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# The Cultural Context of an Educational Reform: Perceived Challenges to the Implementation of Blended Learning at the School of Basic Education in Kuwait

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# Abstract

Higher education institutions and the Ministry of Education (MOE) in Kuwait have been shifting from face-to-face to blended learning (BL) for several years. The only exception is the School of Basic Education (SBEK) where face-to-face and one-way communication is virtually the only method used. The main objective of SBEK is to train teachers. This research aims to explore the possible challenges that face the implementation of BL at SBEK and the solutions needed, from the perspectives of the senior management, teachers and final year students. I also sought to measure and interpret the attitudes of the management, teachers and students at SBEK towards BL using a mixed-methods approach and to explore the extent to which these attitudes are currently perceived as obstacles towards the implementation of blended learning. The sample of this research consists of 344 participants (N = 293 final year students, N = 43 faculty teachers and N = 8 senior management) for the quantitative phase and 43 participants (N = 7 college leaders/senior management, N = 10 teachers/faculty members and N = 26 students) for the qualitative phase.

BL has been considered in the context of the Kuwait higher education system and the MOE as a way of increasing the achievement and the critical thinking necessary for students in Kuwait. The study concludes that the attitudes of most of the participants in this study towards the implementation of BL at SBEK appeared to be positive and optimistic; however, many obstacles were identified. These include an apparent absence of planning and leadership, financial issues, academic issues, cultural issues, English language and technical issues. I have also proposed a road map as a strategy for implementing BL in SBEK based on the research findings.

# Acknowledgements

*"In the name of Allah, the Entirely Merciful, the Especially Merciful. All praise is [due] to Allah, Lord of the worlds - The Entirely Merciful, the Especially Merciful, Sovereign of the Day of Recompense. It is You we worship and You we ask for help. Guide us to the straight path - The path of those upon whom You have bestowed favour, not of those who have evoked [Your] anger or of those who are astray".*

*(1: 1, Holy Quran)*

First of all I have to thank ALLAH (the almighty God) for his assistance and help, as this thesis could not have been completed without his help. I really appreciate the support and the guidance, of my Supervisors Dr Pete Sanderson and Dr Graham Morley, for their priceless insight and friendly assistance. Their support throughout my studies was a major contribution for the completion of the work. I would like also to extend my thanks to my parents Najat and Kheder for their prayers, encouragement and support and to thank my wife Roqia for her emotional support and patience during my studies. I extend these thanks to my children Nour and Osama as they missed me during my studies in the UK. I offer my deep appreciation to the School of Basic Education who gave me this opportunity to pursue my studies. I have to thank all consultants who guided me through this journey and special thanks to all those who participated in the study, on whose cooperation and information this study is dependent.

# Abbreviations and Acronyms

| | |
|---|---|
| AGRC | Arabian Gulf Research Centre |
| BL | Blended Learning |
| ESCWA | Economic and Social Commission for Western Asia |
| GLOBE | Global Leadership and Organisational Behaviour Effectiveness Research Project |
| GRC | Arabian Gulf Research Institute |
| ICDL | Information and Communication Driving Licence |
| ICT | Information and Communication Technology |
| IDV | Individualism |
| IT | Information Technology |
| MAS | Masculinity Index |
| MOE | Ministry of Education |
| MOP | Ministry of Planning |
| PAAET | The Public Authority for Applied Education and Training |
| PDI | Power Distance |
| PDP | Personal Development Planning |
| QAA | The Quality Assurance Agency for Higher Education |
| SBEK | School of Basic Education |
| UAI | Uncertainty Avoidance |
| UCISA | Universities and Colleges Information Systems Association |
| UOF | University of Kuwait |
| VLE | Virtual Learning Environment |
| WLAN | Wireless Local Area Network |

# Table of Contents

# List of Tables

ﺝ

# Chapter One: Introduction

## 1.1 Introduction

The paradigm shift in e-learning that has been sparked by the technical advances of the last decade, continues to receive a great deal of attention (Ismael, 2009). Two broad fronts, each impacting on these developments, can be considered the evolutionary drivers (Abdulhadi, 2005). The first is the delivery system: the technology itself continues to advance at great speed, especially with regard to the access offered by mobile computing. Second, there is the pedagogic expertise that has been nurtured by many online programmes offered by many institutions throughout the world. Thus, culturally, online learning, where students and teachers do not meet face-to-face is attracting a broad consensus regarding its merits as one of the great advances in the spread of learning worldwide (Aburya, 2010). Online courses are delivered and received through interactive teaching strategies based on a Web-based learning platform. A purely online course allows students to receive content and complete coursework at a time and place of their convenience and does not involve face-to-face interaction or time spent in a physical classroom (Cuellar, 2002). These tangible developments in education have helped to shift the focus of learning from the classroom to online learning, in addition to augmenting a proactive approach among learners (in terms of their capacity for search, research, collaboration and so on), which can encourage lifelong learning and independent learning (Alsultan, 2010). In short, the infrastructure of e-learning is impacting not only on education, but also on the way in which data and knowledge are accessed, applied and used (Zaiton, 2005).

E-learning is the collective term for everything relating to the practical use of electronic technology and the Internet in education. It can also be said that e-learning is the application of electronic teaching tools and content to support learning and teaching.

Learning how to use it effectively and exploit this system is as fundamental as was learning how to read in the past in order to access textual content from books. A huge amount of content can be provided online. Moreover, this content can be fashioned and shaped in various ways. These techniques are redefining the relationship between educators and learners. Remoteness is reducing as a problem and is being reset as an opportunity (Fallon and Brown, 2003). The ramification of all of these evolving trends and the increasing spread and build up of the Internet, is the rapid growth of the many online learning programmes offered by a great many universities and learning institutions (Ismael, 2009).

No revolution can proceed without problems and online learning in this respect is no exception. The traditional techniques of learning, with on-hand instructors guiding the learners (and in a subtle sense, reassuring them by their physical presence) are so familiar that some learners feel alienated by the 'remote online' approach to learning (Khsawna, 2009). The synthetic character of the learning, which lacks the face-to-face social space of personal contact as evidenced in a classroom or lecture hall, means that some learners have shown a reluctance to embrace this new approach to learning (Khsawna, 2009). Clearly, this can lead to negative consequences for their academic achievement and indeed, for learners' personal satisfaction with their learning experience. Academic studies have shown that, in some cases, the lack of a physical role model as exemplified in a teacher-classroom environment handicaps some learners (Altahih, 2007). This relationship between teachers and learners shows how education and learning in general are seen as 'character or personality building' and it is generally assumed that physical contact with a teacher is

needed in order positively to foster this. Risks of all forms of cheating have also been articulated by many institutions in the context of online learning (and assessment) and are being actively tackled (Spiceland, 2002).

In light of the foregoing considerations, the concept of Blended Learning (BL) has emerged as a powerful solution in the field of education for some of the above problems. In effect, it offers the best of both worlds, combining the advantages of face-to-face and online learning (Garnham and Kaleta, 2002). BL has been defined by Dziuban *et al.* (2004) as a pedagogical approach that joins together the benefits of socialisation and effectiveness, which are possible in a physical classroom environment, with the benefits of the interactive, technologically enhanced learning possibilities of the online environment. For learners especially, there are clear psychological indicators that have informed this approach. Through BL, students can interact and communicate with each other and with their teachers not only in the classroom, but also outside the formal learning space and they can do this at any time (Garrison, 2005). Thus, BL offers a degree of freedom at both ends of the learning spectrum. The director of learning and teaching at Calgary University has suggested that implementing BL is one of the most effective ways to improve the quality of learning and to add to the students' positive experience (Garrison, 2005). Many studies, in the USA, Canada and Europe in particular, have endorsed a broader role for BL, thus providing an empirical base and rationale for its adoption (Garnham and Kaleta, 2002; Garrison and Vaughan, 2008). As reported by Altahih (2007), 55% of universities and institutions in the UK use BL in some form and this percentage is expected to increase significantly. Specifically, 56% of higher education institutions in the UK use Blackboard in their education (UCISA, 2012). Blackboard is a Web-based Learning Management System (LMS) that completely supports online courses

and provides space for online supplementation of face-to-face courses. It offers a number of features and tools that aim to enhance the learning experience (Gillespie *et al.,* 2007).

**1.2 Purpose Statement**

The main objective of the School of Basic Education in Kuwait (SBEK) is to train and prepare teachers for teaching (PAAET, 2012). The purpose of this research is to explore the possible challenges that face the implementation of BL at SBEK from the perspective of the senior management, teachers and final year students. The researcher aimed to measure and interpret the attitudes of the management, teachers and students at SBEK towards BL using a mixed-methods approach and to explore the extent to which these attitudes are currently perceived as obstacles towards the implementation of BL.

**1.3 The importance of the study**

Traditional face-to-face learning methods have a well-established foundation in Kuwait (Alsharhan, 2011). Schools up to secondary level have adopted various e-learning platforms and integrated these into the curriculum. The SBEK has acknowledged these trends as innovative and transformational, but is yet to adopt an e-learning policy that can tackle the challenges thrown up by e-learning (Ibrahim, 2011). In contrast, the University of Kuwait (UOF), as the premier higher learning institute in the country, has embraced BL since 2002 and continues to develop the platform across the learning spectrum (UOF, 2012). Thus, there is a discrepancy in the adoption of BL between these two higher education institutes which both offer bachelor degrees and are funded by the government. Why does this discrepancy exist and why did the UOF implement BL while the SBEK did not? Are there any challenges that impede the SBEK from implementing BL? What are these challenges and how can they

be overcome?

Many detailed studies have demonstrated BL in education to be one of the most effective forms of learning intervention (Atia *et al*., 2008). This study could provide an insight into the ways of analysing, identifying and channelling the traditionally focussed challenges to the implementation of BL. Moreover, it can frame the questions (and potential answers) in a context that is culturally amenable to assimilation by a nation like Kuwait. A good analogy might be that it is often only in marketing where brands are 'repackaged' in order to find a local market outside the home one. Thus, it is often a re-working or tweaking of an established approach (paradigm) that can facilitate the adoption of new forms of learning that positively impact on a nation's development and give independence to the learners to explore and develop their own life's interests.

This study might help to bridge the gulf between the traditional methods of learning, the investment and adoption of new technologies and the spread of technology among the Kuwaiti general population, especially the young, who are early adopters of new technologies (Bander, 2011). It is an acknowledged fact that the new personal IT and telecommunication technologies are growing in terms of their sophistication and power (Ismael, 2009). The young people in Kuwait use these new technologies widely in their daily life (Alwatan, 2012). Given the rapid dissemination of these key skills, it might be very significant to let the relevant stakeholders and decision-makers at the SBEK know what is happening with the younger generation and try to employ it in their learning process, which can benefit them. Generally, this study may benefit those who are responsible for planning and developing the universities, since understanding the reality of the younger generation along with the challenges in our schools can help them to implement BL more easily.

As this study will be shown to the top management at SBEK, who are the decision-makers, I

will offer insights into the advantages and deployment of BL strategies in higher education in Arabian Gulf and other countries.

A common theme in all modern activities is the environmental impact of humans. There is an educational dimension here. This research partly is an attempt to protect the environment or reduce the damage caused to it by the paper-based technologies that are exclusively used at present by the school management to communicate with the departments, students, faculty and outside bodies.

In an Arabian context (i.e. Kuwait, Saudi Arabia, Qatar, Bahrain, UAE), where the nations that constitute this culturally closely-knit group can be viewed in some sense *homogenous* (AGRC, 2012), there are elements of this research that may have a regional significance and applicability. The outcomes of the research, while closely allied with the Kuwaiti context, may offer insights into the broader application of BL across the Arabian Gulf Peninsula. In particular, the question of how this approach focussed on the Kuwait context can be mapped onto the Saudi or Bahraini institutions, which share broadly similar cultural norms in distinct ways. This is mostly a function of national attitudes and to a lesser extent, habits and local customs (AGRC, 2012). The policy makers, educators and students bring their own views about the challenges of the implementation of BL at SBEK and how these might be overcome. It is hoped that this study will provide them with a means of analysing this question in their own national context. In short, it may offer a broader perspective beyond the boundaries of Kuwait.

All research inevitably leads to a deeper understanding of the issues under study. Both the theoretical aspects and the practical application of the research will naturally, in their own way, inform my own perspective on higher education, both in its broader issues and its direct applicability to educators and learners when contextualised in a BL framework. As learning

in Kuwait has both a cultural root (Arabian) and an international reach, it seems clear that new tools and ways of thinking will characterise my own teaching methods as I hope to be enlightened, robust and relevant across the educational spectrum.

Exploring these challenges may help me when I return to teaching at SBEK; as a result, more pressure may be put on the management to take steps to implement BL. Finally, I have proposed a road map to strategy for implementing BL in SBEK based on the research findings.

## 1.4 Research Design

This mixed-methods study applied a sequential explanatory design (Creswell, 2009) to explore the attitudes of a sample of participants drawn from the college population in the SBEK in Kuwait. The essential feature of this sequential design is that it proceeded in two stages: the first stage involved the use of a quantitative method (a questionnaire survey) to provide an initial evaluation of the attitudes of the participants towards obstacles to BL; and the second stage involved the use of a qualitative method (interviews with managers, teachers and students) to provide greater insights than could be obtained using quantitative methods alone. An analytical strategy was applied to compare and contrast the attitudes of the management, teachers and final year students to BL at SBEK and discover whether these attitudes are currently impeding the implementation of BL. Measuring and interpreting attitudes in the educational domain were the main focus of the research design, because attitudes are the bedrock of the learning system, defining how a given method or tool is viewed and how it is applied and used. Once attitudes have been identified, it is possible that human behaviour can be changed and it becomes easier to estimate the positive and negative chances for innovations in the educational environment (Almulla, 2007). It should then be

possible to reinforce attitudes. If positive, they can be reviewed to identify the reasons for them; if negative, the reasons can be explored to eliminate them. Moreover, studying attitudes has become a prerequisite of the educational process with the aim of positively and efficiently achieving the objectives (Almulla, 2007).

**1.5 Research Questions**

Twelve research questions guided this study and the results are organised around providing empirical evidence to answer these questions. The first six questions related to the quantitative stage of the study, as follows:

RQ1: To what extent do the faculty teachers, senior management and final year students perceive that financial, administrative, academic, culture, technical and skill dimensions represent potential obstacles to the implementation of BL?

RQ2: Do the perceived obstacles to BL vary significantly with respect to the gender, specialisation and GPA of the final year students?

RQ3: Do the perceived obstacles to BL vary significantly with respect to the gender, specialisation and experience of the faculty teachers?

RQ4: Do the attitudes towards BL vary significantly with respect to the final year students, faculty teachers and senior management?

RQ5: Do the attitudes towards BL vary significantly with respect to the gender, specialisation and GPA of the final year students?

RQ6: Do the attitudes towards BL vary significantly with respect to the gender, specialisation and experience of the faculty teachers?

The last six questions related to the qualitative stage of the study, as follows:

RQ7: What qualitative primary themes can be extracted from the interviews?

RQ8: What qualitative primary themes describe the obstacles to BL?

RQ9: How do the quantitative survey dimensions compare with the qualitative primary themes?

RQ10: Do the qualitative primary themes vary with respect to the groups of participants?

RQ11: What qualitative sub-themes are concerned with obstacles to BL?

RQ12: What qualitative sub-themes are concerned with solutions to the problems?

