, M. K. (2001). *Intellectual discourse at the End of the 2nd millennium: Concerns of a Muslim- Malay CEO*. Kuala Lumpur: IIUM Press.

Harasim, L., Hiltz, S. R., Teles, L., & Turoff, M. (1995**).** *Learning networks: A field guide to teaching and learning online*. Cambridge, MA: MIT Press.

Haworth, K. (1995). *World Languages Pages*. Retrieved March 20, 2004. http://www.livjn.ac.uk/language/

Hensrud, F. C. (2001). Quality Measures in Online Distance Education at a Small Comprehensive University. Unpublished PhD thesis. University of Minnesota.

Higgins, J. & T. Johns (1986). *Computers and Language learning*. London: Kogan Page Limited

Hiltz, S. R. (1994). *The virtual classroom: Learning without limits via computer networks*. Norwood, NJ: Ablex.

Ho, Mei Lin C. (2004). Computer-Mediated Communication: Practice, Projects and Purposes. *Teaching English with Technology*. A Journal for Teachers of English. Vol. 4, no. 1, January.

Hoepfl, M., (1997). Choosing qualitative research: A primer for technology education researchers. *Journal of Technology Education,* 9 (1), 66-87.

Institute for Higher Education Policy (IHEP), "Quality on the Line: Benchmarks for Success in Internet-Based Distance Education," April 2000. Retrieved December 25, 2002.
http://www.ihep.com/quality.pdf

Jackson, B. (September. 2004). *Evaluation of Learning Technology Implementation*. Retrieved January 15, 2005.
www.icbl.hw.ac.uk/ltdi/evalstudies/esevalimp.pdf

Jacobsen, D. M. (2003). *Complementary research methods*.
Retrieved March 20, 2004.
http://www.ucalgary.ca/~dmjacobs/phd/methods

Johns, A. M. (1997). *Text, role, and context. Developing academic literacies*. Cambridge Univerity Press.

Jolliffe, A., Ritter, J., & Stevens, D. (2001). The online learning handbook: Developing and using Web-based learning. London: Kogan Page Limited.

Jurczyk, J. & Benson S. N. K. & Savery, J. R (2002). *Benchmarks of Web-Based Instruction: A Comparative Study of Student and Instructor Expectations*. A paper presented in MWERA (Mid-Western Educational Research Association. Columbus, Ohio). Retrieved March 25, 2004.
http://joejurczyk.com/mwera/paper.htm

Kearsley, G. (2000). *Online education: Learning and teaching in cyberspace***.** Belmont, CA: Wadsworth.

Kelsey, K., D. & D'souza, A., K. (2004). Student Motivation for Learning at a Distance: Does Interaction Matter? *Online Journal of Distance Learning Administration*. Retrieved May 20, 2005.
http://www.westga.edu/%7Edistance/ojdla/summer72/kelsey72.html

Kennedy, D. and Duffy, T. (2000). *Understanding the Effort*. University of Paisley, UK. Retrieved April 19, 2005. http://otis.scotcit.ac.uk/casestudy/kennedy.doc

Kenny, J. (2003). *Student perceptions of the use of online learning technology*. Retrieved July 26, 2005. http://ultibase.rmit.edu.au/Articles/march03/kenny1.htm

King, J., and Bond, T. (1996). A Rasch analysis of a measure of computer anxiety. *Journal of Educational Computing Research,* 14(1), 49-65.

Kline, P. (1993). *The handbook of psychological testing*. London: Rutledge.

Knowlton, D. S. (2000). A theoretical framework for online classroom. A defense and delineation of a student-centered pedagogy. In Renée E. Weiss, Dave S. Knowlton, and Bruce W. Speck (Eds.). *Principles of effective teaching in the online classroom*. (pp. 5 – 14). San Francisco: Jossey-Bass Inc..

Lao, T. M. (2002). A Description of the Experiences, Perceptions, and Attitudes of Professors and Graduate Students about Teaching and Learning in a Web-Enhanced Learning Environment at a Southwest Border Institution**.** Unpublished PhD thesis. New Mexico State University.

Lee, B. C. (2004). Korean EFL in-service teachers' experiences with native-speaking teachers of EFL using two computer-mediated communication modes: A qualitative case study. Unpublished PhD thesis. University of Alberta, Canada.

Lee, J. (2001). Instructional support for distance education and faculty motivation, commitment, satisfaction. *British Journal of Educational Technology, 32* (2), 153-160.

Lee, K-W. (2000). English teachers' barriers to the use of computer-assisted language learning. *Internet TESOL Journal*, *6*(12). Retrieved November 26, 2003. http://iteslj.org/Articles/Lee-CALLbarriers. html

LeLoup, J. W. & Ponterio, R. (1995). Addressing the Need for Electronic Communication in Foreign Language Teaching. In Richard Steinfeldt, Ed., Educational Technologies_, monograph of the New York State Council of Educational Associations; 39-54. Retrieved, July 31, 2003. http://www.cortland.edu/flteach/articles/nyscea.html

Lewis, L. Snow, K., and Farris E. (1999). Distance Education at Postsecondary Institutions: 1997-98. National Centre for Educational Statistics (NCES), US. Department of Education, NCES #2000-013. Washington, DC: U.S. Government Printing Office.

Linacre, J. (24th June 2005). Personal communication during the Pacific Rim Objective Measurement Symposium (PROMS) & International Symposium on Measurement & Evaluation (ISME), 2005. Pan Pacific Hotel KL, Malaysia.

Lincoln, Y., and Guba, E. (1985). *Naturalistic inquiry*. Beverly Hills: Sage Publications.

Little, V. S. (2000). Design, Implementation and Assessment of an Online Writing Programme for Multi-age Students, Grades 9—12. Unpublished PhD thesis. California Institute of Integral Studies.

Liou, H. (1997). The Impact of WWW Texts on EFL Learning**.** *Computer Assisted Language Learning.* 10 (5), 455-478.

Lynch, M. M. (2002).The online educator: a guide to creating the virtual classroom. London: RoutledgeFalmer.

Maguire, L. L. (2005). Literature Review – Faculty Participation in Online Distance Education: Barriers and Motivators. *Online Journal of Distance Learning Administration* Retrieved May 15, 2005. http://www.westga.edu/%7Edistance/ojdla/spring81/maguire81.htm

Mason, J. (2002). *Qualitative researching*. London: Sage Publications Ltd.

Mayadas, F. (1997). Asynchronous Learning Networks: A Sloan Foundation Perspective. Journal of asynchronous Learning Networks, 1, 1-6. Retrieved February 10, 2003. http://www.aln.org

McGory, S. Y. (2002). Online, But on Target? Internet-Based MBA courses: A Case study. *The Internet and Higher Education*, 5 (2), 167-175.

McMeniman, M & Evans, R (1998). CALL through the eyes of teachers and learners of Asian languages: Panaceas or business as usual? *ON-CALL* 12 (1), 2-9.

McNabb, M., Hawkes M., & Rouk Üllik (1999). *Critical Issues in Evaluating the Effectiveness of Technology*. Retrieved February 10, 2003. http://www.ed.gov/Technology/TechConf/1999/confsum.html

McNamara, T. (1996). Measuring Second Language Performance. London: Longman.

Mohamed Amin Embi (2004). Development and evaluation of an ESL Web site on Learning-To-Learn English. *CALL-EJ Online*, 6 (1), June 2004. Retrieved April 09, 2005. http://www.tell.is.ritsumei.ac.jp/callejonline/journal/6-1/embi.html

Mohamed Amin Embi and Azmi Abdul Latiff (2004). Trainees' perception on E-Learn: A Malaysian-based ESL web site. *Internet Journal of e-Language Learning & Teaching*, 1(2), 48-57. Retrieved 15 May, 2005. http://www.eltrec.ukm.my/ijellt/pdf/MohamedAmin.pdf

Mohamed Amin Embi and Afendi Hamat (2005). WeB-CEPT: Content creation tool for ESL teachers. *Internet Journal of e-Language Learning & Teaching*, 2(1), 35-41. Retrieved 20 July, 2005.

http://www.eltrec.ukm.my/ijellt/pdf/MohamedAmin_1.pdf

Monske, E. A. (2004). Transitioning into the fully online writing course: A pilot study. Unpublished PhD thesis. Bowling Green State University.

Moore, M., and Kearsley, G. (1996). *Distance education: A systems approach***.** Belmont, CA: Wadsworth.