**1.6 Target Population**

The target population for this research consisted of three main tiers: senior management, faculty members (teachers) and final year students at SBEK. These three tiers comprised a sample that was able to provide the required data. The three tiers play different roles in SBEK, each one seeing the evidence from their own standpoint. I chose these three tiers because I wanted a multiple perspective on the situation. The senior management tier is responsible for making educational policies, plans and decisions in the School. Its members can also provide information about the budget, ways of making decisions and other issues relating to the institution. The responsibility of the teachers or frontline management is, first, to teach; second, to implement the policies and plans that have been decided by top management; and third, to form the committees at the school. The senior management tier consists of the Dean, two of his assistants and seventeen heads of departments (twenty altogether), while the faculty of the SBEK contains 499 teachers and the SBEK in the school year 2011/2012 contains 805 final year students (PAAET, 2011). All of the senior management staff are male and so make up more than half the faculty (300 male teachers to 200 female). The target population is likely to be of help in identifying what plans for learning were prepared for the future. The final year students are about half male and half

female in number. About ten percent of students at the SBEK are working, more than 50%
live on average thirty minutes travel time from campus and more than 15% are married.
SBEK does not allow male and female students to mix in classes and on campus. Two
different campuses are built in different places, one each for males and females. The reason
for sampling the teachers is that they work directly in the education field and most of them
have obtained their PhDs from Western countries where BL is implemented. They can thus
speak from personal experience. Furthermore, the teachers, who deal directly with the
students, examining and evaluating them, can identify what the students need and what their
strengths and weaknesses are (Atia *et al.,* 2008). Final Year students will also be part of the
sample, because at the end of the year they will be teachers and they may strengthen the
study through their three years' experience in this School. All students have experienced BL
during high school and practised one BL module in SBEK in the second or third year. This
module has been delivered for the last seven years, by one tutor as a personal initiative
without school supervision.

**1.7 The context of the study**

Since the current study is related to the SBEK in Kuwait, the next section provides the reader
with the general information about the Kuwaiti society in terms of population, location and
other historical information. It also provides a brief description of the chapters in this thesis.

**1.7.1 Background to the State of Kuwait**

Kuwait is located in the Arabian Gulf where the coastline forms its eastern and part of its
northern borders. Saudi Arabia is situated to the south and Iraq to the west. Kuwait is a
Muslim country and its ethnicity and culture are part of the political and social context of the

Gulf Co-operation Council (GCC). Kuwait is one of the founders of the GCC, which represents the aspirations of the people of Gulf region for economic, social and political union (Algonaim, 1999).

Historically tribes governed Kuwait, like other Arab countries, as a colony of foreign super-powers. As a result of World War 1, the Ottoman Empire was defeated and its colonies were distributed among the allied regimes of the UK and France. The Arab territories were divided into several countries with more or less the same historical tribal governance that had existed before the War, but with specific territorial settlements by the two colonial powers (Alrasheed, 1995). Consequently and for the purpose of transforming the character of Kuwait to that of a modern country, the first Constitution of Kuwait was created to maintain the political status of the new state. The constitution ensured that Kuwait should be a hereditary Emirate, ruled by the ruling tribe to which the other tribes should be loyal and accepting of its role as governor for all the other resident tribes. The ruler, called a prince (Amir), has been a descendant of the Al Sabah family since the middle of the eighteenth century. The Amir is surrounded by consultants and advisors, including senior religious leaders and heads of major tribes, who reach decisions by consensus after considering the relevant religious, traditional and legislative principles. Kuwait City is the capital of the state of Kuwait (Alaidrous, 2002).

Kuwait is regarded as a very small country of 17,818 square kilometres (6,880 square miles). In 2011, the population of Kuwait reached 3,301,189, only 40% of whom were native Kuwaiti citizens (MOP, 2011). The other 60% are either migrant employees and their family members or workers from other Arab and Muslim countries. The official religion of Kuwait is Islam and the main source of legislation as well as of traditions and customs is Islamic Shari'ah, which contains the values and principles of the Holy Qur'an and the teachings of

the Prophet Muhammad. However, in the 1960s, new civil and criminal laws based on the English legal framework were enacted (Alenezi, 2002).

A substantial majority of Kuwaiti people are Sunni Muslims. Only 20% of the population follows the Shi'a branch of Islam. The Kuwaiti law ensures the right of non-Muslims to practise their beliefs freely and safely (Alaidarous, 2002). The official language is Arabic.

**1.7.2 Cultural Dimensions**

The cultural dimensions of the study include the distinct patterns of behaviours and beliefs that classify and characterise groups of people. Cultural dimensions are relevant to the contextual considerations of this study, because they may influence the attitudes of the Kuwait population to BL and also the way that the managers of educational institutions make policy decisions to develop BL.

According to Hofstede's psychometric approach to national cultures, there are four cultural dimensions that differentiate nations from one another: power distance (PDI), uncertainty avoidance (UDI), individualism (IDV) and masculinity index (MAS) (Hofstede *et al*., 2010). Hofstede based this approach on research into a multinational company and its employees, which aimed to identify patterns of difference between national cultures without the confusing results that can arise from differences between corporate cultures. Each country was scored by dimension on a scale of 0 to 100, where 100 represented the most that a given dimension could be displayed. Hofstede's dimensions have been criticised for supporting cultural stereotypes and failing to deeply engage with local contexts in Kuwait. Nevertheless, Hofstede's cultural dimensions are used in this chapter, because they describe the generalised behaviours and beliefs of people in the context of the Arab world, from which the sample used in this study has been drawn.

For the Arab world, including Kuwait, Hofstede's analysis resulted in high scores for power distance (PDI = 80) and uncertainty avoidance (UAI = 68), which were the predominant characteristics of this region. The high PDI score indicates that high levels of inequality are also dominant characteristics. The high UAI ranking reflects a low level of tolerance towards uncertainty, and indicates that some people in Kuwait may not readily accept change and are averse to risk. High uncertainty avoidance may also partly explain why some people in Kuwait are resistant to using the Internet (Alwahaibi *et al*., 2008; Alsultan, 2010).

Hofstede's masculinity index specifically charts gender role distribution, from typically masculine positions to typically feminine positions. The MAS for the Arab world was scored at 52, which is above average, indicating a greater differentiation between gender roles than in most other countries. In comparison with other nations, in the Arab world, males dominate power and society structures, while female rights are more limited. The findings of Hofstede's study imply that women in the Arab world are expected to conform to authority and draw security, stability and wellbeing from their families, whereas in the Western world, women are expected to be self-reliant, to look after themselves and to openly express their individuality. It is possible that this cultural dimension may be related to gender differences in the attitudes of the participants towards BL. The world average for individualism (IDV = 64) contrasts with the IDV score for the Arab world (IDV = 38). This indicates the collectivist nature of the Arab world, which differs from the individualist cultures of other nations. Amongst Arabs, there is a strong, long-term commitment to in-groups, including nuclear families (parents and siblings), and radiating out to extended families (grandparents, uncles, aunts, nephews, nieces) and other families and friends. The in-group's members protect and serve one another and display unquestioning loyalty. In-group loyalty is a central

element of collectivist cultures and for most people in the Arab world, it is ultimately more important than most other rules of society.

The dominance of collectivism over individualism may explain why, when providing answers to questionnaires and interviews, some Arabs may be more concerned with conforming to the opinions of their in-group, rather than expressing their own individual opinions, resulting in response bias (Baron-Epel *et al*., 2010; Smith, 2004).

The GLOBE survey conducted by House *et al.* (2004) also provides a frame of reference to describe the national characteristics of groups of people. The GLOBE researchers asked respondents to rate the extent to which 112 traits characterised 17,300 managers from 951 companies in in the food processing, financial services and telecommunications sectors in 62 countries. The GLOBE survey summarised that the characteristics of managers are contextual, meaning that they are embedded in the organisational norms, values and beliefs of their culture. Business managers from the Arab region, including Kuwait, scored significantly lower than elsewhere on charismatic, team-oriented, participative qualities and the extent to which they engaged in risky future-oriented behaviours. Arab businessmen scored significantly higher on self-protective traits, namely self-centredness, status-consciousness, face-saving, conflict induction and reliance on formal procedures, reflecting Hofstede's dimensions of Power Distance and Uncertainty Avoidance. The GLOBE survey did not, however, determine if the managers of higher educational institutions in Kuwait possess the same personal characteristics as business managers. The findings of Hofstede could provide some indications and justifications for the way in which Arab managers direct their institutions and may help researchers when dealing with them.

**1.8 Short description of the thesis**

This thesis contains seven chapters. The first chapter is an introductory chapter that presents the central aim of the thesis and shows the value of carrying out research into adopting a BL approach at the SBEK in the state of Kuwait (SBEK), as a primary requirement in Higher Education. This introductory chapter also presents the study questions and population information. Further more, because this study has been carried out in Kuwait, this first chapter also sets out general information about the Kuwaiti context that is relevant to this research. The purpose of this is to assist the reader in obtaining a clear view about Kuwait.

Chapter Two provides the reader with comprehensive background information regarding the state of Kuwait, including drawing a general picture of the current progress of the educational process in Kuwait. The educational system and levels of education, including higher education, are described here. This chapter provides a description of the current system of SBEK in Kuwait and moves on to discuss the process of integrating e-learning in the Kuwaiti educational system by the MOE. This discussion requires consideration of the latest MOE strategy regarding the implementation of BL projects in SBEK. An overview of the current progress of the application of BL method in public higher education is also discussed in this second chapter.

In Chapter Three, e-learning, blended learning and attitudes as a concept are highlighted and discussed. Relevant studies from Western and Arab Gulf countries that identified the benefits of BL are included. It clarifies the issues around BL pedagogy, BL design and the challenges in the implementation of BL. This chapter also presents the study questions.

Chapter Four describes the methodology used to conduct this research, including the justification of the methods used to achieve the aims of the study. The ethical considerations and research difficulties are provided in this chapter.

Chapters Five, Six and Seven are devoted to the findings. They provide the evidence to address the research questions and they consider the implications of the findings.

Chapter Five focuses on the first quantitative stage of the study and includes a descriptive and inferential analysis of the data extracted from the questionnaire survey.

Chapter Six focuses on the second qualitative stage of the study and includes a content analysis of the interview responses. A triangulation between the quantitative and qualitative data collected from the questionnaire and the qualitative data collected from the interviews is also presented in this chapter.

Chapter Seven discusses the overall findings of the research, considers their practical implications, provides recommendations for action, including further research and overall conclusions are drawn.

## Chapter Two: Background to the education system and to e-learning in Kuwait

### 2.1 Introduction

A strong modernised education system helps to produce a highly qualified workforce capable of dealing with future challenges in scientific and reliable ways (Alramzi, 2009). It could be construed, that the aspects of education, such as its philosophy, objectives and techniques go through an evolving structure of art and science similar to that of society itself (Alaidarous, 2002). Generally, this can be seen in the changes that mark each decade where education transforms and develops its structure and applications. Education is more than likely to be a dynamic and interactive process that can be developed and adapted to respond to the needs and demands of each succeeding age. Therefore, it is true that each society conceives its learning and teaching system, much as the education system mirrors its society (Alsultan, 2010). In terms of Kuwait, the educational strategy is directed towards one general goal, namely, the development of the entire people. This takes a holistic view of personal development for the individuals as a collective. The notion that this study is based on is the dynamic nature of education; a dynamic educational model is more likely to create a dynamic society and vice versa. The MOE describes its learning philosophy by stating that the modern Kuwait could not be established without substantively preparing the citizens of Kuwait to deal with today's challenges. This should be started at an early age with children whose minds are still being shaped (MOE, 2005b).

Like any huge long-term project, an efficient up-to-date educational model needs funds (Alramzi, 2009). Fortunately, Kuwait is rich in natural resources, in particular oil. This wealth has supported the Kuwaiti government in its decision to allocate enough funds to cover a large-scale modern education system (Alqonaim, 1999) for a long time. For instance

Kuwait's 2011 national educational report showed that its literacy rate was 95%, an advantage that the government plans to build on (MOE, 2011).

This chapter provides a description of the state of Kuwait, the educational system and levels of education, including higher education and the current system of SBEK in Kuwait. It outlines the process of integrating e-learning and blended learning in the Kuwaiti educational system adopted by the MOE. This discussion required me to consider the latest MOE strategy regarding the implementation of BL projects. An overview of the current progress of the application of BL method in public higher education is also discussed in this second chapter. This might explain the huge gap between the public educational institutions in Kuwait in terms of implementing BL and give the reader an overview of the current status of BL in Kuwait.

## 2.2 Education in Kuwait

Systematic education in Kuwait dates from 1745. At this time, mosques set up primitive formal schools. Basic subjects such as the Arabic language, reciting the Qur'an and the values and principles of Islamic Shari'a were taught to small children by the Imams (the religious men and preachers from the mosques). In 1887 "Kuttabs" were established, a form of school where children were taught reading, writing and simple mathematical calculation. Although the subjects introduced to children in the "Kuttabs" were limited, they can be regarded as the basis of official education for young boys and girls (MOE, 1985).

The year 1912 marked the birth in Kuwait of primary formal schools of a more modern kind. Al-Mubarakieyyah school represents the first primary school of modern quality. Since Kuwait's population was growing very rapidly, the Ruler of Kuwait at the time called for such a school to be established in an attempt to respond to the increasing educational needs of the people (Alabdulghfoor, 1983). The curriculum designed for its pupils covered more

subjects than the "Kuttabs" did, such as Arabic, Islamic ethics, history, the geography of Kuwait and the nearby countries, in addition to mathematics for those pupils aged nine and ten who had completed their fundamental education at the "Kuttabs". The policy adopted by the directors of the school did not seek to develop a comprehensive curriculum, but gave the teachers of the different subjects the chance to choose their own teaching materials (Kuwaiti Research and Studying Centre, 2002).

Later, the capacity of the school became so limited that it could no longer meet the high demand for education and the growing numbers of students. As a result, the Alahmadieyyah School was established in 1921 (Algonaim, 1999). This school implemented a curriculum akin to that of the Mubarakieyyah School in most subjects, except for the teaching of the English language (Alabdulghfoor, 1983). This step may have been due to the increasing worldwide importance of English, the language most often used in commercial dealings and trading. This fact opened the eyes of the Kuwaiti merchants to the importance of studying it to increase their trade, in particular those who carried out commercial transactions with merchants in India and Africa. Since the 1920s educational policy makers in Kuwait have recognised that learning English is a vital factor for the development of the country (Kuwaiti Research and Studying Centre, 2002).

Before 1953, the absence of state secondary schools in Kuwait meant that students who finished their studies at Al-Ahmadiyah and Al-Mubarakiyah schools travelled to Baghdad, Victoria College in Egypt and the American College of Beirut in Lebanon to continue their education (Kuwaiti Research and Studying Centre, 2002). In 1953 the opening of the first secondary school in Kuwait enabled students to continue their education in Kuwait instead (Alabdulghfoor, 1983). The government established the Board of Education (Da'erat Almaarif), which was an independent body supervising and managing education in Kuwait,

thus situating education at the heart of the administration's public policy to secure the quality of the national curriculum (Algonaim, 1999).

The efforts of Da'erat Almaarif to develop and improve the quality of national education were significant. New primary schools were established and the higher intermediate and secondary educational levels followed during the 1940s and 1950s. With the increasing oil revenues in 1937, schooling for female pupils started. As the number of schools increased dramatically, Da'erat Almaarif decided to recruit a group of qualified teachers from neighbouring Arab countries, mostly from Egypt. In time, the Kuwaiti educational system began to replicate the Egyptian system in terms of its pedagogy, curriculum and content (Algonaim, 1999). This became a matter of public concern for the Kuwaiti people and government. Consequently, once Kuwait got its full independence from foreign powers in 1962, Da'erat Almaarif was replaced by the MOE, which took control over all public educational establishments including private institutions, in order to standardise the quality of education across the whole system (Alaidarous, 2002). It is worth noting that since 1965 education has been compulsory at all levels for Kuwaiti students up to 18 years old. In addition, the Kuwaiti educational law ensures free education for Kuwaitis at levels including university, vocational and professional preparation. The centralised approach adopted by the MOE proved to be inadequate to deal with the expansion and increasing managerial challenges; thus, the MOE moved to a decentralised approach in the 1980s, forming five educational boroughs in the country (Al Jahra, Al Ahmadi, Al Farwania, Hawally and Al Aseema). The MOE put a head administrator in charge of running each borough, whose mandate included implementing the educational policy and objectives and managing the technical and directorial issues of all the schools in his area. Furthermore, the head administrator had to deal with such day-to-day matters as supervision, evaluation and

delivering educational services within his borough (Alahmad, 2000). In the last fifteen years

another borough, called Mubarak Al Kabeer, has been added to the previous five.