Morrison, G. R., and Guenther, P. F. (2000). Designing instruction for learning in electronic classrooms. In Renée E. Weiss, Dave S. Knowlton, and Bruce W. Speck (Eds.), *Principles of effective teaching in the online classroom*. (pp. 15 – 22). San Francisco: Jossey-Bass Inc.

Mozzon-McPherson, M. (2002). Language advising: Guide to good practice or learning and teaching in Languages, Linguistics and Area Studies. Retrieved July 26, 2005. http://www.lang.ltsn.ac.uk/resources/goodpractice.aspx?resourceid=93

Mustapha, W. & Anwar, T (2002). Malaysian English Language Teachers' Attitude in Implementing Computer Assisted Language Learning (CALL): A Case study of a Public University in Malaysia**.** Paper presented in SEAAIR (South East Association of Institutional Research) International Conference. Legend Hotel, Kuala Lumpur. 24-26 October, 2000.

Nauss, D. A. (2002). The Effects of a Supplemental Computerized Reading Programme on the Comprehension of First-grade Readers in Rural South Florida. Unpublished PhD thesis. University of Central Florida.

Nelson, E. D. (2001). A Study of the Relationship between the Teaching Style and the Use of Computers in Elementary Classrooms. Unpublished EdD thesis. University of Central Florida.

Nunan, David (1995). *Research Methods in Language Learning*. Cambridge: Cambridge University Press.

Nunnally, J. C. & Bernstein, I.H. (1994). *Psychometric theory*, 3rd ed. New York: McGraw Hill.

Nuraihan Mat Daud (1994). Problems in the Implementation of Computer Assisted Language Learning in Malaysia. Unpublished PhD thesis. University of Hull, UK.

Nuraihan Mat Daud and Ainol Marziah Zubairi (2005). Online and offline writing course: A quantitative study. *Internet Journal of e –Language Learning and Teaching*, 2 (1), 1-12. Retrieved April 25, 2005. http://www.eltrec.ukm.my/ijellt/pdf/NuraihanMatDaud.pdf

O'Quinn, L. & Corry, M. (2002). *Factors That Deter Faculty from Participating In Distance Education.* Retrieved May 20, 2005.

http://www.westga.edu/~distance/ojdla/winter54/Quinn54.htm

Palloff, R, M. (1999). *Building Learning Communities in Cyberspace: Effective strategies for the online classroom.* San-Francisco: Jossey-Bass.

Palloff, R, M. & Pratt, K. (2001). *Lessons from the Cyberspace Classroom: The realities of online teaching.* San-Francisco: Jossey-Bass.

Palloff, R, M. & Pratt, K. (2003). *The Virtual Student: A profile and guide to working with online learners*. San-Francisco: Jossey-Bass.

Parks, S., Huot, D., Hamers, J., H.-Lemonnier, F. (2003). Crossing boundaries: Multimedia technology and pedagogical innovation in a high school class**.** *Language Learning and Technology* 7 (1), 28-45. Retrieved July 26, 2005. http://llt.msu.edu/vol7num1/parks/default.html

Patton M. Q (1990). *Qualitative Evaluation and Research Methods*. London: Sage Publications.

Partee, M. H. (2002). Cyberteaching: Instructional technology in the modern campus. University Press of America. Boston.

Peters, O. (2001). *Learning and Teaching in Distance Education: Analysis and interpretations from an international perspective* (1st edn)**.** London: Kogan Page Limited.

Phipps. R. A. & Merisotis, J., P. (1999). *What's the Difference? A review of contemporary research on the effectiveness of distance learning in higher education.* Washington. D.C.: Institute for Higher Education Policy.

Phipps R. A. & Merisotis, J., P. (2000). *Quality on the Line: Benchmarks for success in internet-based distance education*. Institute for Higher Education Policy, Washington, D.C. Retrieved December 25, 2002. http://www.ihep.com/quality.pdf

Qingyang, G. (2003). Mlearning**:** A New Development towards More Flexible and Learner-Centred Learning. *Teaching English with Technology. A Journal for Teachers of English.* 3 (2), April 2003.

Rayan, S., Scott, B., Freeman, H., & Patel, D. (2000). *The Virtual University: The Internet and The Resource –Based Learning*. London: Kogan Page Limited.

Rekkedal, T., & Qvist-Eriksen, S. (2004). Support Services in E-Learning - an Evaluation Study of Students' Needs and Satisfaction. Retrieved July 15, 2005. http://www.eurodl.org/materials/contrib/2004/Rekkedal_Qvist-Eriksen.htm

Reil, R., and Harrasim, L. (1994). Telecommunications Training by Immersion: University Courses Online. *Machine Translated Learning.* 4 (2 & 3) 91-113. Hillsdale: NJL Lawrence Erlbaum associates, Inc.

Roberts. G. (2002). *Technology Assisted off-Campus Programmes at Oxford Brookes University. Project report.* Retrieved July 15, 2003. http://www.brookes.ac.uk/research/odl/Brookes Online Market Study.htm

Rowe, N. C. (2005). Cheating in Online Student Assessment: Beyond Plagiarism. *Online Journal of Distance Learning Administration*. Retrieved May 15, 2005. http://www.westga.edu/%7Edistance/ojdla/summer72/rowe72.html

Rudestam, K.E. & Newton, R. R. (1992). *Surviving Your Dissertation*. California: SAGA Publications.

Salmon, G. (2002). E-moderating. The key to teaching and learning online. London: RoutledgeFlamer.

Sawyer, P R. (1997). Evaluating the Design and Delivery of an Online Technical Writing Course. Unpublished PhD thesis. Illinois State University.

Scanlan, C. L. (2003). *Reliability and Validity of a Student Scale for Assessing the Quality of Internet-Based Distance Learning*. Retrieved October 03, 2004. http://www.westga.edu/~distance/ojdla/fall63/scanlan63.htm

Schepise, S. M. (2002). The Total Learning Environment of Web-based Courses at the University of Central Florida. Unpublished PhD thesis. University of Central Florida.

Schafersman, S. D. (1991). *An Introduction to Critical Thinking*. Retrieved July15, 2004. www.freeinquiry.com/critical-thinking.html

Scheuermann, F., Larsson, K., and Toto, R. (2000). *Organising International Collaborative Teaching and Learning in Virtual Learning Environments*. OTiS e-workshops, 8-12 May. Reteived May 10, 2005. http://otis.scotcit.ac.uk/casestudy/scheuermann.doc

Seng, L., & Mohamad, F. (2002). Online Learning: Is It Meant for Science Courses? *The Internet and Higher Education*, 5 (2), 109-118.

Siekman, S. (1999). The effects of a supplemental computer-assisted language learning environment on the proficiency of second-year German students – a pre-study. Unpublished PhD thesis. Idah State University.

Simonson, M. (2000). Making decisions: The use of electronic technology in online classrooms. In Renée E. Weiss, Dave S. Knowlton, and Bruce W. Speck (Eds.), *Principles of Effective Teaching in the Online Classroom*. (pp. 29 – 34). San Francisco: Jossey-Bass Inc.

Shiao-Chuan, K. & Tun-Whei, C. (2002). Students' perceptions of English learning through ESL/EFL Websites. *Teaching English as a Second or A Foreign Language TESL-EJ* 6 (1). Retrieved July 30, 2005. http://www-writing.berkeley.edu/tesl-ej/ej21/a2.html

Shigemitsu, M. (2004). The use of information communication technologies in English language learning in Japan. Unpublished PhD thesis. Columbia University Teachers College.

Singhal, M. (1997). *The Internet and Foreign Language Education: Benefits and challenges*. Retrieved February 08, 2002. http://www.aitech.ac.jp/~iteslj/Articles/Singhal-Internet.html

Sloan Consortium (2002/2003*). Sizing the Opportunity: The Quality and Extent of Online Education in the United States*. Retrieved February 10, 2005. http://www.sloan-c.org/resources/overview.asp

Sloan Consortium *(2003/2004*). *Entering the Mainstream: The Quality and Extent of Online Education in the United States.* Retrieved February 10, 2005. http://Www.Sloan-C.Org/Resources/Survey.Asp

Sparrow, J. L. V. (2002). Online education at nine state universities in Florida. Unpublished EdD thesis. University of Central Florida.

Spencer, D. F. (2000). A Comparison of a Computer-Mediated Graduate Course in Measurement and Evaluation with A Similar Traditionally Taught Course. Unpublished EdD thesis. University of Central Florida.