The philosophy of the Kuwaiti educational system is summarised in the following vision:

> *Kuwait is visualising the future and envisaging what the citizen's character should be like, in order to cope with this future image, with its spiritual, mental, cultural, psychological, social and technological dimensions, while preserving national identity*
>
> *(MOE, 2008, p.23).*

Furthermore, the Kuwaiti constitution, which was promulgated in 1961, adopted similar

articles related to education to those enshrined in advanced constitutions, for example Egypt,

Iraq, Syria, Lebanon and France (Altabtabaae, 1994). The articles that regulate education in

this constitution emphasise a wide range of values and principles (Kuwaiti Research and

Studying Centre, 2002). Article 13 stresses that education is an essential requirement for the

development of a society and should be guaranteed and supported by the government. Article

14 stresses the obligation of the State to promote scientific research and encourage literature

and the arts. Article 40 emphasises that education is a right for all Kuwaiti citizens, which

should be ensured by law and guaranteed by the government within the boundaries of public

strategy and morals. Moreover, it states that education in its early stages should be

compulsory and available free of charge. The educational policy dedicates specific care to

development of young people, physically, morally and mentally (Kuwait National Assembly,

2013).

Upon signing the constitution, the ruler of Kuwait requested the Minister of Education to

identify the elements of the educational policy and articulate its objectives and strategies.

After holding a number of international and national conferences, the Ministry was able to

produce its educational vision. Perhaps the most important part of its policy is its aims and

objectives. The main goal of education, it states, is a number of fundamental values, such as

providing opportunities to support individuals on the spiritual, ethical, intellectual, social and physical levels, striking a balance between such fundamental factors as the values of Islam and the Arab legacy and a modern culture which focuses on preparing individuals to build their country and also to participate in the development of the international community (MOE 2008).

**2.3 Structure of learning in Kuwait**

Kuwait's educational system contains three types of education side by side: formal or state education funded by the government, religious education based on Islamic Sharia' law and jurisprudence and private education financed by the private sector or foreign academic institutions investing in Kuwait (MOE, 2008). The compulsory stage of education contains three levels: kindergarten which lasts for 2 years, for children aged from four to six years old; primary, which lasts for 5 years, for pupils aged from six to ten years old; intermediate, which lasts for 4 years, for pupils aged from eleven to fourteen years old. This latter stage is followed by the secondary level, which lasts for 3 years. The MOE is responsible for conducting the national curriculum strategy for all the subjects taught in state schools. Girls and boys do not mix in public schools beyond kindergarten level due to the Islamic culture in Kuwait. In the same way, teachers and staff members should be of the same sex, except in some cases, where females might teach at boys' elementary schools because they outnumber male student teachers (Almeea *et al.*, 2005). Generally, the segregation of faculty members in schools is desired by Kuwaiti society more from culture than from any legal requirement.

In 2009 the Kuwaiti parliament agreed the new five-year plan with the highest budget ever of 80 billion pounds. One of its features is developing education in all stages (Alwatan, 2013). For higher education the budget covers development of the current universities and

establishment of new universities. The annual budget for the state of Kuwait in 2012 is 42 billion pounds; the share of education of that budget is 13% (MOE, 2012).

## 2.4 Kuwait Higher Education

Kuwait has three main public undergraduate schools that are funded by the government. UOF opened in 1966 (UOF, 2011) and became the first university in Kuwait to offer almost all majors. The second institute is the Public Authority for Applied Education and Training (PAAET) which opened in 1982 (PAAET, 2012) and specialises in vocational training, nursing and engineering.

UOF offers Bachelors and Masters degrees in different scientific and humanities majors (UOF, 2011), while the PAAET offers only Diplomas (PAAET, 2011).

At UOF the bachelor degree requires four years in the field of humanities and social sciences and five to six years in the fields of medicine, pharmacy and engineering. English is used as the medium of instruction in technological and science fields, while all other subjects are taught in Arabic. A Masters degree requires two years in all fields. In PAAET the diploma degree requires two years in all fields. The third institute is SBEK, which is financially supervised by PAAET and it offers only Bachelor degrees.

## 2.5 School of Basic Education (SBEK)
### 2.5.1 SBEK's History in Brief

The history of the SBEK dates back to the academic year 1949/1950, when various efforts were made for the preparation of primary school and kindergarten teachers. In 1962/1963, the two Teachers' Institutes were opened. Holders of the intermediate school certificate were eligible to join these institutes where they studied for four years. Upon completion they were awarded a diploma, which qualified them to teach in primary schools. The institutes were

closed in 1973/1974. Concurrently – in the year 1968/1969 – two colleges for Teachers were opened. Holders of the secondary school certificate joined these colleges, where they studied for two years, upon the completion of which they were awarded a diploma qualifying them to teach in intermediate schools. These two colleges were also closed in 1973/1974 (SBEK, 2009).

In the academic year 1972/1973, the Teacher Education Institute (boys and girls) was opened. Holders of the secondary school certificate or equivalent joined the Institute where they studied for two years, upon the completion of which they were awarded a diploma qualifying them to teach at primary schools. From the year 1972/1973 to 1976/1977, the traditional academic year system was followed. The study was limited to two branches: arts and science. In the academic year 1977/1978 the traditional system was replaced by the credit course system which stipulated passing 68 credits as a graduation requirement (SBEK, 2009). Today, the duty of the SBEK is primarily the preparation of teachers in different subjects (SBEK, 2009). SBEK places teachers who are qualified in different majors, including physical education, librarianship, psychological sciences, mathematics, Islamic religion, geography and kindergarten, across all stages of the public education system. The age range of students in SBEK is 18-23. More than 50% live approximately 30 minutes from campus, more than 15% are married, and approximately 10% work in addition to studying (PAAET, 2011).

Since 1995 all students at the SBEK have been granted monthly around 250 pounds to help them with university life. In 2011 the parliament issued a new law and increased the grant to around 400 pounds. The school consists of two main campuses, one for male and the other for female. In the SBEK, lecturers teach undergraduate courses according to their qualifications. A teacher who holds a Bachelor degree can not teach at school although he

might be an assistant, while holders of a Masters degree can teach undergraduate courses only, PhD holders can teach on any Higher Education course (SBEK, 2009). There is no requirement to have teacher training, although it is preferred. The majority of the lecturers are Kuwaiti while very small percentages are non-Kuwaitis.

From the establishment of SBEK to the present time, school teachers have been teaching using the face-to-face approach. The lecture-based classroom has been the standard pedagogical approach at school, while the system also requires that teachers hold the international computer driving license (ICDL) since 2001 in order to be employed. Using an approach, which is so teacher-centred, has been criticised by many studies, as it does not meet students' needs and doesn't help them to be self-learners (Zaiton, 2005). My experience at the school suggests that SBEK does not follow the new trends and innovation in the development of teaching strategies. In September 2014, SBEK will be officially named as the University of Jaber and will be fully independent (Alrai, 2013). The present research might be significant as the findings could help the new University staff management to speed up implementing BL.

## 2.6 E-learning in Kuwait

E-learning is widely considered to represent a key element of supporting the educational process; transforming archaic, negative learning styles of repetitive rote-learning teaching that are comparable to indoctrination into a contemporary relevant learning style that is creative, interactive, encourages and supports self-sufficient and positive learning (Zaiton, 2005). With the aim of providing its education system with such improvements, Kuwait has developed a strong, reliable Internet infrastructure and focused great attention on the development and promotion of national IT and communications networks, emphasising the

needs of the education sector (IBP, 2011). The MOE in Kuwait produced an open-ended, clear strategy for the introduction of information technology (IT) into the educational curriculum (MOE, 2005a). The overall guidance, funding, support and setting out of long-term aims offered by central government can be seen to have affected the outcome of introduction of e-learning. E-learning now represents a useable asset in the Kuwaiti learning landscape, it has become central to the creation and maintenance of a vision for the future and to applications of IT in Kuwait (MOE, 2012). As part of the strategy statements made by the MOE, a definition of e-learning was developed relevant to the educational environment in Kuwait. The 2011 strategy report defines e-learning as:

> *Technology-based learning, such as that conducted with computers linked through the Internet and the communication networks inside and beyond classrooms, either independently or under the direct supervision of teaching staff*
> *(MOE, 2011, p.133).*

It can therefore be seen that the development of e-learning represents a movement away from traditional, face-to-face and print-based learning methods, towards a learning environment that combines face-to-face learning with e-learning which links students and instructors, to provide what can be seen to be a more independent learning environment.

E-learning is also referred to by the Ministry as a *blended e-learning model* (Alsharahan, 2012). In the context of the definition cited above, the Ministry elaborates upon the objectives of e-learning that form part of the framework of the educational environment that is applied to the school system. These objectives are as follows:

### 2.6.1 Objectives of e-learning in Kuwait

1. *To provide a distinctive model of education in the State of Kuwait, that aspires to regional leadership.*

2. *To develop and deepen the sense of community and create a cultural fabric that advances a knowledge-based economy in the State of Kuwait.*

3. *To improve learning and education by dissemination of scientific excellence and develop a culture able to support programmes which enrich the educational process in the State of Kuwait.*

4. *To contribute to the reform and development of educational programmes using modern communications methods, information technology and the Internet to support curricula across all educational stages, alongside various activities and events that modernise and develop teaching methods; developing all aspects of the educational matrix.*

5. *To disseminate learner-centric culture throughout the Kuwaiti educational community, of which pupils remain the essential core.*

6. *To develop tools that utilise state-of-the-art technology for the Kuwaiti educational environment.*

7. *To enrich the educational environment with further non-traditional approaches that facilitate education, enhance the learning process and aim to create the desired benefits of education.*

8. *To create an environment that supports immediate interaction between learners and between learners and teachers, such as that provided by e-tools.*

9. *To consider individual differences between learners and their styles of learning, enabling all learners to achieve success through the provision of appropriate learning environments that maintain the principle of equal opportunities.*

10. *To transform the role of the teacher so that the educational process is instructor- led rather than subject to widespread indoctrination-style techniques.*

11. *To enable pupils to receive scientific material in a way that is tailored to their individual abilities, visual, audible or readable means.*

12. *To provide permanent, prompt services in education, learning and supervision for learners, teachers and all other stakeholders inside and outside educational institutions, with the aim of developing learner-centric*

*course delivery methods that are adjustable to individual learners' abilities and differences.*

13. *To build a large renewable database from scientific materials and accessories in order to contribute to the development and effectiveness of teaching approaches.*

14. *To activate integration between IT and modern communications tools and all educational fields in order to meet educational objectives and to support learners and teachers to improve their use of communications and information technology, developing key transferable skills.*

*(MOE, 2012, p.121).*

With the aim of achieving educational goals, initial implementation of the above-listed objectives took place during the 1982-1983 academic year. IT systems were introduced, creating a new and unique learning category variously referred to as IT studies, computer science and other similar titles. Through creating this new discipline, the Ministry can be seen to have responded to the widespread emergence of IT across society as a whole (MOE, 2002). Following the trauma of the Iraqi occupation of Kuwait, educational IT strategies gradually resumed, from around 1993. IT can now be seen to have grown to take on a broader relevance and is used as a tool across all subject areas of the curriculum. The implications for both learners and teachers served as a paradigm shift in that the Internet has radically altered the way in which society accesses and uses information and knowledge. Huge amounts of information are now easily accessible via the Internet, representing a critical development for the field of education and learning (MOE, 2005a). Following the success of the trial introduction of IT across key stages of education, in 2001 IT was integrated into kindergartens and the early years programme (MOE, 2005a). The following year, an awareness programme was carried out, during which all teachers were required to complete a compulsory course referred to as the 'International Computer Driving Licence

(ICDL)', based on a policy passed by the MOE in May 2002. The policy intervention allowed the MOE to disqualify teachers from their positions if they had not completed this qualification by the start of the 2007/2008 academic year.

In November 2002, this top-down policy initiative was followed by the launch of a training course aimed at educating teachers in the advantages of e-learning, facilitated via a joint online project between the MOE in Kuwait and the US State Department, coordinated by the University of Oregon. The first distance-learning course included forty Kuwaiti teachers and covered an introduction to 'web based resources' for teachers of English, mostly secondary school teachers. The main aim of these courses was to raise awareness of computers among educators and to equip them with the skills to use computers as tools for education. This initiative can be seen to have positively developed the teaching environment, engaging teachers in active and insightful online debates relating to various educational issues. Furthermore, teacher awareness of the importance of using web-based teaching materials increased. A specific area in which teacher skills were improved was in the separation of topics according to age groups of online students and in customising the course material content delivery styles depending on students' cultural backgrounds and native languages. Online teaching methods including access to online course content and web-based communication with tutors were adopted and implemented alongside the use of traditional classroom textbooks and materials, the overall aim being to widen knowledge around each subject. The MOE approach here of implementing technology to support e-learning demonstrably improved the learning environment from the perspective of students and teachersand has contributed to the positive development of educational standards (AlKhashab, 2007). Around 2003, soon after this growth in the integration of e-learning, the Ministry developed its strategy for enhancing the application of e-learning techniques across

all levels of the public education system (MOE, 2005b). Table 1 below demonstrates the rapid growth in Internet users in Kuwait between 2000 and 2010, rising by almost 1 million in just 10 years.

**Table 1: Internet Growth in Kuwait**

| Year | Population | Users |
|------|-----------|-------|
| 2000 | 2.424.422 | 150.000 |
| 2003 | 2.530.012 | 567.000 |
| 2005 | 2,630,775 | 600,000 |
| 2008 | 2,596,799 | 900,000 |
| 2009 | 2,692,526 | 1,000,000 |
| 2010 | 2,789,132 | 1,100,000 |

Source: http://www.internetworldstats.com/stats5.htm

It can therefore be seen that, whilst the Internet was quickly becoming widely considered to be the ultimate pool of information and knowledge, the strategy development would ensure that IT and e-learning would become a standard application across all subject areas in the education system (Kheder, 2008). Extensive studies were conducted in 2004, in the USA, Canada and Singapore by Kuwaiti educators who drew on the experiences of their colleagues in these countries; they applied their research in contributing towards the implementation of programmes of e-learning in Kuwait that were similar to those in these countries.

According to Goloum (2005),

> *The Ministry has begun the largest project of its kind to develop the infrastructure and to replace old hardware with modern ...*
>
> *(Cited in MOE, 2005b, p.91).*

By modernising the computer equipment available to teachers and students and improving infrastructure to provide reliable Internet access in schools, along with the provision of

appropriate training courses for teachers, the MOE extended its project to develop and broaden e-learning approaches (MOE, 2005a). The use of traditional textbooks was reduced across the curriculum and the adoption of flash memory to store educational content digitally has been supported with the required equipment and training (MOE, 2011). In 2009, the ministry developed its second plan for the application of e-learning in all public schools (Alsharhan, 2011). Central to this plan was the introduction of the latest technology and approaches to course delivery and knowledge transfer methods; these will be further considered in the following section. Both of these areas can be seen to have developed the profile of e-learning and to resolve any issues revealed by practical experience, in earlier models (MOE, 2011).

In 2006, Aldhfeeri *et al.* conducted a study to explore teachers' opinions on the impact of electronic learning in public schools. A key assumption of the study was that students' use of the Internet in schools develops new skills and establishes new standards of working practices that meet the content and aims of the curriculum. Questionnaires were used to collect data relating to six areas: basic computer knowledge, the ethics of technology use, efficiency tools, research tools, communication application and problem-solving and decision-making tools. The results of the study informed the following conclusion:

> *[the]  personnel involved in the educational system in Kuwait ought to consider the e-learning competency areas upon implementing e-learning in Kuwait's educational system, MOE should have the  basic infrastructure in place and support from Political areas and adequate funding, E-Learning should be recognised as a guide to standard learning in curriculum developments. The results also show the gender differences in communication where male schoolteachers scored higher than female schoolteachers*
>
> *(cited in Al Khashab,  2007).*

Despite the advantages of e-learning in widening the educational scope beyond textbooks and facilitating efficient exchange of assignments and communication between teachers and students via e-learning portals, the application of e-learning also has disadvantages. For example, the use of e-learning demands reliable, 24/7 accessibility to the e-learning applications, which demands a guaranteed, functioning Internet connection of an appropriately high speed, offset against an environment that incudes areas of low bandwidth and it requires continuous platform development. It must be affordable to all students and teachers, whilst providing a sufficiently high quality of content to be appropriate for use in e-learning at various educational levels, whilst providing portability and compatibility of service that is suitable for all computer applications (Alkhashab, 2007).

**2.6.2 The framework of e-learning at the MOE**

One of the effects of the fast growth of e-learning is the emergence of many prescriptive models, a number of which have been reviewed by Mayes and de Frietas (2007). It appears, however, that there are no definitive prescriptive models of e-learning, nor have any models been specifically designed to underpin e-learning in MOE or higher education in Kuwait. Although earlier models for e-learning simply set out the application of technology to deliver information, more recent approaches have emphasised pedagogical issues, including studies by Alexander (2001); Blignaut and Trollip (2003); Collis and Moonen (2001); Conrad (2000); Garrison and Anderson (2003); Laurillard (2000, 2002); Mayes and Fowler (1999); and Salmon (2002).

Mayes and Fowler (1999) proposed a three-stage cycle for e-learning, conceptualisation, construction and dialogue and set out a simple online instruction model for its delivery. A key area of focus of this approach highlights that primary and secondary courseware in

isolation cannot provide sufficient support for learning. It is only during the dialogue stage that high level learning is supported, whether through tertiary courseware or blending e-learning with face-to-face interaction.

Salmon (2002) set out a five-stage online instruction framework, developed from a complex constructivist system that positions the teacher not as an authority figure but as a moderator/facilitator. Of the five stages, the first two aim to help learners to become comfortable using the virtual learning environment. The third stage introduces online course materials and activities to learners, this is built upon in the fourth stage where knowledge is developed via extensive online interaction, both teacher to student and student to student. The fifth and final stage actively encourages learners to take more personal responsibility for their own learning. The model essentially focuses on supporting learners to become more confident and critical thinkers. In this learning environment, the role of the teacher is to support and encourage learners to review and reflect upon the knowledge and understanding developed through the course and to facilitate high-level discussion of ideas and concepts.

Laurillard's Conversational Framework, which focuses directly on learning in higher education, has achieved widespread application in the UK. Laurillard's framework draws direct connections between student-teacher interactions and technology, as such can be seen to represent a helpful frame of reference for blended learning. The framework centres on interactive conversation or dialogue between student and teacher, focusing on the feedback received by students as a result of such dialogue. It offers descriptions for approaches to interaction between a teacher and individual learners and also emphasises a key element of e-learning: the requirement for adaptation from the teacher to the learners and the need for meaningful feedback to be received by students from the teacher. Face-to-face teaching approaches (as in Mayes and Fowler's Conceptualization Cycle and Salmon's five-stage

model) largely assume that the interactions between teachers and students need not be prescribed, rather that they are spontaneous and intuitive. Laurillard set out to prescribe such interactions explicitly in order that they could be applied to e-learning. Whilst Laurillard's method places more importance on two-way dialogue between teacher and student than on passive movement of information from teacher to student, the model in its essence represents an instructional teaching perspective. It positions e-learning as a means by which a learner can understand the concepts as set out by the teacher; In order for this outcome to be achieved, interaction between teachers and learners is required, alongside the delivery of meaningful feedback from teacher to learner. From a practical perspective, the model prescribes a number of types of interactions: interactive, reflective, communicative/discursive and adaptive.

The successful application of MOE strategy is based on many important factors, including technical, technological, administrative, human and cultural elements (Alsharahan, 2012). However, it didn't really mention any pedagogic element in detail or any model followed.

MOE strategy focuses on providing latest technologies and the main aspect is to provide information. The MOE thinks that in order to achieve the desired results from the application of the e-learning strategy and ensure its continuous success, the following aspects need to be considered:

### 2.6.2.1 Awareness and media

The awareness and media project aims to plan and implement a comprehensive media campaign using printed and visual materials, outdoor advertisements and public relations efforts in order to build awareness of educational developments and e-learning projects throughout the target population and to develop a new approach to community culture

(Alsharahan, 2011). Via a national campaign, the project will build awareness of the importance of introducing communications and information technology into the educational process (MOE, 2011). The project also seeks to facilitate the transformation of traditional perceptions and cultural values with regard to education, with particular emphasis on e-learning, in order to encourage the growth of learner-centric attitudes within the next generation and to engage the community, families and educational administration in an interactive and effective educational process (MOE, 2012). The campaign represents a step towards building public awareness of applied educational developments and the role of e-learning applications. A key message of the campaign is to improve public understanding of the ability of the development of these educational processes to provide long-term support for the future of life-long learning and the benefits that it offers (Alsharah, 2011).

The strategy also enables teachers at the MOE to develop their educational abilities, whilst allowing for the creation of instructor-led tools and enabling administrators to build and activate administrative sources that effectively support pupils, teachers, parents and the community as a whole (Alsharahan, 2012).

**2.6.2.2 Tools**

This project seeks to provide, prepare and equip an advanced database centre containing large, high-tech servers capable of supporting large networks for high numbers of user accounts, emails, an e-learning portal, an e-library and e-learning content for pupils and teachers. The technical set up should also be capable of servicing the programmes used by workers at the MOE (MOE, 2011). Furthermore, the project aims to update and develop the e-learning infrastructure in schools controlled by the MOE, as well as connecting all the state schools in Kuwait with a fast and unified fibre-optic network (Alsharah, 2011). A pilot

project was conducted by the MOE in cooperation with the Ministry of Communications and the Central Authority for Information Technology (Alsharhan, 2011). Phase 1 of this project dealt with the building of an advanced database centre and the development of infrastructure for secondary and intermediate schools. Schools were equipped with computers and networking equipment and provisions were made for home learning, such as the availability of laptops. Phase 1 was launched in August 2009 and completed in May 2010. Currently, the MOE has the most recently developed and fastest database centres in the region, as verified by major companies such as Microsoft, Intel and Dell (MOE, 2012). This project phase intended to provide a central database centre to meet the specifications of a suitable environment for dealing with e-learning services. It was also crucial that this phase resulted in tools and services to manage school and educational area networks at the MOE effectively, robustly, securely and reliably, that are easy to operate and maintain (Asharahan, 2012).

The main database centre will be the major node, hosting the Kuwaiti education portal that provides access to curricula (e-learning content). Alsharah (2011) considers the database centre to be one of the most important pillars of the infrastructure, as it delivers e-learning services around the clock, through the Kuwaiti portal, to school pupils, teachers, administrators and parents, wherever they are located. It will provide, for the first time in Kuwait, communication services, which are rapid and accessible between all segments of the community, coming into contact with every home in the State.

### 2.6.2.3 Kuwait educational portal

The Kuwait educational portal provides a gateway for other online services to be accessed securely by registered users. The project to build the portal was completed in July 2012 and made available to users from the 2012/2013 academic year (MOE, 2012). The aim of the

Kuwaiti educational portal is to deliver an e-learning environment to teachers, pupils, administration and parents.

### 2.6.2.4 E-learning content

Content is one of the most important elements of the e-learning strategy (Ismael, 2009). The Kuwaiti e-learning portal will make interactive scientific materials digitally available at any time and in any place. E-learning content in various forms such as sound, image and interactive elements will be designed according to the Learning Objects (Alsharahan, 2011). Pupils can learn interactively using the content to full advantage; it is a learner-centric approach that can help pupils to achieve excellence. It is also possible for the teacher to follow up all pupils' levels of performance, using reports and tools provided by the learning administration system and portal (Alsharah, 2011). This project is as yet incomplete; however, the Ministry is cooperating with different companies in this field in order to identify the best service provider. It is intended that the project will comply with the latest international standards for this field, in order to optimise user interaction with the system once in place; the Head of the e-content project, Alsharhan (2012) indicates that the:

> *Ministry of Education is now revising the offers from different companies and it will decide soon on the best option for students, I will guarantee that our content will be designed and developed to the highest quality, in accordance with the latest international standards.*
> *(Alsharahan, 2012, p.5).*

Alsharhan (2011) indicates that the e-learning content will be delivered using learning objects through problem solving methodology. The learning object is an integrated unit, which displays a concept carrying measurable pedagogical goals. This project is scheduled for completion in January 2013, with the implementation phase taking place during the

second semester of the academic year 2012/ 2013 (MOE, 2012).

**2.6.2.5 Provision of wireless networks for schools – smart schools**

This project has been completed. The wireless networks are experiencing a period of great development since they can be deployed within a range of school facilities, notably classrooms, to provide opportunities for the teacher to present lessons and courses using laptops and educational software as a supplementary means of delivering the goals of courses and transmitting information more clearly (Alqallaf, 2012). This involves connecting the equipment through wireless networks at school, which in turn are connected to the Internet, providing opportunities for the teacher to give various examples and to identify supportive sites which will give deeper insight into the course material by adopting different learning approaches (MOE, 2012). A further benefit of this system is that it also allows for pupils, teachers and administrators to access the e-learning facilities via mobile devices, meaning that opportunities for learning and engagement between pupils and teaching staff are no longer limited to libraries, computer laboratories and classrooms, but accessible across campuses.

**2.6.2.6 Smart (virtual) classrooms**

Smart classrooms, whereby students and teachers are able to gather and communicate either in classrooms equipped with facilities for e-learning, or via the Internet in online classrooms with video conferencing capabilities, instead of being required to physically be in the same room as each other, have been adopted in public schools and provide many benefits that contribute to a distinct learning environment.

Amongst the array of technological tools available in a smart classroom, the following are

currently tools employed in the MOE public schools in Kuwait:

a- *Interactive whiteboard.*
b- *Online content presentation*
c- *Classroom control centre.*
d- *Computers serving pupils inside or outside classrooms of all types.*
                                                                     *(MOE, 2012, p.129).*

### 2.6.2.7 Provision of laptops

The MOE believes that the provision of laptops is important to ensure the success of the plan,

the Ministry being aware that for various reasons some students would not be able to obtain

their own (MOE, 2010). However, due the rapid development of technologies that has

allowed Turkey and Singapore to provide many schools with tablet computers, the Ministry

has been obliged to cancel the project of distributing laptops in light of the new technology

available in the form of tablet computers (Alderwaza, 2013).

### 2.6.2.8 E-library

This project is awaiting approval by the Minsters Council. Alsharhan (2012) summarises the

aims of this project as follows:

> *The e-library project is a basic element of the e-learning strategy in Kuwait and it aims to deliver information to every pupil and teacher easily through the Kuwaiti portal. This project aims to build and develop e-libraries and to promote cooperation with large Arab and international e-libraries and sources of knowledge, which will be integrated with the Kuwait portal, in order that teachers and pupils can search for information in e-books and other digital resources*
> *(Alsharhan, 2012, p.17).*

**2.6.2.9 Vocational training and development**

A programme has already been developed to train teachers in the elements of the e-learning strategy and its use, tools and systems. The aim of this training is to help the teacher to optimise efficiency and to take advantage of the initiatives rolled out by the strategic partners of the MOE, such as Microsoft, Intel and Cisco, delivering an instructor-led training in order to ensure that a student-centred learning approach is implemented (Alsharahn, 2012). Student-centred learning refers to an approach to student learning that considers how students learn and engage in a learning context, as well as what their learning experience is, in order to drive teaching practices. Student-centred learning focuses on the learner and his/her needs instead of the input of the teacher. One of its central objectives is to encourage active learning instead of passive learning. This approach also aims to develop learner autonomy, increased student responsibility and accountability, along with emphasizing thorough learning and understanding rather than surface level knowledge. A further benefit is the encouragement of mutual respect and interdependence and a two-way relationship between the learner and the teacher instead of the traditional one-way relationship (EHEA, 2014).

For these reasons, the Teacher Training Programme was developed to ensure the consistency of the method and to enhance the capacities of teachers. However, the project also guarantees the training of all other persons in the educational and supervisory body, including non-teaching staff such as administrators, technicians and supervisors, to raise efficiency and enable all involved to keep pace with technological developments. Despite the original intentions for widespread training, a recent study by the MOE (2012) mentions that only 40% of the teachers received training from this project, without offering explanations for this.

## 2.7 E-learning in public higher education

The UOF adopted an approach to the implementation of BL along two parallel e-learning lines. The first line is the 'models' system and the second is the online training in collaboration with Human Soft. The online training provides free training courses to students and teachers through the NET system. The university offered more than three thousand courses across different areas such as information technology, desktop, business and personal development to a large number of students, faculty members and administrative staff (Alkandari, 2011). Consequently, faculty staff skills were improved in the areas of the use of e-learning methods, building and uploading e-content and preparing electronic assignments and exams. Moreover, the University organises training courses for its students on the Blackboard system, under the supervision of the Information System Centre (UOF, 2012). The UOF is, as is the SBEK, a public Institution. Since early 2002 it has significantly developed the implementation of BL (UOF, 2012). The UOF largely conducts course delivery via smart classes and a virtual learning environment (VLE), in addition to face-to-face teaching methods. VLE is an online course management application, which allows for the integration of course organisation, communication, content and assessment/exercises (Gillespie *et al.,* 2007). UOF is equipped with the latest technology, including highly developed servers and reliable networks. Labs and classrooms are equipped with advanced teaching aids such as computers, the facilities to deliver digital presentations and smart boards. Moreover, modern classes at the UOF allow the use of devices such as cameras in order to record lectures and save them electronically. Online registration for academic classes at UOF is accessible to students via the university portal whilst both students and staff members can receive information online (ESCWA, 2003). Wireless LANs are now accessible within a range of buildings and cafés on campus, supported by the multiple

Gigabit Ethernet network that operates throughout the University. Platform-Cisco's AVVID provides the IP telephony which is available for students throughout the college grounds and maintains all types of data transmission including vocal, visual and text (ESCWA, 2003). Despite some problems related to the malfunctioning of technological resources onsite, staff members and students have criticised the consistency of the organisation of the computer networks within the campuses, particularly during periods of exams and enrolment (Alkandari, 2011).

While the benefits of the model clearly suggest that e-learning facilities should be open to all citizens, at present the services are limited to registered faculty, staff and students. There are plans to extend this facility to the parents of students in the future. The UOF library has been completely digitised so that students can access and download all academic articles to their flash drives for future reading and study (Alkandari, 2011). A student portal at UOF is equipped with multiple Gigabit Ethernet fibre networks extending all around the campus. In addition, a WLAN has been installed to ensure access from anywhere within the university boundary, allowing students to work from anywhere on campus, including the cafés, meeting areas or restaurants (ESCWA, 2005).

> *The UOF has taken a step in line with modern trends in education that take new technologies and apply the results of the information revolution that liberates the educational process from the inevitability of increasing the interaction between students and the professor. It also opens the door to many students to benefit from available courses without the need to be in traditional classrooms, where face-to-face lectures are reduced.*
>
> *(Alkandari, 2011, p.23).*

While the infrastructure of learning has been the main focus – the physical rollout of equipment and technical expertise and the ability to access online content anywhere and anytime – the pedagogical goal of BL is to enhance the intellectual skill of learners, to boost

critical thinking and develop academic achievement and personal satisfaction in the learning experience, with the aim of achieving a consistently positive learning experience. Over the past ten years, since statistics became available, students who graduated from the UOF achieved higher Grade Point Average (GPA) scores than their peers at the SBEK. GPA is one of the main benchmarks used by the MOE when recruiting new teachers.

The head of the e-learning excellence centre at UOF said;

> *Blended learning has proved significant in advancing educational excellence both nationally and internationally and definitely with our students*
>
> *(Alkandari, 2011, p.29).*

Yet despite this record of achievement with BL, the SBEK has still to adopt this powerful approach to teaching and learning. The above mentioned plans of the MOE and the efforts of the UOF highlight the wide gap between these two state-owned organisations; demonstrating that no elements of the application and use of e-learning can be found at the SBEK. The gap is also apparent in the lack of coordination between the three institutions, because students of the SBEK are preparing to teach in public schools (Bander, 2011). This is of fundamental importance because any lack of coordination between the SBEK and the Ministry could result in a loss of benefits of e-learning to all involved.