Stern, E. (1988). The evaluation policy and the politics of evaluation. *Tavistock Institute of Human Relations Annual Review.* Retrieved February 10, 2004 www.icbl.hw.ac.uk/ltdi/evalstudies/esevalimp.htm

Stewart, I. (2002). Development and Validation of an Instrument for Student Evaluation of Web-based Instruction**.** Unpublished PhD thesis. The Mexico State University.

Stick, S., L. & Ivankova, N. V. (2004). A Decade of Innovation and Success in Virtual Learning: A World-Wide Asynchronous Graduate Programme in Educational Leadership and Higher Education. *Online Journal of Distance Learning Administration* Retrieved February 20, 2005. http://www.westga.edu/%7Edistance/ojdla/winter74/stick74.htm

Stoks, G. (1993). Integrating New Technologies into the Modern Languages Curriculum. *CALICO Journal*, 11 (1), 77- 93.

Stromberg, A.M. (2002). A Comparative Study of Two Delivery Methods of Instruction, Face-to-Face (F2F) VS. Online and their Effect on the Level of Performance in Technology Skill Standards**.** Unpublished PhD thesis. The Florida State University.

Suhaila Sulong and Ridwan Wahid (2005). If We Can't Do It Inside, We'll Do It Outside': Learners' Perceptions of External Computer Use for an ESL Writing Class. *Internet Journal of e-Language Learning & Teaching,* 2 (1), 25-34**.** Retrieved 20 July, 2005. http://www.eltrec.ukm.my/ijellt/pdf/SuhailaSulongf.pdf

Taylor, K. (2001). Evaluation of an Online Psychology Class**.** Unpublished PhD thesis. The University of Memphis.

Teaching and Learning Committee: A Meeting of the Survey Evaluation and Quality Assurance Subcommittee in Sydney University. Thursday 31st July, 2000. Retrieved July 10, 2005. www.econ.usyd.edu.au/download.php?id=977

Templeton, E. (2004). *Online Tutoring e-Book - Institutional Support*. Retrieved May 10, 2005. http://otis.scotcit.ac.uk/onlinebook/otisT7p.htm

Thurnstone, L. L (1928). The measurement of opinion. *Journal of Abnormal and Social Psychology, 22*, 415-430.

Tucker G. R (1999). The Applied Linguistics, Schools Reforms, and Technology: Challenges and Opportunities for the Coming Decade. *CALICO Journal***.** 17 (2), 197- 219.

Twigg, C. A. (2001). *The Pew Learning and Technology Programme: Quality assurance for whom? providers and consumers in today's distributed learning environment.* Retrieved February 10, 2002. http://www.center.rpi.edu/PewSym/mono3.html

Van Gorp, M J. (1997). ClassNet: A potential Computer-Mediated Communications Learning Tool in Preservice Teacher Education**?** Unpublished PhD thesis. Iowa State University.

Warschauer, M., & Healey, D. (1998). Computers and language learning: An overview. *Language Teaching, 31*, 57-71. Retrieved November 19, 2002. http://www.gse.uci.edu/markw/overview.html

Western Interstate Commission on Higher Education (1995). *Principles of Good Practice in Electronically Offered Academic Degree and Certificate Programmes*. Retrieved February 10, 2002. http://www.wiche.edu/telecom/Projects/balancing/principles.htm

Western Cooperative for Educational Telecommunications (2000). *Guidelines for the Evaluation of Electronically Offered Degree and Certificate Programmes.* Retrieved February 10, 2002. http://www.wiche.edu/telecom/Guidelines.htm

Wright, B., & Masters, G. (1982). *Rating Scale Analysis*. Rasch Measurement. Chicago: MESA Press.

Wright, B. D., & Stone, M. H. (1979*). Best test design*. Chicago: MESA Press.

Wright, B. D, & Grosse M. (1993) How to set standards? Rasch Measurement Transactions 7:3 p.315. Retrieved July 10, 2005. http://www.rasch.org/rmt/rmt73e.htm

Wright, B. D. (2000). How to set standards? Rasch Measurement Transactions, 14:1 p.740. Retrieved July 10, 2005. http://www.rasch.org/rmt/rmt141n.htm

Wright, B. D. & Stone, M. (2004). Making Measures. Chicago: The Phaneron Press.

Yeung, D. (2001). Toward an effective quality assurance model of Web-based learning: The perspective of academic staff. *Online Journal of Distance Learning Administration*, Summer 2002, Volume 5, Issue 2. Retrieved February 10, 2005. http://www.westga.edu/~distance/jmain11.html

APPENDIX ONE

THE 45 BENCHMARKS THAT WERE EXAMINED IN THE IHEP 2000 STUDY

INSTITUTIONAL SUPPORT BENCHMARKS

1. Faculty are provided professional incentives for innovative practices to encourage development of distance learning courses.
2. There are institutional rewards for the effective teaching of distance learning courses.
3. A documented technology plan is in place to ensure quality standards.
4. Electronic security measures are in place to ensure the integrity and validity of information.
5. Support for building and maintaining the distance education infrastructure is addressed by a centralized system.

COURSE DEVELOPMENT BENCHMARKS

6. Distance learning course development must be approved through a broad peer review process.
7. Guidelines exist regarding minimum standards of course development, design and delivery.
8. Course design is managed by teams comprised of faculty, content, experts, instructional designers, technical experts, and evaluation personnel.
9. During course development, the various learning styles of students are considered.
10. Assessment instruments are used to ascertain the specific learning styles of students, which then determine the type of course delivery.
11. Courses are designed with a consistent structure, easily discernable to students of varying learning styles.
12. The technology being used to deliver course content is based on learning outcomes.
13. Instructional materials are previewed periodically to ensure that they meet programme standards.

TEACHING/LEARNING BENCHMARKS

14. Student interaction with faculty is facilitated through a variety of ways.
15. Student interaction with other students is facilitated through a variety of ways.
16. Feedback to student assignments and questions is provided in a timely manner.
17. Feedback to students is provided in a manner that is constructive and non-threatening
18. Courses are separated into self-contained segments (modules) that can be used to assess student mastery before moving forward in the course or programme.
19. The modules/segments are of varying length determined by the complexity of learning outcomes.
20. Each module/segment requires students to engage themselves in analysis, synthesis, and evaluation as part of their course assignment.
21. Class voice-mail and /or e-mail systems are provided to encourage students to work with each other and their instructor(s).
22. Courses are designed to require students to work in groups utilizing problem-solving activities in order to develop topic understanding.
23. Course materials promote collaboration among students.

COURSE STRUCTURE BENCHMARKS

24. Students are provided with supplemental course information that outlines course objectives, concepts and ideas.
25. Specific expectations are set for students with respect to a minimum amount of time per week for study and homework assignments.
26. Faculty are required to grade and return all assignments within a certain time period.
27. Sufficient library resources are made available to students.
28. Students are instructed in the proper methods of effective research, including assessment of resource validity.
29. Before starting the programme, students are advised about the programme to determine if they have the self-motivation and commitment to learn at a distance.
30. Learning outcomes for each course are summarized in a clearly written, straightforward statement.

STUDENT SUPPORT BENCHMARKS

31. Students can obtain assistance to help them to use electronically accessed data successfully.
32. Students are provided with hands-on training and information to aid them in securing material through electronic database, interlibrary loans, government archives, news services, etc.
33. Written information is supplied to the student about the programme.
34. Easily accessible technical assistance is available to all students throughout the duration of the course /programme.
35. A structured system is in place to address student complaints.

FACULTY SUPPORT BENCHMARKS

36. Technical assistance in course development is available to faculty and they are encouraged to use it.
37. Faculty members are assisted in the transition of the classroom teaching to distance instruction and are assessed in the process.
38. There are peer monitoring resources available to faculty members teaching distance courses.
39. Distance instructor training continues throughout the progression of the class.
40. Faculty members are provided with written resources to deal with issues arising from the student use of electronically-accessed data.

EVALUATION AND ASSESSMENT BENCHMARKS

41. The programme's educational effectiveness is measured using several methods.
42. An evaluation process is used to improve the teaching/learning process.
43. Specific standards are in place to compare and improve learning outcomes.

44. Data on enrolment, cost and successful/innovative uses of technology are used to evaluate programme effectiveness.
45. Intended learning outcomes are regularly reviewed to ensure clarity, utility, and appropriateness.

APPENDIX TWO

INSTITUTE FOR HIGHER EDUCATION

POLICY BENCHMARKS (2000)

INSTITUTIONAL SUPPORT BENCHMARKS

- A documented technology plan that includes electronic security measures (i.e., password protection, encryption, back-up systems) is in place and operational to ensure both quality standards and the integrity and validity of information.
- The reliability of the technology delivery system is as failsafe as possible.
- A centralized system provides support for building and maintaining the distance education infrastructure.

COURSE DEVELOPMENT BENCHMARKS

- Guidelines regarding minimum standards are used for course development, design, and delivery, while learning outcomes—not the availability of existing technology—determine the technology being used to deliver course content.
- Instructional materials are reviewed periodically to ensure they meet programme standards.
- Courses are designed to require students to engage themselves in analysis, synthesis, and evaluation as part of their course and programme requirements.

TEACHING/LEARNING BENCHMARKS

- Student interaction with faculty and other students is an essential characteristic and is facilitated through a variety of ways, including voice-mail and/or e-mail.
- Feedback to student assignments and questions is constructive and provided in a timely manner.
- Students are instructed in the proper methods of effective research, including assessment of the validity of resources.

COURSE STRUCTURE BENCHMARKS

- Before starting an online programme, students are advised about the programme to determine (1) if they possess the self-motivation and commitment to learn at a distance and (2) if they have access to the minimal technology required by the course design.
- Students are provided with supplemental course information that outlines course objectives, concepts, and ideas, and learning outcomes for each course are summarized in a clearly written, straightforward statement.
- Students have access to sufficient library resources that may include a "virtual library" accessible through the World Wide Web.
- Faculty and students agree upon expectations regarding times for student assignment completion and faculty response.

STUDENT SUPPORT BENCHMARKS

- Students receive information about programmes, including admission requirements, tuition and fees, books and supplies, technical and proctoring requirements, and student support services.

- Students are provided with hands-on training and information to aid them in securing material through electronic databases, interlibrary loans, government archives, news services, and other sources.
- Throughout the duration of the course/programme, students have access to technical assistance, including detailed instructions regarding the electronic media used, practice sessions prior to the beginning of the course, and convenient access to technical support instructors.
- Questions directed to student service personnel are answered accurately and quickly, with a structured system in place to address student complaints.

FACULTY SUPPORT BENCHMARKS

- Technical assistance in course development is available to faculty, who are encouraged to use it.
- Faculty members are assisted in the transition from classroom teaching to online instruction and are assessed during the process.
- Instructor training and assistance, including peer mentoring, continues through the progression of the online course.
- Faculty members are provided with written resources to deal with issues arising from student use of electronically-accessed data.

EVALUATION AND ASSESSMENT BENCHMARKS

- The programme's educational effectiveness and teaching/learning process is assessed through an evaluation process that uses several methods and applies specific standards.
- Data on enrollment, costs, and successful/innovative uses of technology are used to evaluate programme effectiveness.
- Intended learning outcomes are reviewed regularly to ensure clarity, utility, and appropriateness.

APPENDIX THREE

QUESTIONS SUGGESTED IN THE PEW SYMPOSIUM FOR ONLINE STUDENTS

INSTITUTIONAL SUPPORT

- How reliable was the technology used in the course?
- Was the technology-e.g., Web sites, course management software-easy to use?

COURSE DEVELOPMENT

- Was the course content relevant to your educational and professional goals?
- Was the course up-to-date?
- How challenging was the course? Were expectations for performance set high and within reason?

TEACHING/LEARNING

- Did you receive sufficient help when you needed it?
- Was there sufficient feedback to help you achieve your learning goals?
- Was there sufficient interaction with other students to meet your needs?
- Was there sufficient interaction with the instructor to meet your needs?
- Did course activities contribute to your learning goals (vs. being a "waste of time")?

COURSE STRUCTURE

- Was the information you received before enrolling in the course accurate and adequate?
- Did you have sufficient access to learning resources—e.g., libraries, databases?
- Were course expectations clear?
- Did the course experience match the expectations?
- Were assignments and learning activities clear?
- Were evaluations (interim and final) fair?

STUDENT SUPPORT

- Did you receive information about policies, procedures, and support services (registration, payment procedures, financial aid, etc.) that you needed?
- Were your questions answered accurately and in a timely fashion?
- Were complaints addressed adequately?
- Did you receive course materials in a timely fashion?
- Did you receive adequate technical assistance?
- Did you know how to access online resources?

VALUE, FLEXIBILITY AND CONVENIENCE

- Was the course worth its cost?
- Was the course flexible enough to meet your needs?

APPENDIX FOUR

INTERVIEW QUESTIONS FOR STUDENTS

INSTITUTIONAL SUPPORT

1 How reliable was the technology used in the course?
2 Was the technology - e.g., Websites, course management software - easy to use?

COURSE DEVELOPMENT

3 Was the course content relevant to your educational and professional goals?
4 Was the course up-to-date?
5 How challenging was the course?
6 Were expectations for performance set high and within reason?

TEACHING/LEARNING

7 Did you receive sufficient help when you needed it?
8 Was there sufficient feedback to help you achieve your learning goals?
9 Was there sufficient interaction with other students to meet your needs?
10 Was there sufficient interaction with the instructor to meet your needs?
11 Did course activities contribute to your learning goals (vs. being a "waste of time")?
12 Is feedback equal to performance?
13 Is collaborative problem-solving encouraged?

COURSE STRUCTURE

14 Was the information you received before enrolling in the course accurate and adequate?
15 Did you have sufficient access to learning resources - e.g., libraries, databases?
16 Were course expectations clear?
17 Did the course experience match the expectations?

STUDENT SUPPORT

18 Were the course goals, learning objectives and outcomes made clear to you at the beginning of the course?
19 Did you have the necessary technological equipment and skills required for this course?
20 Was there adequate technical support if you encountered difficulties?
21 Was the format and page design of the online course easy to use?
22 Were there sufficient instructions given for you to complete all assignments?
23 Did you feel hindered in your online experience any way? Please describe?
24 Did you participate in online conversation with your online instructor during the course?
25 Did you participate in online conversation with your classmates during the course?
26 Were your questions answered accurately and in a timely fashion?
27 Were complaints addressed adequately?
28 What learning activities most influenced your learning in this course?
29 Did you receive course materials in a timely fashion?
30 Did you receive adequate technical assistance?
31 Did you know how to access online resources?

EVALUATION AND ASSESSMENT

32 Were assignments and learning activities clear?
33 Were evaluations (interim and final) fair?
34 Were standards of for evaluation of assignments made clear?
35 Did you receive prompt feedback on your completed assignments?

VALUE, FLEXIBILITY AND CONVENIENCE

36 Was the course flexible enough to meet your needs?

Comment on how to improve the online learning experience

APPENDIX FIVE

INTERVIEW QUESTIONS FOR THE INSTRUCTORS

A. INSTITUTIONAL SUPPORT BENCHMARKS

1. What are the goals of the programme/ why did CELPAD change this course to online mode?
2. Is the institution fulfilling its duty in offering the programme online?
3. Does the programme represent a change to the institution's stated mission and objectives?
4. Is the change truly significant?
5. What are the institution's policies concerning the establishment, organization, funding, and management of online offered programmes? Do they reflect ongoing commitment to such programmes?
6. What kind of technical support were you provided in conducting your Internet-based course?
7. Was it sufficient?
8. Does your institution provide satisfactory technical support to students in the online learning course(s) you taught?
9. Is there a clear, well-understood process by which the Internet-based programme evolves from conception into administrative authorization to implementation?
10. In the institution's organizational documentation, is there a clear and integral relationship between those responsible for online offered programmes and the mainstream academic structure?
11. How are the integrity, reliability, and security of services assured?
12. Are training and technical support programmes considered adequate by those for whom they are intended?
13. Given the rapid pace of change in modern information technology, what policies or procedures are in place to keep the infrastructure reasonably up-to-date?

B. COURSE DEVELOPMENT BENCHMARKS

1. By what process was the programme developed? Were academically qualified persons responsible for curricular decisions?
2. What were the academic qualifications of those responsible for curricular decisions, assessment, and programme oversight?
3. What are the academic qualifications of those presenting and managing the programme?
4. Are these qualifications considered appropriate to the responsibilities of these persons?
5. What technologies are used for programme interaction (e.g., email, telephone office hours, phone conferences, voicemail, fax, chat rooms, Web-based discussions, computer conferences and threaded discussions, etc.)?
6. How successful is the programme's interactive component, as indicated by student and instructor questionnaires, comments, or other measures?