## 2.8 Summary

Since the establishment of the State of Kuwait in 1745, great attention has been given to education. The attention to education developed rapidly after oil was discovered in Kuwait. With the increasing use of technology in education, Kuwait was the first country in the Arab Gulf region to integrate technology in the educational process. At present, Kuwait is doing its utmost to integrate the latest technological development into education. In summary, this

chapter provided the reader with a comprehensive image of the education system in Kuwait. It also described the current status of e-learning in Kuwait public institutions. The vast majority of educational institutions in Kuwait are equipped with the latest educational technology but the SBEK, it would appear, falls behind with aspects of e-learning. Although the MOE and UOF offer all the latest technologies, tools and conducts great projects to facilitate BL implementation, they haven't mentioned (either in their reports or in my interviews with some of their senior administrators about the educational aspects of BL strategy in greater details, or any evaluation studies for current BL strategy so far) what they expect from BL, why they implemented BL and what BL designs they have, nor how learning occurs and which model they follow.

# Chapter Three: Literature Review

## 3.1 Introduction

The principle underpinning distance learning is learning for all, at anytime, anywhere, where students and teachers are geographically separate, the process of education is based on self-learning (Hamdan, 2007). When distance learning first emerged, the students were receiving books and other educational content via traditional mail (Sultan, 2005). Since then, different methods of learning have been used, such as audio and video tapes, television and audio broadcasting technology (Alkailani, 2004). However, the notable characteristic in the development of distance learning in the past was that, in spite of the use of radio and telephone in schemes such as Australia's Schools of the Air, in many instances it lacked direct interaction between teacher and students. With the advent of the Internet and the immense development of the means and technology of communication this deficiency has been remedied (Alarini, 2005). Now there can be personal interaction between all the participants in an educational process because new ways of contacting one another have been established. This technology has led to the emergence of e-learning (Ismael, 2009). This chapter reviews e-learning, blended learning and attitudes as a concept. Relevant studies from Western and Arab Gulf countries that identified the benefits of BL are included. It also clarifies the issues around BL pedagogy, BL design and the challenges of the implementation of BL. This chapter also presents the study research questions, which the study seeks to answer.

## 3.2 E-learning

Due to the rapid development in technology, day by day, there is no comprehensive and specific concept or definition of e-learning. Many different definitions are found in the literature and hence it must be conceded that e-learning is one of the most changeable concepts in education (Race, 2005).

Alsaleh (2005) defines it as a combination of synchronous and asynchronous interactions. Khan (2005) explains that e-learning uses the Internet intentionally to provide an interactive educational environment for any one at any time, while Driscoll (2002) considers that e-learning is any kind of learning that occurs through any electronic means. Altahih (2007) defines e-learning as a method of, and approach to, teaching and instruction which takes advantage of what is provided by the Internet and different communication media to create a means of communication between the teacher and the student and among the students themselves.

Alkailani (2004) defines e-learning as:

> *A learning that depends in most cases on computer either via the Internet or by an internal local communication network in the institution*
>
> *(Alkailani, 2004, p.33).*

Generally, it seems from the above definitions that e-learning is about using technology in learning and teaching, but most of the definitions of e-learning emphasise the use of the Internet to achieve an interaction between the various components of the educational process.

## 3.3 Types of e-Learning

It appears from the foregoing that e-learning can fit one of two main definitions, the first of which is that e-learning is based on using any electronic means for learning, whether inside

55

or outside the classroom, without the need for students to be connected to the Internet, either via CD-Rom, computer or instructional television. The second definition, referred to by several studies (Almusa, 2005; Khan, 2005; Alsaleh, 2005) is that e-learning involves the use of the Internet. This definition is in turn divisible into two main types:

### 3.3.1 Synchronous e-learning

In this type of e-learning, the teacher teaches the students in real time; they will meet each other with prior notice for discussions, conversations and lessons. Virtual classes, chat rooms, shared whiteboards and video conferencing are the tools used in this branch (Ismael, 2009). This type of e-learning involves live and direct interaction between the various parties in the instructional process. The student can inquire directly from the teacher about anything that s/he finds hard to understand. The teacher can also ask students about what has been explained (Khan, 2005).

### 3.3.2 Asynchronous e-learning

Asynchronous e-learning is based on the non-convergence of teacher and students in real time. It provides the teachers and students with the opportunity to choose a time and place which suit them to communicate and study. Halfawi (2006) and Amer (2007) consider emails, forums, mailing lists and discussion boards as the most used tools for asynchronous e-learning. Students can access and interact with materials asynchronously at their convenience, so the learning structure is more flexible and less time consuming for teachers to execute (Gillespie *et al.*, 2007). Hammond (2005) reviewed 62 studies carried out between 2002 and 2004 in which asynchronous discussion (emails and conferencing programs such as First Class and WebBoard) were used to support learners in higher education institutions. 56

were in the context of initial teacher training in developed or Westernised regions of the world (North America, Europe, Australia and New Zealand). The other 6 were conducted in Hong-Kong, Taiwan and Brazil. None were in Kuwait or the Gulf region. Asynchronous and synchronous tools can be used, either in BL, or in fully online teaching, which is known as 'online learning'. Teachers and students in online learning do not meet face-to-face (Alsultan, 2010).

## 3.4 Blending Learning

BL, as an agreed definition of method and concept, has attracted controversy since its inception. Almosa (2007) makes the case that a researcher may find and use various and even dissimilar and contrasting definitions for BL. This explains why it is difficult for researchers to focus on any particular one. Blended, or *hybrid*, learning is a combination of face-to-face and online learning methods, the exact composition of which depends upon the aspects lecturers mix together and deliver using specific teaching activities online. According to Driscoll (2002), BL covers four major fields of study: a combination of two or more types of web-based technology; a combination of two teaching methods to generate the best possible learning results, with or without the involvement of instructional technology; a combination of traditional in-class and any form of instructional technology; and a combination that uses intructional technology along with actual job tasks.

Most research on BL falls within one of two camps, either Driscoll's third catogery, or a definition of BL as combination of in-class and online learning methods (Ismael, 2009; Tang and Byrne, 2007; Welker and Bernardino, 2006; Beatty, 2007 and Yoon and Lim, 2007). This definition, which combines face-to-face teaching with online learning, can be implemented in three ways: developing online learning materials akin to the course materials;

offering online learning materials as additional resources; replacing parts of the instructional content with online materials. Graham (2006) has identified the definition that integrates face-to-face and online learning, as consisting of three descriptive modes. Firstly, the Enabling blend which entails offering more than one method for obtaining the same learning opportunity. Secondly, the Enhancing blend, which involves offering additional online learning resources for the courses that are conducted face-to-face. Thirdly, the Transforming blend which integrates online learning as a main method with the traditional learning and teaching modes.

As a result of these definitions that integrate traditional in-class learning with technological learning activities, BL benefits from the advantages of the two educational systems where this new emerging system acquires the advantages of both models.

Ragan (2009) indicates that BL is:

> *The planned integration of online and face-to-face instructional approaches in a way that maximises the positive features of each respective delivery mode*
> *(Ragan, 2009, para. 4).*

WebCT categorises the strata of blending learning which are globally used into three major levels, as defined by Ross and Gage (2006):

> 1.) *Web-supplemented or technology-enhanced courses, which add supplementary online components to a traditional course without changing the amount of time students spend face-to-face with instructors.*
>
> 2.) *Hybrid or reduced face-time courses: hybrid courses reduce the amount of face-to-face in class time and substitute it with online learning activities.*
>
> 3.) *Blended programmes or degrees: a hybrid or blended degree program means that a student is not a "traditional student" or an "online student" but has the freedom to choose from all types of courses to earn a degree. Some are blended, some face-to-face, and some fully online*
> *(Ross and Gage, 2006, p.156).*

The most innovative path is to reduce face-to-face learning time (Alsultan, 2010). However, it is not very easy to fit into the administrative structures of higher education. It requires faculty to adapt their way of teaching and possibly introduce new tasks and roles (Ross and Gage, 2006). Based on the policies and regulations of SBEK, face-to-face learning time is mandated and cannot be changed without first changing the regulations (PAAET, 2011). In the current situation in SBEK, the proposed BL approach is the combination of online learning and face-to-face without reducing the time devoted to the latter

One issue I would like to raise here is that I would have preferred to use strict inclusion criteria when selecting studies concerning the benefits of BL, but I experienced difficulty in locating peer-reviewed journal articles that focussed on the emergence and benefits of BL in the Gulf region due to it being embryonic as a research area. This is rather different in comparison with the West, which is at a certain level of maturity with regards to BL implementation. Similarly, research into BL as a subject is at a stage where there is a large body of peer-reviewed publications. In order to bridge this deficiency, I have included Doctoral studies and Masters theses besides peer-reviewed studies to ascertain a picture of the benefits of BL in the Gulf region. The studies from the Gulf that I have included to support the benefits of BL in Western countries were those that used pre- and post-tests, experimental and control groups, demonstrated sufficient validity to be included in my study. It might be beyond the scope of my study to critically analyse the individual methodologies of each study that I reviewed. One of the main factors that determined inclusion was the pedagogical stance of each study. Those that were underpinned by student-centred learning were given preference. It is also important to acknowledge that some of the positive effects of BL could be attributed to the 'Hawthorne effect'. The Hawthorne effect refers to the tendency of certain individuals to apply more effort and demonstrate improved performance

levels when they are aware that they are participating in experiments. Behaviour changes are often ascribed to being the result of the attention that such individuals received from researchers rather than from the specific manipulation of other variables (Cook, 1962).

## 3.5 The Underlying Principles of BL

Education in the twenty-first century has been significantly influenced by modern technology (Zaiton, 2005). Many universities now recognise the need for a major shift in the higher education (HE) environment. Given that students differ in their learning needs, conventional lecture-based learning does not cater for all (Young, 2002). Thus, Littlejohn and Pegler (2007) suggest that e-learning is the best approach when responding to the increasing challenge of meeting the needs of HE. With the spread of the Internet, in both its depth and breadth, some universities have redesigned their courses to be taught online to increase Higher Education accessibility. The term 'BL' has recently emerged as a result of the inception of online learning.

Despite the vital role that BL has had in enhancing education in recent years, online learning and teaching have been the subjects of controversy and debate (Ismael, 2009). The lack of social interaction amongst students and between students and teachers is one of the main challenges confronting online learning strategy. It is argued that this loss of social interaction along with isolation from traditional university society will lead to loss of the spirit of competition between students and reduce their motivation to learn (Algorab, 2003).

Tabor (2007) feels that maintaining students' enthusiasm to join in and learn through online learning is very difficult. He goes on to say that low-skilled computer students will not be as deeply involved in learning as other students, which suggests a possible preference for

traditional methods. Alsultan (2010) claims that some students find it very difficult to express their views via online learning and prefer to express themselves face-to-face.

Although it is possible to stage live discussions, the need for a teacher's physical presence, as well as that of other students in the classroom, cannot be satisfied by the educational resources provided on the Internet, however abundant. It is because online learning students lack a human or social-centred model that will educate them socially and personally (Altahih, 2007). Another issue clarified by Dey and Sobhan (2008) is that the potential for cheating is one of the issues in online learning, since it is all too easy for students to find other people to do their tests and their homework. Hudson (2005, cited in Salama, 2005) shows in his research that those students who have learned through online learning lack skills in face-to-face conversation and in presenting ideas. That is, the lack of a social audience presents problems, which may become acute.

In 2000 the UK government formed UK eUniversities World Wide (UKeU), the aim of which was to coordinate online learning in higher education and also to provide it internationally. The government spent 62 million pounds in setting up the project, but after four years it was disbanded. Howard Newby, the chief executive of the Higher Education Funding Council for England (HEFCE, 2004) gave as reasons:

> *In hindsight it was clear that online learning on its own was not as popular as predicted, and there had been a number of e-learning failures by the universities in the United States. What students wanted was 'blended' learning where online materials were backed up by conventional teaching*
> *(cited in Jones, 2006, p.183).*

Due to the increased assistance that BL offers to e-learners, the additional flexibility and ease of access provided to traditional students by combining both face-to-face and online learning, most universities which previously provided full online courses or full face-to-face are moving towards BL (Young, 2002; Graham *et al.*, 2003; Kumar, 2007; Almosa, 2007). It is

increasingly popular in the educational field and has led to the increased effectiveness of learning according to Amer (2007).

The UOF at the school of Islamic Studies moved to BL in order to cope with the increasing number of students at undergraduate level attending traditional courses. The school had to deal with a shortage of qualified teachers and a lack of classrooms. It also needed to replace about one third of the face-to-face time on some modules because some tutors prefer not to meet female students more than once a week due to prevailing cultural norms (Alkandari, 2011).

According to Graham (2006), the advantages of BL have proven to be very effective for many learners and mixing traditional learning methods with online formats is especially effective. McFarlin (2008) conducted a study to investigate the effect of BL on physiology students' performance at Houston University. The results of the first exam showed that the blended group obtained results which were 10.5% higher than those of the traditional group. Likewise in the second exam the group scored 17.6% higher than did the traditional group. Taking the average of both exams for the autumn and spring courses, the score of the blended group was 14% higher than that of the face-to-face group. As for final exam findings, the students who were taught by BL scored 9.9% higher than students taught using face-to-face techniques. Increased effectiveness helped to reinforce self-directed study. The lectures were delivered online, whereas face-to-face time was used critically to discuss and question the concepts delivered online. This dialogical approach to learning allowed face-to-face interaction to bridge gaps specific to each student.

In the Gulf context, which Kuwait is a part of many Arabian Gulf researchers consider that BL has tested to have been more effective than traditional or online learning approaches in increasing the achievement rates of undergraduate students, their attitudes and their

satisfaction in learning. There have been at least 45 Gulf region studies, in different education subjects, that have approved the effectiveness of BL in improving student achievement. Table 2 contains an example of these studies.

**Table 2: BL Effectivness Studies**

| Study and date | Course name | Place | Results |
|---|---|---|---|
| Alkayat (2010) | Quran Recitation | Bahrain | Increasing in Recitation skills and Overall satisfaction |
| Alshammari (2007) | Geography | Saudi Arabia | Increasing students achievement and attitudes |
| Alkhader (2008) | Environmental | Kuwait | Increasing students achievement |
| Alilian (2009) | Anatomy | Bahrain | Increasing students achievement and attitudes |
| Alhogali (2006) | Math | Saudi Arabia | Increasing achievement |

Although the recitation tajweed in Alkayat study is rote learning in nature, the study showed that the technology has enhanced the recitation skills. This could be due to the Hawthorne effect or simply due to increasing the types of interaction between the Quran and its reciter. The other studies were more interactive and adopted a student-centred approach. All of these demonstrated a positive impact on the learner. This could be due to other unknown factors, but there were several subjects in different countries all showing an increase in achievement.

It would make sense to suggest that this owed something to the introduction of technology. Using comparative statistics, students of the SBEK had low achievement scores compared with students in the School of Education at the UOF. The grade point average GPA of the majority of UOF students ranged from 3 to 3.5 while SBEK students ranged from 2 to 2.5 (PAAET, 2011). In the last four years, the GPA of SBEK students showed low levels of achievement year by year, so implementing BL may help increase the achievement grades of those students. The BL approach in UOF is likely to invoke a student-centered approach, which is known to lead to better achievement by learners (Alkandari, 2011). At this point one can assume that this impact cannot be attributed to the BL alone but rather to the combination of BL and student-centred learning, thus the technology underpinned by effective pedagogy. Garrison and Vaughan (2008) discuss another benefit; they argued that BL offers the opportunity to evaluate the quality of education and redesign sufficient educational models that help higher educational institutions to make use of the benefits of BL in terms of effectiveness, convenience and efficiency. Using a range of activities enables students to develop their critical thinking and increase their involvement in the learning process. This approach also encourages students to take part in the development of an inquiry process, which, in the long term, improves the quality of learning and teaching at the higher educational level. According to Abdullah (2013), Arab students lack critical thinking skills. He mentions that the way of teaching, where teachers are at the focal point of the learning process, marginalising students to the role of passive recipients and a lack of dialogue. This could be a main reason for this critical shortfall. Several studies on the impact of BL on increasing the critical thinking of undergraduate students have been conducted in the Arab world, seem to have had a vital role in increasing critical thinking skills. Garrison and Kanuka (2004) highlight the importance of interactive dialogue in BL in facilitating critical

thinking; they say

> *The range and quality of interactive dialogue*
> *that can be facilitated through BL is congruent*
> *with the widely accepted means of facilitating*
> *critical thinking and higher-order learning.*
> *(Garrison and Kanuka, 2004, p.98).*

Three studies have been conducted in UOF in Kuwait to investigate the impact of BL on developing critical thinking skills. Alshammari (2009) found in his study that using e-activities in BL has developed critical thinking more effectively with students who have done computer programming language C++ course. Almutairi (2011) was interested in examining the outcome of applying asynchronous communication tools in combined learning to improve critical thinking at the Education Faculty; his study demonstrated that BL has improved critical thinking skills of students and argued that the use of debate and emails as asynchronous communication means in blended format increases academic progress.