C. TEACHING AND LEARNING BENCHMARKS

1. In conducting your course, please tell us what methods you used to maintain personal interaction between (a) yourself and the students and (b) the students with each other?
2. In terms of interaction, what strengths and shortcomings did you find compared to the traditional classroom?
3. On the average, how did your students perform compared to students taking similar classes through traditional means?
4. If there is a difference to what you attribute it?
5. Does teaching online influence your instructional methods?
6. If you have opportunity to teach similar courses again, would you want to do so?

D. COURSE STRUCTURE BENCHMARKS

1. Is the programme "coherent and complete?"
2. Are related instructional materials appropriate and readily accessible to students?
3. Do you provide students with supplemental course information that outlines course objectives, concepts and ideas?
4. Do you set specific expectations for students with respect to a minimum amount of time per week for study and homework assignments?
5. Are you required to grade and return all assignments within a certain time period? And do you do that?

E. STUDENT SUPPORT BENCHMARKS

1. Is a help-desk function realistically available to students during hours when it is likely to be needed? (Is there adequate technical support?)
2. Do your students have regular access to an adequate "physical library"?
3. How the students are informed about technology requirements and required technological competence?
4. Are the services perceived by EAW students to be adequate and appropriate?
5. Are these services perceived to be adequate and appropriate by those responsible for providing them? What modifications or improvements are planned?
6. How are the learning needs of the students enrolled in EAW identified, addressed, and linked to educational objectives and learning outcomes?

E. FACULTY SUPPORT BENCHMARKS

1. Have any question of intellectual ownership property arisen concerning your work in online education? If yes, please explain.
2. Does the institution have a well-developed policy to address issues such as workload, compensation, intellectual property rights, and faculty evaluation?
3. What support services are available for those responsible for preparing courses to be offered online? What support services are available to those instructors responsible for working directly with students?

4. Do participating instructors consider these services to be appropriate and adequate?
5. Does the staff include qualified instructional designers? If so, do they have an appropriate role in programme and course development?
6. What orientation and training programmes are available?
7. Is adequate attention is paid to pedagogical changes made possible and desirable when information technologies are employed?
8. Given the staff available to support online offered programmes, are the possible changes in course design and management reasonable?
9. Do those involved consider these orientation and training programmes to be appropriate and adequate?

F. EVALUATION AND ASSESSMENT BENCHMARKS

1. How does the institution review the effectiveness of its online education programmes assure alignment with institutional priorities and educational objectives?
2. How does evaluated student performance compare to intended learning outcomes?
3. How is student performance evaluated?
4. How is the institution's ongoing programme of assessment and improvement developed and conducted?
5. Does the programme appropriately involve academically qualified persons?
6. What is the institution's mechanism of review of existing programmes and courses?
7. Has the process had measurable results to date?
8. What criteria did you employ to grade students in your online education course (papers, multiple choice testing, essays, etc.)?
9. Does this differ from the criteria you might have used in a traditional classroom course? If yes, please describe:
10. What elements are necessary for students' success and have they been evaluated?
11. Do online classes require special skills and what are these?
12. Do you think that your students have the necessary skills to use the computer?

Suggestions:
Or, what additional comments do you have about the online EAW at the CELPAD?

……

APPENDIX SIX

PILOT QUESTIONNAIRE

Evaluation of an online English for academic writing course

I would like to evaluate the 2-hour lab sessions that are part of EAW that you are taking this semester. Please answer the questions in part A and part B. Your responses will be very helpful in our attempt to improve the quality of online courses.

PART I

Gender Male ( ) Female ( )
Age……
Year of study…….
Current CGPA ……..
Kulliyyah ……
Country of origin …….
Have you taken any computer-related course before (e.g. computer literacy)?
Yes ( ) No ( )

PART II

Indicate the extent to which you agree or disagree with the following statements regarding the 2-hour online lab sessions by putting a cross in the appropriate box using the scale given below.

Strongly Agree 1 **Agree 2** **Neutral 3** **Disagree 4** **Strongly Disagree 5**

No	INSTITUTIONAL SUPPORT	1	2	3	4	5
1.	CELPAD has measures to ensure quality standards					
2.	CELPAD has electronic security measures to ensure the integrity and validity of information.					
3.	The Chat-room was easy to use					
4.	The technology delivery system is highly reliable.					
	COURSE DEVELOPMENT					
5.	The level of content difficulty is appropriate to me.					
6.	The course content is relevant for me to fulfill the academic writing in my Kulliyyah.					
7.	The technology being used to deliver course content is based on learning outcomes					
8.	The Instructional materials are previewed periodically to ensure that they meet programme standards.					
9.	The students are required to engage themselves in analysis, synthesis, and evaluation as part of their course and programme requirements.					
10.	I find that the software links easy to use.					
11.	The instructional methods used in the 2-hour online sessions help me learn the subject matter. Note:					

	Instructional methods may include discussions, group work, etc.					
12.	The assessment activities (tests, quizzes, essays, presentations, etc.) contribute to my confidence in writing an argumentative paper.					
13.	The course content is delivered with appropriate media.					
	TEACHING/LEARNING	1	2	3	4	5
14.	I receive sufficient help from the instructor when I need it.					
15.	The instructor provides enough examples to allow me to better understand the subject matter.					
16.	The online instructor encourages proper communication among students.					
17.	There was sufficient feedback from the online facilitator to help me achieve my learning goals.					
18.	There is sufficient interaction with other students to meet my needs.					
19.	The instructor made efficient use of class time.					
20	The instructor encouraged students to think for themselves.					
21.	There is sufficient interaction with the online instructor to meet my needs.					
22.	There is significant interaction with other students to meet my needs.					
	COURSE STRUCTURE					
23.	Before starting an online programme, students are advised about the programme to determine (1) if they possess the self-motivation and commitment to learn online and (2) if they have access to the minimal technology required by the course design.					
24.	I was provided with supplemental course information that outlines course objectives, concepts, and ideas					
25.	Learning outcomes for the course are summarized in a clearly written, straightforward statement.					
26.	I have access to sufficient library resources that may include a "virtual library" accessible through the World Wide Web (online tutorials or libraries, content-related Web sites, etc.).					
27.	The assignments and learning activities were clear.					
28.	Evaluations of the paper and the outline were fair?					
	STUDENT SUPPORT					
29.	I received information about policies, procedures, and support services (registration, payment procedures, financial aid, etc.) that I needed.					
30.	My questions were answered accurately and promptly					

	when I had questions.					
31.	My complaints to the online instructors were addressed adequately.					
32.	There was easily accessible technical assistance available to me thorough the duration of the course /programme.					
33.	I could retrieve course materials according to the schedule?					
34.	I was guided on how to access online resources throughout the course.					
35.	I was provided with hand-on training and information to aid them in securing material through electronic database, interlibrary loans, government archives, news services, etc.					
	VALUE					
36.	I am enjoying the 2-hour online sessions.					
37.	I talked with other students about the 2-hour online sessions and received positive feedback					
38.	The course provided a valuable learning experience					
39.	I recommend this course to other students					
	FLEXIBILITY AND CONVENIENCE					
40.	The course is flexible enough to meet my needs.					

APPENDIX SEVEN

STUDENTS' QUESTIONNAIRE

Evaluation of Online English for Academic Writing Course

This questionnaire is designed to evaluate the **ONLINE** sessions that are part of EAW English for Academic Writing. Your answers to this questionnaire will help the researcher to prepare a study for the fulfillment of the requirements for the Ph.D in English Language Studies.

Please read the statements carefully and answer PART I and PART II.

Your answers will be kept strictly confidential and anonymous.

PART I

Please, tick (✓) the appropriate box.

A-Gender:	□ Female □ Male
B-Age:	□ 19 □ 20 □ 21 □ 22 □23 □ 24 □25 □ 26
C-Year of study:	□First □ Second □ Third □ Fourth
D-Current CGPA:	□ Below 2.00 □ 2.00 - 2.49 □ 2.50 - 2.99 □ 3.00 - 3.49 □ 3.50 - 4.00
E-Kulliyyah	□ IRKHS □ Economics □ Engineering □ ICT □ Architecture □ Law □ Science
F-Country of origin:	□ Malaysia □ International (please, specify
G-Have you taken any computer-related course before (e.g. computer literacy)?	□ Yes □ No

PART II

Indicate the extent to which you agree or disagree with the following statements regarding the online lab sessions by putting a tick (✓) in the appropriate box using the scale given below.