Alfadhli and Khalfan (2009) conducted a study aimed at examining the effect of employing e-learning to improve the students' critical thinking skills in the UOF. The central interest of this research is critical thinking doctrine and its influence on the students within e-learning class settings. The research process empirically investigates two rational points. The first involves the impact of e-learning in improving the critical thinking of the university students and the second investigated the response of the students who undertake an e-learning course. To collect the quantitative data, the researchers used the California Critical Thinking Skills Test (CCTST) as well as a questionnaire to elicit students' views. The conclusion was that the use of e-learning significantly enhanced students' critical thinking skills. The attitudes of the students were positive and the satisfaction of the students was directly related to the teacher's performance.

The BL model is favoured over the online learning model at the undergraduate level. A

survey conducted by Owston *et al*. (2006) in Canadian universities indicated that transforming entire online courses to a blended mode was necessary to meet the needs of undergraduate students who require extra support, especially in their first year. The results of the Canadian survey compare favourably to those of a study carried out in the College of Social Sciences at UOF (Alkhader, 2008). The study aimed to explore the influence of interactive multimedia-supported activities on academic achievement, information preservation and degree of satisfaction. The results found that using BL has increased the students' satisfaction level and also indicated that the students would learn more productively through this type of learning.

Another study by Futch (2005) was undertaken at Florida Metropolitan University to identify the views of both learners and teachers concerning a BL programme. It showed that the students' perspective towards blending online with in-class learning methods was positive because this combination fulfils their needs for actual socialisation and at the same time gives them the space to follow other parts of the course online.

In response to a question that was addressed by the University of Wisconsin–Milwaukee and other universities that used BL courses regarding their views on blended courses, students said that they found blended courses to be enjoyable and useful. They identified a number of reasons for their views. Firstly, blended courses are flexible, which gives students the chance to follow their studies independently online. It also reduces the burden of physical attendance and travelling concerns. Secondly, they provide them with interactive activities involving their teachers and classmates online as well as in-class. Thirdly, they offer them access to limitless updated online information resources. Fourthly, they offer an effective environment for time management, critical thinking and problem solving skills.

Finally, they increase student participation, because they offer them the opportunity to select

the mixed module in which they are interested. Other reasons included having more time to search for resources and relevant materials during online activities than when in class, gaining regular feedback either from teachers or their classmates and improving their Internet and computer skills. The studies reviewed assumed that all learners have ICT equipment and an Internet connection. Whilst this is an enabler, at the same time it could exclude learners that do not have access to the Internet. Whilst the Internet access is widespread in Kuwait, SBEK students do not have access on campus.

Mixing traditional learning methods with online ones increases accessibility and flexibility and shrinks the cost of education by cutting the price of buildings and services (Graham, 2006). It also reduces the expense of travelling back and forth for students who are not living on campus (Alsultan, 2010). Others, however, argue that online learning involves hidden costs that are not taken into the equation, such as those for acquiring electronic learning facilities and infrastructure (Ismael, 2009).

The results of extensive research conducted by Sharpe and others, in which more than 300 other studies into the foundation of BL all over the United Kingdom were examined, reveal that BL helps in accepting diversity, improving on-campus experience, increasing efficiency, accessibility and flexibility, as well as enhancing knowledge and achieving cost-effectiveness (Graham, Allen and Ure, 2003; Sharpe *et al*., 2006). All the lecturers at the University of Wisconsin-Milwaukee who took part in a BL pilot project declared they would repeat this experience, pointing out the enhanced educational setting it provided them, as well as the positive experience for students (Garnham and Kaleta, 2002). One issue relating to approaching such projects, is that these new developments often have to be backed by additional management, administration and support to achieve the objectives. To repeat these projects can often be challenging without the same level of support, when such practice is not

fully embedded.

Advantages attained through easy access and flexibility of BL have been acknowledged in higher education the world over, irrespective of differences in culture and geographical locations. For example, students who live in locations far from the university campus or who are not able to attend campus classes due to other obligations have the opportunity to pursue most of their education through online courses. The benefit of providing education to learners in rural areas was reported in a study conducted by Yudko, Hirokawa and Chi (2008) in the state of Hawaii. The study aimed to explore the perceptions of students towards integrating online learning with traditional learning in a remote area with significant barriers to travel. The students' attitude was supportive of blended courses, particularly amongst those who had good Internet skills. The study concluded that a combination of online formats with traditional face-to-face learning had promising potential, although the researchers remarked that the impact of this new learning style on the educational experience of the students required further research and investigation.

Alsharhan (2011) argues that a BL style is the first step in creating a significant cognitive change in ordinary educational processes due to the variety of learning methods. Students have the opportunity to choose between a wide range of learning models, according to their personal needs and situations, to accomplish their learning objectives. For example, working students who are not able to enrol on a wholly traditional in-campus course can enroll on a BL course where they can undertake online and face-to-face courses. About 10% of students at the SBEK are working, more than 50% live an average of thirty minutes travel time from campus and more than 15% are married (PAAET, 2011). The flexibility that BL offers these groups could enable them to overcome such problems.

Another study was carried out at Freshman College in Saudi Arabia in 2005 to examine the

impact of BL methods on improving English as a foreign language and particularly the teaching of grammar. The results of the study revealed that when the learning setting at the school lacked technological equipment in the classroom, accessing online materials at home to complement class activities helped students to improve and motivate their learning of English (Aljarf, 2005). Furthermore, in Arab societies where communication and interaction between people of different backgrounds and genders is less common due to prevailing cultural norms, creating virtual learning settings provides a secure and expansive environment for learners to express their views openly (Tubishat *et al.,* 2006). Tubaishat and others carried out a survey in two Arab universities; the first was Zayed University in the United Arab Emirates and the second, Jordan University of Science and Technology, in Jordan. The case study examined the influence of technological development and culture on students at the higher education level. The study concluded that offering online learning settings to the students made them interact more comfortably due to the absence of restrictions on interaction associated with the traditional learning environment. The students also observed that online technology made interaction with their colleagues after campus hours more possible (Tubaishat *et al.,* 2006). Moreover, online settings motivated the students and increased their confidence to interact in discussions and present their views and ideas freely.

Thus, introducing online learning technology would help culturally conservative Arabian Gulf countries to overcome some of the limitations on interaction caused by political, traditional values and culture. Therefore, it is important to be aware of the insight of BL in gender-segregated countries like Kuwait and to appreciate its connection with cultural values and norms.  A further variation on the value-added benefits of BL on students was expressed through social interaction (Alsalem, 2009). This study is interested in investigating the effect

of interaction between learners in virtual learning settings on students' academic progress and drive towards education, as well as their interaction with the teachers and the course materials. The study concluded that the benefits of BL are not limited only to improving the quality and the motivation of learning but that, in addition, combining online courses with face-to-face sessions also increases their level of interaction and contentment.

Vaughan (2007) argues that institutions that implemented blended programs reported that BL increased interaction between lecturers and learners, encouraged learners' involvement in the learning process and maintained constant learning progress among students because of the flexibility of the educational settings. A similar study, on the impact of BL on increasing interaction, was made by Alghzo (2006) at the United Arab Emirates University. The study explored the perceptions of 66 female students at the College of Education towards online developed teaching methods used in the educational course. The outcomes of the study showed that the surveyed sample had positive perceptions of most of the online initiative, the sample also pointed out various benefits of the enhanced teaching method. For instance, facilitating the submission of their assignments and obtaining their marks online, accessing additional materials promptly, improving their understanding and discussing course materials with the teacher and their classmates.

The studies so far have indicated benefits on several spectrums. These include better interaction, ease and flexibility, effectiveness on achievement; attitudes and satisfaction and personalised learning.

## 3.6 BL Pedagogy

The term 'pedagogy' can be used to refer to the theoretical framework of teaching methods in the context of converting teaching theory into teaching practices. It can also refer to the

ways in which practices are understood according to theory. Pedagogy bridges the gap between theory and practice and it can be seen that developments in technology and digitalisation have created a demand for a more advanced pedagogy capable of meeting the needs of the digital era (Loveless, 2006).

Ally (2003) states that the key aim of integrated technology in education is to enhance learning. Zaiton (2005), however, emphasises the view that technology is a delivery channel for education and does not in and of itself influence learners' achievement levels. In order to comprehend the impact of e-learning, it is therefore necessary to understand learning. Learning theories should be considered in order to investigate learning principles and the ways in which technologies can be applied to support student learning methods (Ally, 2003). Such consideration can be widened to also look at how new tools, such as technological developments, can be applied to support learning methods and to obtain a broader understanding of how students learn.

Several schools of thought have addressed learning theories although the three key approaches are: behaviourism, cognitivism and constructivism (Zagoul, 2003). Research into learning theories has found that learning takes place via a progression through these three learning forms: learning begins with behaviourism, progresses to cognitivism and then moves to constructivism (Mansour, 2001). It has also been noted by Buzzeto-More (2007) that learning theories have progressed though behaviourism, cognitivism and constructivism in a way that parallels the progression and development of educational technology. It is important to note, however, that these theories were developed before technology began to impact upon education and learning. Behaviourism is founded on the observation of behaviour change, ignoring the possibility that thought processes take place within the mind and regarding the mind as a 'black box'. Relatively permanent behavioural changes are defined as learning and

the theory assumes that changes are observable. Pure behaviourism therefore concludes that where no changes can be observed, no learning has taken place (Jordan *et al.*, 2008). To rely solely on behaviourist theory during the design of online learning environments limits opportunities for learners to interact with content or with lecturers and tutors (Hirumi and Bermudez, 1996, cited in Woo and Reeves, 2007). Ally (2003) notes that learning involves more than behavioural changes alone and therefore certain types of learning may not be observable.

Cognitivist theory addresses the learning mind and considers mental processes: perception, sensation and encoding and memory. Behaviourists do not address these processes as they take place within the 'black box' of the mind (Jordan *et al.,* 2008).

Cognitivism perceives learning to be an internal process bringing together memory, thinking, reflection, motivation and abstraction (Ally, 2003). It further considers the process of learning and how the mind can receive, store, organise and retrieve information. Cognitive psychology considers the internal processes that take place as the mind attempts to understand the environment; such processes include: perception, attention, thinking, learning, problem solving and memory (Zagoul, 2003).

Mansour (2001) describes the fundamental basis of constructivism as the belief that knowledge is constructed by the learner; it does not exist independently from the learner. Cognitivism and constructivism both address cognitive processes and constructivism is a progression from cognitivism, so it is difficult to draw clear distinctions between the two theories. One defining difference between the two is that while cognitivism is focused on how information is processed, constructivism is focused on how individuals use information to create and construct knowledge (Jordan *et al.*, 2008).

Cole (2009) states that the 'best' learning takes place when people play an active and

constructive role in their learning. Therefore, it can be said that constructivists perceive learners not as passive receivers of external knowledge but as active participants in their own learning and construction of knowledge (Jordan *et al.,* 2008). A key assumption of constructivism is that better learning takes place when learners are free and supported to explore information of their own accord instead of simply receiving information that is directed at them by a teacher/instructor or a machine. A recommendation of constructivists with regard to e-learning is that discussion areas and opportunities be provided which are non-compulsory course elements. The purpose and framing of discussion opportunities in this way is intended to create important, informal support amongst course members, supporting and freeing them to take their own learning beyond the limits of a formal curriculum.

Cooperative and collaborative learning through constructive learning activities (i.e group discussions and problem solving activities) are key recommendations of constructivism towards supporting constructivist learning. An element of constructivism includes the assumption that knowledge results from social interaction; social constructivism can therefore be seen to emphasise the importance of culture and society to learning, as individuals all participate and contribute to the construction of shared environments (Jordan *et al.,* 2008).

Learning via BL can be framed within constructivist learning theory as the learner is an active participant in her or his own learning process. Experience is increased through doing and through interaction and collaboration within the community (Alsharhan, 2012). Within a constructivist approach to learning, the role of the teacher shifts towards facilitator, moderator and supporter, enabling the learner to discover and construct themselves and their knowledge independently. Alsharhan (2012) added that the pedagogy of BL should be based

upon social constructivist learning theory, especially with the massive deployment of web 2.0 tools (Twitter, Facebook, blogs, YouTube, etc.). Web 2.0 describes the second generation World Wide Web and focuses on supporting collaboration and communication and securing the online sharing of information (Luo, 2010).

Generally, Graham, Allen and Ure (2005) indicate that one of the main advantages of shifting to BL is to improve pedagogy. The available literature categorises pedagogy or teaching methods into many forms, the most familiar of which are the student-centred and teacher-centred approaches. The first focuses on learners and involves accessibility and flexibility. The teacher in these situations concentrates attention on students, which means that the teacher is responsible for helping learners access and apply information in order that learners develop their independent research and writing skills, as well as encouraging them to share knowledge with their peers. The other approach, teacher-centred learning, involves methods used by teachers such as lectures, explanations, talks, presentations and demonstrations. Here, the teacher is the sole source of information. S/he chooses the sources of knowledge, decides pace and evaluates the student's achievement. A number of disadvantages can be identified in the teacher-centred method, such as lectures limiting room for feedback on the effectiveness of students' learning experience. This is a one-way communication method, with no meaningful indication of whether students are rationally engaged with the course materials or not. Therefore, according to Bonwell (1996), it can be easy for students to forget information or knowledge presented them when they are merely passive learners, or when the lecturer is not qualified to teach principles of intellectual thinking like application, analysis, synthesis or evaluation. One-way communication is virtually the only method used in SBEK. Teachers are the only source of information and students are only passive receivers. Besides

its other benefits, BL is a learner-centred form; Alsultan (2010) indicates that learners in BL are more likely to be engaged in the learning process rather than being passive receivers. Dzakiria *et al.* (2006) examined whether the adoption of a BL pedagogy suited the learning environment of the University of Utara in Malaysia. The study concluded that moving towards adopting a BL pedagogy entails mixing the dynamic nature of technological learning available in the virtual setting with the effectiveness and communal environment of the classroom and not just mixing delivery methods (Bonwell, 1996). Unlike the teacher-centred model, the student-centred model requires more than lecturing, creating assignments, exams and marking. It also helps students to be more independent and willing to learn from each other (Felder and Brent, 1996). Alsharhan (2012) refers to pedagogical specialists who advise making major developments to higher education environments by moving to student-centred methods that engage students with interactive learning methods rather than the conventional activities of listening and taking notes.

The transformation to student-centred policies with active learning methods has been under examination in order to establish their influence on the learning process. An example of this examination can be found in a study conducted by Armbruster, Patel, Johnson and Weiss (2009). Their interest in the efficiency of student-centred pedagogies began when they became aware of comments about the inadequacies of conventional lecture-based courses. Many faculties shared similar concerns regarding the attitudes of their students and the feedback they received on lectures that indicated that they were "boring". The research also shows that in addition to negative attitudes, the students exhibited a low level of attendance, little in-class participation and poor performance. The study concluded that integrating the norms of student-centred teaching methods into what always used to be a traditional in-class format led to gradual progress in students' presentation and attitudes. The study also reported

that the faculty released online weekly tests to motivate students to keep track of course materials and encouraged them to post comments on their comprehension of these materials. The students received the tests positively. They were taken as a means of improving their personal and independent learning. Furthermore, Felder and Brent (1996) indicate that among the concerns raised by lecturers regarding the student-centred teaching approach is the long time spent on learning activities, which leaves little time for following the curriculum. In addition, they indicate that changing to a student-centred approach entails being ready to respond to some negative reactions from students who are not happy with the change. Alsharhan (2012) argues that BL gives lecturers the option to employ a learning environment based on a student-centred approach.