Strongly Disagree 1 Disagree 2 Neutral 3 Agree 4 Strongly agree 5

No	**INSTITUTIONAL SUPPORT**	1	2	3	4	5
1.	CELPAD has measures to ensure quality standards.					
2.	CELPAD has electronic security measures to ensure the integrity and validity of information.					
3.	The technology delivery system is highly reliable.					

	COURSE DEVELOPMENT					
4.	The level of course content difficulty was appropriate to me.					
5.	The course content was delivered with appropriate media					
6.	The technology being used to deliver course content is based on learning outcomes					
7.	The content of the course helped me to fulfill the academic writing in my Kulliyyah					
8.	The Instructional materials are previewed periodically to ensure that they meet programme standards.					
9.	The assessment activities (tests, quizzes, essays, presentations, etc.) contributed to my confidence in writing an argumentative paper.					
10.	The students are required to engage themselves in analysis, synthesis, and evaluation as part of their course and programme requirements.					
11.	There was guidance on how to access online resources throughout the course.					
	TEACHING/LEARNING					
12.	The instructor provided me with sufficient help when I needed it.					
13.	The instructor provided enough examples to allow me to better understand the subject matter.					
14.	The instructor encouraged proper communication among students.					
15.	The instructor offered sufficient feedback to help me achieve my learning goals.					
16.	The instructor's feedback to my questions is provided in a timely manner.					
17.	The instructor's feedback to my assignments is provided in a timely manner.					
18.	The instructor's feedback is offered in constructive non-threatening manner.					
19.	The instructor made efficient use of class time.					
20.	The instructor encouraged students to think for themselves.					
21.	There was sufficient interaction with the instructor to meet my needs					
22.	There was sufficient interaction with other students to meet my needs					
	COURSE STRUCTURE					
23.	Learning outcomes for the course are summarized in a clearly written, straightforward statement.					
24.	I was provided with supplemental course information that outlines course objectives, concepts, and ideas					
25.	Before starting an online programme, students are					

	advised about the programme to determine (1) if they possess the self-motivation and commitment to learn online and (2) if they have access to the minimal technology required by the course design.					
26.	I have access to sufficient library resources that may include a "virtual library" accessible through the World Wide Web (online tutorials or libraries, content-related Web sites, etc.).					
27.	The course objectives were clear					
28.	Faculty and students agree upon expectations regarding times for student assignment completion and faculty response.					
29.	The course experience matched the expectations of the course.					
30.	The assignments and learning activities were clear.					
31.	Evaluations of the paper and the outline were fair?					
	STUDENT SUPPORT					
32.	I received information about programmes, including admission requirements, tuition and fees, books and supplies, technical requirements, and student support services.					
33.	My questions to student service personnel are answered accurately and quickly, with a structured system in place to address student complaints.					
34.	My complaints to the online instructors were addressed adequately.					
35.	There was easily accessible technical assistance available to me thorough the duration of the course /programme.					
36.	I could retrieve course materials according to the schedule.					
37.	I was provided with hands-on training and information to aid me in securing material through electronic databases, interlibrary loans, government archives, news services, etc.					
	VALUE/FLEXIBILITY AND CONVENIENCE					
38.	I talked with other students about the online sessions and received positive feedback					
39.	The course provided a valuable learning experience					
40.	I recommend this course to other students					
41.	The course was flexible enough to meet my needs.					
42.	I found learning the online sessions convenient and interesting.					
43.	I could follow the course more easily than other courses.					

APPENDIX EIGHT

INSTRUCTORS' QUESTIONNAIRE

Evaluation of Online English for Academic Writing Course

This questionnaire is designed to evaluate the **ONLINE** sessions that are part of EAW English for Academic Writing. Your answers to this questionnaire will help the researcher to prepare a study for the fulfillment of the requirements for the Ph.D in English Language Studies.

Please read the statements carefully and answer PART I and PART II. Your answers will be kept strictly confidential and anonymous.

PART I

Please, tick (✓) the appropriate box and fill the blank where is necessary.

A-Gender: □ Female □ Male
B-Age: ( ) years
C-Academic rank: □Teacher □ Assist Lecturer □ Lecturer □ Assist. Prof. □ Assoc. Prof.
D-Working experience (years) □ 1-5 □ 6 – 10 □ 11 – 15 □ 16 - 20 □ 21 years or over
E-Degrees, certificates earned (in English language and English teaching) □ Diploma □ Bachelor □ Master □ PhD
F-Country of origin: □ Malaysia □ International (please, specify…
G- computer courses attended □ Computer literacy □ Computer Assisted Language Learning (General) □ Training courses to teach online EAW □ Others, please specify …..
H- How do you rate your skill in using the computer? □Very Good □ Good □ Average □ Poor □ Very Poor
I- Have you held any administrative position in CELPAD? **Position** **Semester/ year** …… …… ……

PART II

Indicate the extent to which you agree or disagree with the following statements by putting a tick (✓) in the appropriate box using the scale given below.

Strongly Disagree 1 Disagree 2 Neutral 3 Agree 4 Strongly agree 5

	INSTITUTIONAL SUPPORT	1	2	3	4	5
1.	CELPAD has measures to ensure quality standards.					
2.	CELPAD has electronic security measures to ensure the integrity and validity of information.					
3.	The technology delivery system is highly reliable.					
4.	Support for building and maintaining the online education infrastructure is addressed by a centralized system.					
	COURSE DEVELOPMENT					
5.	Guidelines exist regarding minimum standards of course development, design and delivery.					
6.	The technology being used to deliver course content is based on learning outcomes.					
7.	Instructional materials are previewed periodically to ensure that they meet programme standards.					
8.	Courses are designed to require students to engage themselves in analysis, synthesis, and evaluation as part of their course and programme requirements.					
	TEACHING/LEARNING	1	2	3	4	5
9.	Student interaction with faculty is facilitated through a variety of ways.					
10.	Student interaction with other students is facilitated through a variety of ways.					
11.	Feedback to student assignments is provided in a timely manner.					
12.	Feedback to student questions is provided in a timely manner.					
13.	Feedback to students is provided in a manner that is constructive and non-threatening					
14.	Students are instructed in the proper methods of effective research, including assessment of the validity of resources.					
	COURSE STRUCTURE					
15.	Before starting an online programme, students are advised about the programme to determine (1) if they possess the self-motivation and commitment to learn online and (2) if they have access to the minimal technology required by the course design.					
16.	Students are provided with supplemental course information that outlines course objectives, concepts, and ideas.					
17.	Learning outcomes for the course are summarized in a clearly written, straightforward statement.					
18.	Students have access to sufficient library resources that may include a "virtual library" accessible through the World Wide Web.					

19.	Faculty and students agree upon expectations regarding times for student assignment completion and faculty response.					
	STUDENT SUPPORT					
20.	Students receive information about programmes, including admission requirements, tuition and fees, books and supplies, technical and proctoring requirements, and student support services.					
21.	Students are provided with hands-on training and information to aid them in securing material through electronic databases, interlibrary loans, government archives, news services, etc.					
22.	Easily accessible technical assistance is available to all students thorough the duration of the course /programme.					
23.	Questions directed to student service personnel are answered accurately and quickly, with a structured system in place to address student complaints.					
	FACULTY SUPPORT BENCHMARKS					
24.	Technical assistant in course development is available to faculty and they are encouraged to use it.					
25.	There are peer monitoring resources available to faculty members teaching online courses.					
26.	Online instructor training continues throughout the progression of the class.					
27.	Faculty members are assisted in the transition of the classroom teaching to online instruction and are assessed in the process.					
28.	Faculty members are provided with written resources to deal with issues arising from the student use of electronically-accessed data.					
	EVALUATION & ASSESSMENT BENCHMARKS					
29.	The programme's educational effectiveness is measured using several methods.					
30.	An evaluation process is used to improve the teaching/learning process.					
31.	Specific standards are in place to compare and improve learning outcomes.					
32.	Data on enrolment, cost and successful/innovative uses of technology are used to evaluate programme effectiveness.					
33.	Intended learning outcomes are regularly reviewed to ensure clarity, utility, and appropriateness.					