In this respect, Garrison and Vaughan (2008) confirm that combining traditional in-class teaching methods with online learning methods, which necessitates considering technological solutions as well as pedagogical features, is a major challenge for successful BL. As there is no single 'right design' for BL courses, there is also no 'single perfect method' due to the large collection of face-to-face and online teaching approaches. Determining the best teaching methods to use in a blended course depends on many pedagogical features, including the aims of the course, the teaching attitude of the lecturer and learners' expectations. As Ismael (2009) asserts, e-learning is an expanding field that has attracted huge effort on the part of educators in the past few years, although the expected benefits of ICT cannot be achieved in the absence of efficient pedagogy. He adds that it is the teaching strategy that influences the value of learning, not the technology. Technology is the tool, not the master craftsman.

BL offers learners the opportunity to interact and engage in learning activities whether in traditional in-class sessions or online sessions; it increases students' participation and

interaction with teachers, classmates, course materials and additional resource and is a blend of both individual and collective evaluation on the part of learners and teachers.

The results of a large survey of 160 studies turned up three kinds of engagement: firstly, behavioural engagement, which concerns participation and covers academic and social involvement by focusing on academic progress and avoiding drop-out; secondly, emotional engagement, which focuses on the feeling of learners regarding lecturers, classmates and the educational institution. The aim is to establish emotional bonds between students and academia in order to encourage the ability to do the learning activity. The third type of engagement is cognitive engagement, which concerns investment and integrates thoughtfulness and willingness to facilitate the understanding of difficult ideas and the mastery of complicated skills (Fredericks *et al,* 2004). Given that comprehending the essential components of student engagement has a great impact on instruction policies regarding BL settings, teachers are required to reconsider learning objectives and outcomes and develop the most suitable activities to encourage student engagement. Furthermore, Oncu (2007) contends that there is a strong connection between students' engagement and teaching methods in student-oriented courses. He adds that the success of interactive learning depends on the level of students' involvement in the learning-focused activities and that the more they interact with their classmates, the more they progress. Likewise, Alkandari (2011) identifies the elements that attract student engagement as including designing effective activities and strategies that facilitate the movement from one level of cognitive engagement to another. Furthermore, instructional policies should include practical and responsive outlines capable of offering guidance in relation to the learning process, such as sticking to the subject, observing the level of progress and encouraging critical and analytical thinking. Therefore, it is the lecturer's responsibility to determine the most appropriate collection of

resources, activities, learning materials and objectives.

Therefore, changing to a BL approach must be directed towards making the learners responsible for their learning experience. Skibba's (2007) investigation into the changing role of staff giving blended courses found that, because BL is basically a student-centred form, the teacher needs to change from a lecturer and conveyor of content into a medium or a learning facilitator. The change in role requires the teacher to shift from being a lecturer or presenter of knowledge to being a director, assistant and encourager for learners, by deploying a range of learning methods. It is important for teachers to work on improving their teaching skills in order to be able to assist and direct their students successfully.

The usefulness of a BL approach was the core of a study carried out by Pereira *et al.* (2007) for the delivery of a Human Anatomy course. The findings of this study were that adopting a BL approach is very demanding for teachers, particularly in the organisational domain since teachers are required to obtain previous knowledge about the standing of students as learners as well as the character of the programme in terms of goals and content. As a result, teachers have to design appropriate activities and offer learning settings that motivate student participation. Similarly, a survey was conducted by Kim and Bonk (2006) in which a questionnaire was circulated among students and teachers to identify future trends relevant to online learning, improvements in teaching methods and predictable technology appropriate for online teaching. This study concluded that changing to BL requires that teachers develop teaching skills so that they can deal with BL teaching methods and objectives. They are also required to improve the learning skills of their students to meet the demands of a student-centred learning model by offering students rigorous guidance and assistance. In effect, it places learners at the centre of the learning model.

Furthermore, Bonk and Graham (2006) argued that the most essential skill that teachers have

to acquire by the year 2010 is moderating the learning process and creating effective content for online learning courses. They foresee that in online learning setting, such skills will have more importance than actual lecturing skills. According to the responses of a survey sample, it was concluded that online collaboration and problem-based learning are the top teaching methods as identified by students. This finding necessitates that educational institutions should give their staff professional development support to enable them to provide online learning courses. According to Alsultan (2010) it is important to be aware of what to combine and how this combination affects the educational process. To achieve a successful educational experience, attention must be paid to the exact mix of technology, in-class teaching policies and methods. It is essential to ensure that the different learning techniques are used correctly and in the relevant format and combination. Therefore, teachers should determine what parts of the blended course should be delivered online and which in class sessions.

## 3.7 BL design

Garrison and Vaughan (2008) argue that although BL appears to be uncomplicated, the practice can be challenging. During implementation a number of issues came to light, which turned it into a complex process. These included the level of teaching and course objectives. Therefore, it is often not appreciated that a BL course would be less efficient if not designed properly in advance (Graham, 2006). Despite the fact that BL design is flexible enough to meet various needs, it does not have a single course design or model that can be adopted by all institutions. This characteristic might be regarded as both a strength and a weakness at the same time (Singh, 2003).

The final design of the course curriculum should be taken into consideration when putting

together a blended course that integrates online and in-class activities and learning resources (Alsharhan, 2012). Mastering the formula for accurate combination is among the challenges that lecturers experience when designing BL due to the wide range of technology options and probably the absence of a specific example to follow for that particular combination. Garrison and Kanuka (2004) note that ready-made blended designs that can be directly applied by lecturers are rare. They add that technology provides endless designs, which may be applicable to countless contexts, which makes it difficult to choose which of them to implement. Likewise, Alkandari (2011) and Littlejohn and Pegler (2007) state that a single BL type that is suited to all situations is not available, but modern learning settings should develop constantly to respond to learning demands. However, Littlejohn and Pegler (2007) provide advice on the design of BL lessons according to a framework named LDlite. LDlite supports lesson planning by enabling teachers to plan and design BL activities and also by assisting them in documenting activities so that they can be reapplied by themselves or other educators.

According to Littlejohn and Pegler, there are four types of blends. Firstly, 'space', which covers face-to-face or technology based communication. Secondly, 'time', which considers availability and geography. Thirdly, 'media', which looks at technologies and tools. And fourthly, the 'activity' blend, which covers both individual and group learning and teaching activities. Littlejohn and Pegler note that different blends will result in different outcomes and any changes of the elements making up the blends result in different effects for both educators and learners. LDlite is composed of three key elements: firstly, the task or activity completed by learners in order to meet a given learning objective; secondly, the people (learners and tutors) with participatory roles in such activities; and thirdly, the resources (i.e software support and content materials) necessary for the activities to be carried out. During

these activities, learners receive feedback from both peers and tutors. Littlejohn and Pegler (2007) comment on wider ethical debates in the development of BL and an extensive design agenda. BL practitioners can thereby be stimulated to consider and apply reusable or repurposed elements coherently and ethically. Despite the technological nature of this approach, which does not totally replace the incorporation of pedagogical theory, it may motivate pro-technologists to address a more diverse range of concepts.

Logically, the aims and goals of the course should determine the design, the components and the portions of these components in the structure of the blended approach. Choosing the correct components that fit the aims of the blended course is a fundamental factor in the process of design. After all, reconsidering and redesigning the relation between instructions and learning is what BL is all about. For example, Phoenix University in the United States choose to apply a blended design where it allocated one-third of the course time to face-to-face teaching and two-thirds to an online model. Consequently, lecturers utilised class time to hold interactive discussions instead of delivering lectures (Ismael, 2009). Another example can be seen at UOF where environmental studies students' attendance at class sessions was reduced from three times a week to only once a week. The designer of this module chose to provide learners with written instructions and tutorial help and activities online, while using both online and class time for providing comments and assistance in general (Alkandari, 2008).

Yelon (2006) argued that when producing successful BL designs, the most important thing is to ensure the correctness of design of the teaching method. This means that instead of focusing purely on technology delivery, teachers should concentrate on using technology correctly by determining the most suitable teaching methods. Furthermore, a number of reasons were provided by the University of Wisconsin–Milwaukee for why the BL model

can be a challenge for teachers. One was that learning to deliver effective blended sessions gives teachers the opportunity to employ more student-centred learning activities, leading to corresponding changes in the relationship between the teacher and the students. This makes it more student-centred and also changes the role of teachers, transforming them into facilitators rather than lecturers. Hence, teachers have to focus on creating a learning setting where students become responsible for their learning process.

These research outcomes suggest that higher education institutions need to assist their staff with professional development support, to enable them to determine the portion of their courses that should be more effectively delivered online and the portion best conducted in the classroom, depending as always on the goals and content of the course. Furthermore, HEI's need to encourage and help teaching staff to acquire the skills needed for moving positively towards a learner-centred approach to teaching and to design the appropriate teaching methods for online and in-class practice.

## 3.8 Challenges to BL implementation

According to Alsharhan (2011) the implementation of BL faces several challenges. Abdulhakeem (2010) argues that absence of planning and leadership is a major challenge that faces the implementation of BL. Institutions have a significant role in successfully implementing BL in higher education. BL experience cannot be gained unless the institutions make some contribution, because they are in a position to address this new approach and solve any problems of implementation that may occur in these new settings. Garrison and Kanuka (2004) stress the vital role of institutions in developing the required policies and plans, allocating resources and providing reliable support mechanisms to ensure the successful functioning of the BL system.

No move to successful BL settings would be complete unless it was based on strong policy and a clear strategy. Alsharhan (2011) mentions that any school administration has to develop its own vision of what it wishes to attain and all staff should share this vision. Hew and Brush (2007) suggest that leaders need to provide teachers with a clear image of the attainable goals and substantial results expected from the initiative to integrate new technology. Hew and Brush (2007) conclude in their study that in the absence of meaningful cooperation between administrators and staff and if there is a lack of leadership strategies, the exploitation of technology in teaching will not go further.

The process of developing a strong policy which encourages the move to a BL system should take into consideration that a response is needed to essential issues. These include the reasons which lead the institution to use a BL mode, the kind of educational experiences that should be introduced by the new approach, the way in which this new approach challenges current traditional practices, what the innovation is, suppositions, faculty expectations and finally, the way in which this new approach will be managed (Garrison and Kanuka 2004). Garrison and Kanuka link strong policy to planning. Two key planning requirements must be fulfilled to establish BL: operational and strategic planning. Strategic planning includes identifying needs, goals and objectives, considering and setting out potential costs and resources. The identification of costs includes delivery models and schedules, technology, infrastructure and human resources. Operational planning contextualizes goals and objectives in the form of an action plan. Operational planning, in relation to BL, includes consideration of non-instructional elements such as developing support for shared resources, for example registration and fees, technology management, building effective assessment processes and advertising strategies. Policymakers should bear in mind that the challenge today is to acknowledge and accept the significant changes in societal demands, technological

advancements, student demographics, competition and funding shortfalls. Resulting from these changes is an obligation to work creatively and to confidently address the impacts they create. To achieve success in addressing such demands requires challenging the status quo and repositioning teaching and learning within higher education institutions through innovation and creative action, alongside transforming perceptions of how educational enterprise should be applied.

Many other studies have demonstrated that lack of leadership, organisation and a clear vision are obstacles to integrating technology or implementing BL (e.g. Alsawi, 2011; Hosamoo, 2011; Adas and Abu Smais, 2011; Lawson and Comber, 1999; Fox and Henri. 2005; Shiek, Mohammad and Ateya, 2005; and Mhehe, 2002).

Another challenge facing the implementation of BL in Muslim countries is the culture. The culture of Kuwait is religious; and in order to implement BL in higher education in Muslim countries, the culture must be kept in mind. The results of a research project carried out in Saudi Arabia reveal that lecturers working in a communication and research module found it difficult to use the Internet because of the students' cultural and religious beliefs (AlWahaibi *et al.,* 2008). According to Alsultan (2010):

> *Conservative families in Kuwait, for example, still think that the Internet is dangerous and it should not be available to all students, in particular, not to girls. Such families believe that the network contains much unethical content work and it is their duty to protect girls and secure their future.*
> *(Alsultan, 2010, p.43).*

I am, however, at a loss to understand why the Internet should be more dangerous for girls than boys; it should be clear that religion is not the basis of this view, but merely the social customs with which these families and tribes have been brought up. The Prophet Mohammad, peace be upon him, said that women are the other half of men (Binbaz, 2012)

and the society is not built without both men and women. In the same context, the design of online activities should also be subject to cultural control in a Muslim country such as Kuwait. To make this idea clear, the Kuwaiti culture does not allow dance to be included in its curriculum (Alsharhan, 2012) and for some people images of unsuitably dressed women are not allowed.

The disadvantage of including different cultures in the design of an online module is that it may deprive the module of shared meaning because individuals normally vary in their conceptualisation of what a certain "layout of graphical interface, images, symbols, colours and sound" means (Chen, Mashhadi, Ang and Harkrider, 1999, cited in Alharthi, 2005).

Another element related to the culture in Kuwait is that some institutions, including the SBEK, do not allow male and female students to mix in classes and on campuses. Two different campuses are built in different places, one each for males and females. Due to this policy of separation, each school needs a bigger budget in order to obtain more infrastructure for its two branches; it needs to provide more technicians of each gender and good management of time by the teachers, who usually need to drive more than 15 minutes to get to the other campus.

Not only do the faculty members who teach male and female students have to move from one campus to another and back again for their classes, but may need to do so three times a day. BL flexibility may be a solution: with video conferencing, a teacher can teach the males while the females watch the lessons live from their campus, while in the next class the teacher reverses the process and the males can watch the lesson online.

Another challenge that would face the implementation of BL is the technical aspect. An effective implementation of BL at the higher education level requires resources and technical support to be allocated because combining online learning with traditional face-to-face

methods requires sufficient, solid, robust and strong infrastructure to allow Internet access, use of computers, hardware and software (Zaiton, 2005; Mesbah, 2008). From experience, unfortunately, SBEK doesn't have Internet access for students, classes are not equipped with any computing facilities and three computer labs serve more than 10,000 students (PAAET, 2011).

The higher education institutions, which have decided to implement BL, must take account of these elements before implementation (Ismael, 2009). However, many studies indicate that universities suffer from poor technical assistance for faculty and students and consider this to be the main challenge to implementing e-learning (Abdulhadi, 2005). Many schools cannot afford to employ enough technicians for their staff and students, due to the lack of funding; therefore, technicians find themselves overloaded with the number of appeals from teachers and students and cannot attend to them soon enough (Hew and Brush, 2007). This challenge has driven some schools to rely on external technical support, which is also inadequate because technical supporters are not always available whenever they are needed. Faculty members and learners on BL courses may also need technical support in the form of information available outside campus hours. It is worth noting that technical support is quite as important to lecturers as to students. Lecturers who lack online teaching experience may find it difficult to adapt to a blended system. Therefore, they should be provided with support including appropriate training and mentoring techniques (Ismael, 2009). If not, the results are malfunctions which cause delay in the work of both faculty and students.

A study carried out by Nyirongo (2009) to investigate the adequacy of technical support at Mzuzu University in Malawi revealed that only 30.1% of the staff believed that the university offered them adequate technical assistance in their efforts to integrate technological resources in their courses. The rest of the studied sample, almost 70% of the

whole, believed that technical assistance either does not exist at all, or, if it does, is generally inadequate. The study concluded that its sample rated technical assistance a key factor in the adequate implementing of e-learning in higher education. Support for faculty and students is a key element of the successful implementation of BL; the provision of effective support, as a minimum, should enable realisation of the course management environment to be used by students and teachers and also of any situational, informational, dispositional or institutional obstacles that may exist. For students, computer access (with Internet connection and necessary software) should be included as part of student support to assist with technology access and the skills required to work well in a BL environment. Unlike the facilities available to meet the technology needs of students, it is often the case that the support services required by teaching staff are not in place. Within a BL environment, teachers require technical assistance as well as support to develop courses and manage the timeframe of their learning curve. A course development group assigned to the development of BL courses is an effective support system for teaching staff. It typically includes a content expert (the instructor), a media specialist able to assist with technical aspects of the creation of course materials and an instructional designer able to assist with course design (Garrison and Kanuka, 2004; Zaiton, 2005).