APPENDIX NINE

DEMOGRAPHIC DATA IN THE PILOT STUDY

Distribution of students of the Pilot Study, according to the demographic information (n=53)

Characteristics	n	Percentage
Gender		
Female	31	58.5
Male	21	39.6
Missing	1	01.9
Age		
21 Years	21	39.6
22 Years	16	30.2
23 Years and Above	16	30.2
Year of Study		
Second Year	22	41.5
Third Year	16	30.2
Fourth Year	15	28.3
Faculty		
IRKHS	17	32.1
Economics	7	13.2
Engineering	8	15.1
Information Communication Technology	6	11.3
Law	10	18.9
Science	3	5.7
Architecture	2	3.8
Nationality		
Malaysian	40	75.5
International	12	22.6
Missing	1	1.9
Computer		
Yes	37	69.8
No	16	30.2
CGPA		
Below 2.0	1	1.9
2.0-2.49	1	1.9
2.50-2.99	18	34.0
3.0-3.49	18	34.0
3.5-4.0	4	7.5
Missing	11	20.8

APPENDIX TEN

TRANSCRIPT OF AN INTERVIEW WITH INSTRUCTORS

A. INSTITUTIONAL SUPPORT BENCHMARKS

1. What are the goals of the programme/ why did CELPAD change this course to online mode?

Ok, I think the online course is to give support to the general LE4000 course. Because, as you may know, it is a blended learning. So it is to support students in terms of giving information about research paper writing, practical support in terms of word processing, etc. The change to the online learning, for me it is a positive mode. Because in terms of online teaching, it offer more resources than traditional courses can possibly do. When the students are learning in the computer lab indeed they have to work definitely.

2. Is the institution fulfilling its duty in offering the programme online?

Umm, that is a difficult question to answer because it may involve generalization. I feel from my own experience, we are enabling students at least to use the resources that are available on the Internet and that enhance the performance of LE4000' students.

3. Does the programme represent a change to the institution's stated mission and objectives?

No, not really. Another means to the same end. I think it is part of the institution to upgrade the standard of the English of the students. It is another means to that end.

4. Is the change truly significant?

It is an improvement.

5. What are the institution's policies concerning the establishment, organization, funding, and management of online offered programmes? Do they reflect ongoing commitment to such programmes?

Well, first, CELPAD finance the writing of the course and setting up the course. However, CELPAD fallen short in terms of the maintenance of the computers. You can find in any of our labs four to five computers not functioning.

6. What kind of technical support were you provided in conducting your Internet-based course?

Well, we were given briefing to the use the system. How to use course material, and very periodical courses on general computer use.

7. Was it sufficient?

Well, that is not sufficient. It is never enough but it is actually a good start. But we want them to continue.

8. Does your institution provide satisfactory technical support to students in the online learning course(s) you taught?

The students? Not immediate support but if there is a problem, I mean we have to report it to the technician who will eventually try to fix it again.

9. Is there a clear, well-understood process by which the Internet-based programme evolves from conception into administrative authorization to implementation?

Well, when we introduced the course we did try to tell/ talk to people about different methodologies. We are talking about the staff now, aright? We did then

talk to them about moving them from teacher-cantered classrooms to places where students more independent and having the computer-based courses available makes them more independent. So, we did that and training courses as well.

What was the teacher reaction to this?

The teachers' reaction was extremely disappointing as much as many teachers did not show up to the training sessions.

What is the reason of this resistance?

Perhaps it is traditional teacher resistance. The teaching profession is a very conservative profession as you probably know, and I think that is one thing and maybe it is difficult to say the older staff who perhaps are a little bit afraid of the computer as I think but the general turn up to the training workshops over the last three semesters has been disappointing. You have to ask them why they didn't turn up.

10. In the institution's organizational documentation, is there a clear and integral relationship between those responsible for online offered programmes and the mainstream academic structure?

There was somebody who was called the supervisor for the computer system learning as we call it. His job was to facilitate this course. And he actually had to put the course online. Right? So he was responsible for the soft running of the course. Unfortunately, he now has been transferred to Kedah and has never been replaced by. Unfortunate!

11. How are the integrity, reliability, and security of services assured?

Well, in terms of reliability of the resources when the course was written and while brother Ahamd Fuad here he used to check the links to make sure that they are still alive. In terms of security, let us to say about the chat room. if you go to the general chat room without a password, then anybody can actually access it. There are two passwords: one to log in for the site and another one for the private chart room. I say to them I want o set a private room for you and this is your password usually the name of the lecturer and the section number so this is Adnan 24, for example. So any student from my section can join that and then I think it can be secure. But the general chat room anybody can access it. The teachers were trained to move students to their own private room.

12. Are training and technical support programmes considered adequate by those for whom they are intended?

Umm, those who go to the training seem to be reasonably happy. Umm, look, as I said before the absence in many seems to indicate either lack of interest or they already have known sufficient about the course which is again I doubt it.

13. Given the rapid pace of change in modern information technology, what policies or procedures are in place to keep the infrastructure reasonably up-to-date?

Ahmad Fuad used to… but .. look now..

B. COURSE DEVELOPMENT BENCHMARKS

1. By what process was the programme developed? Were academically qualified persons responsible for curricular decisions?

Yeah, umm, the principle course writer has previous experience of producing online courses. She is an academic in this University with considerable material writing experience.

2. What were the academic qualifications of those responsible for curricular decisions, assessment, and programme oversight?
Ok, well, basically experience in teaching in CELPAD, master degree in material production and of course online material.

3. What are the academic qualifications of those presenting and managing the programme?
They have degree from bachelor degree to Ph.D in ESL, Education…

4. Are these qualifications considered appropriate to the responsibilities of these persons?
I do not think that it is a question of academic qualifications as much as methodological expertise.

5. What technologies are used for programme interaction (e.g., email, telephone office hours, phone conferences, voicemail, fax, chat rooms, Web-based discussions, computer conferences and threaded discussions, etc.)?
Ok, I mention the chat rooms, the online discussion board as a means of communication which used to work very well but now it is nor functioning, I use emails, or telephone or f2f .
What is the problem with the discussion board?
Umm, I think it has been very busy, it has not been serviced, and it is full. We cannot use it. The online folders also have the same problem. It used to be the responsibility of the supervisor. Now, I do not know whose responsibility it is.

6. How successful is the programme's interactive component, as indicated by student and instructor questionnaires, comments, or other measures?
Well, my students that I have liked it and found it very motivating.

G. TEACHING AND LEARNING BENCHMARKS
1. In conducting your course, please tell us what methods you used to maintain personal interaction between (a) yourself and the students and (b) the students with each other?
Well, okay, Basically, in the teaching methodology, I am physically there, I have a physical presence in the class. We communicate f2f, in chat room, and in the classroom we chat on the discussion board. , emails, etc.

2. In terms of interaction, what strengths and shortcomings did you find compared to the traditional classroom?
Well, I think the real strength is that it is online course where there is an ability to set student tasks which they can fulfil, we give them Internet based tasks. Writing tasks can be done on the Web and corrected; using the word processor is also a main advantage. Teachers and students can interact more freely. **The shortcomings,** perhaps, because it is partially online, it is a little bit seem strange to chat to people

who you can see them physically. But we hope that we are practising for a fully online course one day, you know what I mean?

3. On the average, how did your students perform compared to students taking similar classes through traditional means?
As for as I am aware looking at the results I do not think that there is a major difference. I think that the online students did as well as the off line students. And also that time the online students were deprived of two hours. They took 4 hours compared with 6 for the offline students.
4. If there is a difference to what you attribute it?
Assuming that they have been given the same opportunity, the online students would do better. I attribute this to the availability of the Internet resources and the computer
5. Does teaching online influence your instructional methods?
Inevitably, yes it does. I mean I try to use the available resources as much as I can. In the traditional classroom you are quite limited in what you have.
6. If you have opportunity to teach similar courses again, would you want to do so?
Yeah.

D. COURSE STRUCTURE BENCHMARKS
1. Is the programme "coherent and complete?"
Coherent yeah, but complete if you look for the perfection we are far from complete. But it can stand on it own. So I am virtually satisfied and proud with what we have and they are happy with it.
2. Are related instructional materials appropriate and readily accessible to students?
Yes.
3. Do you provide students with supplemental course information that outlines course objectives, concepts and ideas?
Rarely do I. Sometimes I do, since I tend to say that what they need is there, just they have to read.
4. Do you set specific expectations for students with respect to a minimum amount of time per week for study and homework assignments?
Yes. I ask them to spend as much time outside as much as they do inside, so 6 + 6=12 hrs**.**
5. Are you required to grade and return all assignments within a certain time period? And do you do that?
You know that is left very much to the individual teacher.

E. STUDENT SUPPORT BENCHMARKS
1. Is a help-desk function realistically available to students during hours when it is likely to be needed? (Is there adequate technical support?)
No, umm, okay, in terms of accessing the materials and using the labs, so the only mechanism is through the shooter. Then the shooter would have to see the situation and try to work on that.

2. Do your students have regular access to an adequate "physical library"?
Absolutely,

3. How the students are informed about technology requirements and required technological competence?

Umm, it is assumed from the that the students will be able to handle everything, and in the first couple of lessons, I think that most shooters will make sure that students can. If I find some students who don't and this rarely happens (most of the students are better than I am), I let students help each other. It tends not to be an issue.

4. Are the services perceived by EAW students to be adequate and appropriate?
Yeah, okay, when everything is working, I think it is adequate, but I think the things are not always working. So this is the issue**. What do you mean here?** The system tends to work quite well, but I mean just the individual machines, so, for example, if an individual machine has a problem, that reduces the number of the available. And there are times where you might have a couple of students working on the same machine.

5. Are these services perceived to be adequate and appropriate by those responsible for providing them? What modifications or improvements are planned?
I think the system as it stands is okay, but the question is of supervising and maintenance of the machines.

6. How are the learning needs of the students enrolled in EAW identified, addressed, and linked to educational objectives and learning outcomes?
Okay, LE4000 is essentially a general academic English course. Umm, having said that, the content to the research paper is assumed to be produced of faculty based, but to this point no especial effort has been given to the especial needs of the, for example, the lawyers or engineers. There should be another UNIT (ESP or EST) to produce ESP courses that is another issue. So this course is a general one with the subject matter taken from the faculty. I haven't run any need analysis because that is a general academic course. Our assumption is that they need to write a term paper with some descriptions.

F- FACULTY SUPPORT BENCHMARKS
1. Have any question of intellectual ownership property arisen concerning your work in online education? If yes, please explain.
Umm, not on the personal level. I think the one who is producing the material has been paid a sum of money, and in that all she did waived the copy right to the CELPAD.
2. Does the institution have a well-developed policy to address issues such as workload, compensation, intellectual property rights, and faculty evaluation?
Well, it is not well developed, it does have has certain guidelines indeed but ... I think it is not great deal of original because it is perhaps the only original course that we produced
3. What support services are available for those responsible for preparing courses to be offered online? What support services are available to those instructors responsible for working directly with students?
Clerical assistance, and technical assistance when LE4000 firstly produced. Financial packing.
4. Do participating instructors consider these services to be appropriate and adequate?
I think so in terms of producing a course in this dimension.

5. Does the staff include qualified instructional designers? If so, do they have an appropriate role in programme and course development?
In this particular course, I think so
6. What orientation and training programmes are available?
Umm, at the beginning of every semester, a training course is given to new staff in terms of the handling of the computer lab. And at the same time there is ongoing course which normally runs in the beginning of every semester for anybody who wishes to look at the methodologies and the contents we have. One of the apparent issues in this course is that it is not well-attended.
7. Is adequate attention is paid to pedagogical changes made possible and desirable when information technologies are employed?
I think this is what the ongoing course is really trying to address, it is the methodological issues
8. Given the staff available to support online offered programmes, are the possible changes in course design and management reasonable?
No.
9. Do those involved consider these orientation and training programmes to be appropriate and adequate?
Also No.

G. EVALUATION AND ASSESSMENT BENCHMARKS
1. How does the institution review the effectiveness of its online education programmes assure alignment with institutional priorities and educational objectives?
Institutionally no. But I think that there are a number of studies and teachers producing some research based on it, comparing online and offline, that's it.
2. How does evaluated student performance compare to intended learning outcomes?
Yeah, the final goal of the course is to produce 2500 word research paper and they seem to do that very well.

3. How is student performance evaluated?
That is divided, I think into 10 % to participation, 20% for initial outline, 30 % to the actual paper, and 40% for the final exam. We have the marking scheme……

4. How is the institution's ongoing programme of assessment and improvement developed and conducted?
I think it depends basically on thorough discussions about the quality of courses, when there is a problem then some thing is done.

5. Does the programme appropriately involve academically qualified persons?
Yes
6. What is the institution's mechanism of review of existing programmes and courses?
Not really as I said before it is very informal, you are not invited to a meeting that is called that.
7. Has the process had measurable results to date?
I think in the general quality of the course, we benefit from the discussion
8. What criteria did you employ to grade students in your online education course (papers, multiple choice testing, essays, etc.)?

Well, as I mentioned earlier it is basically the production of something like a proposal outline and then the writing the paper itself,
9. Does this differ from the criteria you might have used in a traditional classroom course? If yes, please describe:
Not so much..
10. What elements are necessary for students' success and have they been evaluated?
I n this course, umm, the initial input of the online course which is at the same time supported by hard copy book, and the guidance of a very good shooter who is always aware of the aims and the objectives of the course. Essentially, those are the three things.
11. Do online classes require special skills and what are these?
Specialist skills on the part of the teachers no, not really. Just the right approach and the right methodology, and one of the things that is really important is the belief of the shooter in the ability of the online or at least blended learning to have results. If they do not have that willingness, I am afraid that will not happen.

12. Do you think that your students have the necessary skills to use the computer?
Absolutely, no doubt of that.

Suggestions:
Or, what additional comments do you have about the online EAW course at CELPAD?

I do like to see a pilot one which is actually really truly online. Because I think the future of this course is more than just a campus audience. Therefore, we should save a number of sections and run them as f truly online with the normal blended sort of f2f meetings but with more emphasis on the online than f2f. Then the shooter can teach in her place or in her office, much more to be autonomous learners, to be.
Our teacher needs more training on online delivery, you have to carefully select qualified people and train them and eventually these people will become trainers for more. I do not know what is the criteria for selecting, because the people who decide on this. That is out of the hand of the course producer or course coordinator or the supervisor of the online course. This is basically an administrative issue. When they interview people they look at the things in general.

APPENDIX ELEVEN

DEMOGRAPHIC DISTRIBUTIONS OF THE INSTRUCTORS

(n=28)

Characteristics		n	Percentage
Gender	Female	18	64.3
	Male	10	35.7
Age			
	30 years and below	41	4.3
	31-35	6	21.4
	36-40	8	28.6
	41-45	3	10.7
	50 and above	7	25.0
Academic Rank	Teacher	11	39.3
	Lecturer	14	50.0
	Asst. Prof.	3	10.7
Working Experience	1-5 years	5	17.9
	6-10 years	3	10.7
	11-15	11	39.3
	16-20	5	17.9
	21 and above	4	14.3
Highest degree	B A	8	28.6
	MA	17	60.7
	PhD	3	10.7
Nationality	Malaysian	20	71.4
	International	8	28.6
Computer literacy	Yes	13	46.4
	No	15	53.6
CALL	Yes	16	57.1
	No	12	42.9
Training courses to teach online EAW			
	Yes	22	78.6
	No	6	21.4
Others (Web design, Networking, multimedia, courseware, IT)			
	Yes	3	10.7
	No	25	89.3
How do you rate your skill in using the computer?			
	Very good	3	10.7
	Good	11	39.3
	Average	14	50.0
Dean, Head, Deputy Dean, Deputy Head			
	Yes	4	14.3
	No	24	85.7

Instructional coordinator			
	Yes	15	53.6
	No	13	46.4
Course developer			
	Yes	1	3.6
	No	27	96.4

APPENDIX TWELVE
DEMOGRAPHIC DISTRIBUTION
OF THE STUDENTS

COURSE STRUCTURE BENCHMARKS mean 0.008

(n=421)

Characteristics		n	Percentage
Gender	Female	285	67.7
	Male	132	31.4
Age	20 years and below	115	27.3
	21 years	183	43.5
	22 years	71	16.9
	23 years	29	6.9
	24 years and above	22	5.2
	Missing	1	0.2
Year of study	First	89	21.1
	Second	249	59.1
	Third	50	11.9
	Fourth	28	6.7
	Missing	5	1.2
Current CGPA	below 2.00	7	1.7
	2.00 – 2.49	37	8.8
	2.50 – 2.99	141	33.5
	3.00 – 3.49	157	37.3
	3.50 – 4.00	63	15.0
	Missing	16	3.8
Kulliyyah	IRKHS	118	28.0
	Economics	118	28.0
	Engineering	50	11.9
	ICT	26	6.2
	Architecture	16	3.8
	Law	52	12.4
	Science	40	9.5
	Missing	1	0.2
Nationality	Malaysian	371	88.1
	International	50	11.9
Have you taken any computer-related courses?			
	Yes	310	73.6
	No	111	26.4