The technical challenges to the implementation of BL raised by many studies are Internet accessibility, infrastructure and technical support (e.g. Alghzo, 2006; Wee and Abu Bakar, 2006; Hosamoo, 2011; Elhersh, Muflih and Aldhoon, 2010; Cuban *et al.,* 2001; Aljarf, 2004; Wang, Cowie and Jones, 2010; Magalhaes and Ali, 2008; Mhehe, 2002; Arome, 2001).

Another challenge, which can face the implementation of BL, is the time required and the workload. Seavers (2002) indicated that faculty teachers have no time to learn and improve their technological skills, being already overloaded with work. It may be advisable to help

faculty teachers to manage their time, because the transition from traditional teaching to BL requires teachers to spend time in redesigning courses, running online activities and doing face-to-face teaching. Another issue of time in moving from traditional learning to BL is that faculty members are so overloaded with work and duties that they have no time to learn computer skills or design online courses; or if they take time for these things, it may affect their current work, since implementing BL requires frequent interaction between students and teachers and immediate feedback (Ismael, 2009); this leaves less time for academic research and adds to the workload. However, it has been argued that simple technological settings which demand little time and effort to set up and need no major changes, such as reconfiguring teaching applications, should be adopted more often repeatedly (Zhao and Frank, 2003). Time has been demonstrated to be an obstacle to the implementation of e-learning in many studies around the world (e.g. Alebaikan and Troudi, 2009; Wang, Cowie and Jones, 2010; Magalhaes and Ali, 2008; Aljarf, 2004; and Arome, 2001)

The next challenge in implementing BL is the financial one. Generally speaking, it is manifest that scarcity in resources, such as technology, technical assistance, time or reward, is attributable to limited financial resources (Rogers, 2000). Ismael (2009) states that implementing BL does require a suitable budget, crucially determined by the technology to be used, but generally high. Garrison and Kanuka (2004) insist that BL initiatives require financial resources both for initiation and support of BL activities. Heterick and Twigg, as cited in Garrison and Kanuka (2004), note that although new initiatives such as BL require certain amounts of initial investment (or 'seed money'), when considered over a longer period they may result in greater effectiveness and cost efficiency. They added that commitment from the senior administration is crucial in order to reassess priorities within existing budgets to create sustainable resources for costs such as computers, instructional

design and development.

Another element related to the financial challenge is that of rewards or incentives. Some universities, such as the UOF, encourage staff to use BL by giving financial incentives (Alkandari, 2011) but incentives should not only be financial. The teaching staff in higher education in Kuwait are already well paid and as a result they are not, despite the higher pay, interested in implementing BL, which only calls for more effort. It would be better if incentives for such people took the form of hastening their promotion to a higher or senior position in the institution or reducing the number of their taught courses or even reducing their face-to-face hours.

Mosley (2005) found in his study that using incentives to encourage teachers to participate in the technology was very useful – a monitoring programme, rewards and incentives can all greatly facilitate the successful implementation of any innovation.

Generally, Alkandari (2011) states, when teachers are given rewards and incentives they became more encouraged and "stimulated". He makes the point that the lack of money itself or inappropriate allocation can act as a major obstacle to integrating technology in schools. But incentives, as noted above, can be other than financial. (e.g. Aljarf, 2004; Mhehe, 2002).

The next challenge facing the implementation of BL is insufficient knowledge and skills among the teachers and students. As Hennessy *et al.* (2005) point out, faculty teachers have to acquire two types of knowledge:

> 'The technological pedagogical knowledge' which involves using particular plans to instruct learners by means of a specific technology, and 'technological content knowledge', which involves determining whether the delivered content suits technological teaching
>
> *(Hennessy et al., 2005, p.181).*

This awareness of the best technology or feature to use for a given content, considering the course objectives, is very valuable in this regard (Alsharhan, 2012). What is suitable for

physical education, for instance learning a new physical skill, could not be a suitable for a course in Arabic language, say, one in advanced grammar rules. Even in one specialisation there is a variety of factors: what is appropriate for football is not necessarily appropriate for fencing.

Faculty and students need to have the skills and knowledge to use a particular technology (Zhao *et al.*, 2002). For example, faculty and students are required to be trained in and possess specific skills and knowledge before using the virtual learning environment, knowing its tools and features and how to use them effectively. One more essential precondition, which requires the attention of educational institutions before moving to the blended learning mode involves improving the professional skills of the lecturers in redesigning traditional courses to fit an online learning format that the students can use easily (Alsharhan, 2011). Central to the successful development and delivery of BL courses is human resources. In order to support teachers who are less experienced in BL, it is important to recruit individuals with experience of curriculum development and instructional design and with technology skills. Furthermore, it is important to have in place individuals able to manage change through motivational strategies and personal attention to teaching staff who are not yet persuaded of the worth of BL (Garrison and Kanuka; MOE, 2011; Alkandari, 2011; and Almusa, 2005).

Before implementing any innovation in an institution, it should be noted that there are individual differences between faculty staff or students. There are many different factors that determine one's speed in learning new skills, such as one's previous experience of using technology or technological skills in general, so what should be ensured before implementing innovations is that faculty and students are capable of and ready to use the new approach. This might greatly help it to be successful. It may be worth mentioning that many universities

have created a specialist team which consists of a professional instructional designer, expert in the field, to overcome any deficiency in faculty skills regarding course content, usage, etc… (Alhazani, 2013). This step can speed up the implementation of BL. Another solution may be to bring in professional instructional designers to train interested faculty members in order to help other faculty members who may be more resistant to such innovations.

The skills aspect and the lack of professional training courses to implement e-learning and BL have been raised by many studies as a serious challenge (e.g. Alsawi, 2011; Elhersh, Mufleh and Aldhoon, 2010; Hughes, 2005; Shiek, Mohammad and Atiyah, 2005; Aljarf, 2004; and Wang, Cowie and Jones, 2010).

Attitudes are an important part of the essential human factors which shape the characteristics of human behaviours (Fishbein and Ajzen, 1975). The educational area, like any other area, is one in which people need to be aware of the attitudes of participants if they hope to improve their learning experience (Mager, 1984). In implementing any innovation successfully, all participants should have positive attitudes towards it. Alsultan (2010) emphasises that participants need a positive attitude to make any change in professional development. Other studies argue that change can only occur when a sense of innovativeness, positive attitudes and an awareness of the need for the innovation emerge (Alshinaq and Doomi, 2010).

Sait *et al.* (2003) examined the use and effect of the Internet on teachers in Saudi Arabia; they found that teachers have a tendency to resist the replacing of face-to-face teaching by online teaching methods because they had a negative attitude to using the Internet itself. Exploring the participants' attitudes may help researchers to determine whether the implementation of BL will incur their resistance or not. Any change in the institution would need certainty on this matter, otherwise anxiety will lead to a failure to make the change a

91

lasting one (Abdulhamid, 2011). Roger (2000) indicates that the positive attitudes are an important element in measuring the readiness of any school to accept innovations. He remarks that any innovation is threatened if it is implemented without studying the attitudes of the participants. Most of the studies regarding the attitudes towards BL and e-learning that have been conducted in the last 10 years explored positive attitudes towards them (e.g. Abounajj, Nachoukil and Ajman, 2012; Adas and Abu smais, 2011; Abu Qudais, Aladahailaeh and Alomari, 2010; Alshinaq and Doomi, 2010; Ocak, 2010; Panga, 2010; and Brooks, 2008).

## 3.9 Attitudes

Definitions of attitude are numerous, (Almulla, 2007). Almakhzoumi (1995) defines attitude as the desire of an individual or his/her propensity to respond to certain things in a certain way. Allawi (1992) defines attitude as:

> *a state of implied invisible willingness or*
> *tendency, which is in between stimulus and*
> *response and prompts the individual to respond*
> *to a certain subject due to this stimulus*
> *(Allawi, 1992, p.13).*

It should be borne in mind that an attitude should be understood as one of three possible kinds: cognitive, sentimental and behavioural. Rajecki (1990) believes that for it to be claimed that an individual has a certain attitude these three components should be consistent. First and foremost, a cognitive conception of the position he faces should be formed, since it contains new information and experiences leading to a change in his sentiment so that he will either accept or reject the subject. This is the behavioural component. In spite of the inequality and variation regarding the concept of attitude, there is something close to agreement among researchers that positive attitudes to a certain event or professional change

92

play a vital role in motivating the individual and prompting him towards it. In addition, attitudes play a great part in an individual's choice of profession (Almakhzoumi, 1995).

Fishbein and Ajzen (1975) assume that attitudes are measurable. Allawi (1992) states that data on attitudes can be collected by two main techniques. The first is through carrying out observation of the people who have the attitudes and the second is through asking the people concerned about their beliefs, a technique based on the self-report method of Anderson (1981) and Allawi (1992). However, the first technique is less reliable than the second one because it is difficult to measure attitudes by direct observation. Attitude is an incidental element, an entity that cannot be measured straightforwardly but can be inferred from other visible information (Halloran, 1967).

Moreover, Almakhzoumi (1995) warns that it is difficult to get accurate data about attitudes by merely observing apparent human behaviours, due to the complexity of human manners. He names three main problems which may result from implementing this method, namely, the difficulty of obscurity in deciding on the observed behaviours and tracing them accurately; mistakenly deducing affective distinctiveness from the observed behaviours; and misunderstanding the observed behaviours.

Anderson (1981) states that, when conducting questionnaires and interviews to discover attitudes, the most important problem arises when the participants provide inaccurate information in order to gain social acceptance and acquiescence. Social acceptance indicates that individuals are more likely to respond to a questionnaire or statement in a manner that they think to be desirable by society, or at least satisfactory to the researcher, than to provide responses based on their true values and emotions. According to Allawi (1992) acquiescence means the willingness to support a statement or to accept a specific answer, even if the person making the statement is unsure or hesitant, so as to gain social acceptance.

It is important to free the participants in a survey from any pressures, which might obscure the real attitudes. I have ensured the authenticity of the attitudes that I measured, as discussed more fully in the methodology and findings chapters. On this basis, I will attempt to identify the attitudes of the participants to BL, since this could help an institution to use BL more effectively once it is implemented and since positive attitudes can be reinforced while negative ones can only be eliminated (Almulla, 2007). In terms of technology, participants' attitudes towards BL may be considered as liking or disliking implementation or use of BL.

### 3.10 Summary

Many studies address the topic of the current research and could provide new dimensions and perspectives. As far as the researcher is aware, this study is the first in Kuwait to tackle the obstacles and the attitudes to implementing BL from the standpoint of senior management, teachers and students. Other researchers have identified obstacles based on attitudes to using e-learning, whether they lay in the computer, the Internet, or the virtual learning environments. Many of these obstacles appear to be due to the novelty of this type of learning in Kuwait and Arabic countries, in particular.

Some of the previous studies were similar to the present study in testing the technical, administrative, financial and academic obstacles to e-learning; however, this study is different from previous studies in the diversity of the obstacles that have been investigated and of its variables, since it studies the effect of the variables in each layer of its research sample. In the students' layer, this study considers the presence of differences in the students' points of view on the basis of age, gender, cumulative average and specialisation, while it also looks for differences from the points of view of the teachers and the higher administrators in terms of gender, age, experience, scientific degree and specialisation.

Most of the previous studies used only a questionnaire to gather information, which may explain why the findings were sometimes problematic. In this study, in contrast, I used both questionnaires and interviews as a way of ensuring better and more valid findings. Most of the previous studies focus on teachers and/or students as the subject in their research, while this study focuses on three different samples, exploring their opinions in the hope of creating a comprehensive picture. In the findings certain obstacles do appear to hinder the implementation of BL. Generally, many international studies have confirmed the effectiveness of BL; however, studies conducted in this area in the Kuwait and the Arabian Gulf are scarce. Another challenge that continues to face BL globally is the need to gain further understanding of the need, strategies and designs of BL (Vaughan, 2008).

According to Abdusallam (2011) political aspects could be the main challenge to implementing BL in some countries, preventing improvements in education generally and implementing new technologies. Most of the educational materials on the Internet, learning platforms, social networks and virtual learning environments are based on English. Therefore, the use of the English language may present a challenge to implementing BL in SBEK. Magalhaes and Ali (2008) found in their study that language is a challenge to implement E-learning in Kuwait companies. This could be applied to all Arab and non-English speaking countries where the decision-makers are required to choose the best technology that can fit their societies. Based on the themes that have been covered in Chapter Three and following the importance of the study mentioned before, research questions emerged in order to fill any gaps that were modelled from previous research. As age is one of the variables in this study, it could be useful to highlight the issue of digital natives. It has been suggested that the manner in which young people today use ICT separates them from their teachers as well as from previous generations of students. The transition has been so

profound that the way in which education is delivered must adapt to the abilities and interests of the new generation of 'digital natives' (Prensky, 2001; Bennett *et al.*, 2008). 'Digital natives' refer to the generations born approximately between 1980 and 1994, and the concept applies to the reliance of these generations on ICT. For much of their lives, people from these generations have been surrounded by computers, digital players, video games, smartphones and other tools and toys of the digital age (Prensky, 2001). Questions have been raised as to whether current education systems are suitably equipped to meet the needs of this new generation of students. Education in developed countries has been described as in crisis and is sure to face additional challenges in the future (Tapscott, 1998 in Bennett *et al.,* 2008). Prensky (2001) maintains that students have changed, and our education system was designed to meet the needs of a different type of student.

Prensky (2001) refers to those people who were born prior to 1980 as 'digital immigrants', and he emphasises that the majority of this population sector, which includes many teachers, are not as technologically fluent as 'digital natives' and are often extremely unfamiliar with the skillset of digital natives. It has been claimed that the differences between the technological skill levels of different generations has been an important source of alienation and disaffection amongst students. By addressing issues around the differences in technological abilities across different generations, Prensky (2001) highlights one of the central problems faced by modern education.

## 3.11 Research Questions

The preceding literature review generated the twelve research questions which guide this study and the discussion of results is organised around providing empirical evidence to answer these questions. The first six questions related to the quantitative stage of the study,

as follows:

RQ1: To what extent do the faculty teachers, senior management and final year students perceive that financial, administrative, academic, culture, technical and skill dimensions represent potential obstacles to the implementation of BL?

RQ2: Do the perceived obstacles to BL vary significantly with respect to the gender, specialisation and GPA of the final year students?

RQ3: Do the perceived obstacles to BL vary significantly with respect to the gender, specialisation and experience of the faculty teachers?

RQ4: Do the attitudes towards BL vary significantly with respect to the final year students, faculty teachers and senior management?

RQ5:  Do the attitudes towards BL vary significantly with respect to the gender, specialisation and GPA of the final year students?

RQ6: Do the attitudes towards BL vary significantly with respect to the gender, specialisation and experience of the faculty teachers?

The last six questions related to the qualitative stage of the study, as follows:

RQ7: What qualitative primary themes can be extracted from the interviews?

RQ8: What qualitative primary themes describe the obstacles to BL?

RQ9: How do the quantitative survey dimensions compare with the qualitative primary themes?

RQ10: Do the qualitative primary themes vary with respect to the groups of participants?

RQ11: What qualitative sub-themes are concerned with obstacles to BL?

RQ12: What qualitative sub-themes are concerned with solutions to the problems?

# Chapter Four: Methodology

## 4.1 Research Design

> *The research design is the plan for the research*
> *(Thomas, 2009, p.70).*

The design of this research contains both quantitative and qualitative research methods. The

nature of the questions leads to responses that fall into a 'mixed method' approach consisting

of quantitative and qualitative methods. Johnson and Onwuegbuzie (2004) describe a mixed

method approach saying:

> *If you visualise a continuum with qualitative research*
> *anchored at one pole and quantitative research anchored at*
> *the other, mixed methods research covers the large set of*
> *points in the middle area. If one prefers to think categorically,*
> *mixed methods research sits in a new third chair, with*
> *qualitative research sitting on the left side and quantitative*
> *research sitting on the right side.*
> *(Johnson and Onwuegbuzie, 2004, p.14).*

In my research, the two main benefits of using this approach are triangulation and

complementarity. Triangulation has been used to cross-examine the information collected

from multiple sources (more explanation is given in Chapter 6), while complementarity

means gaining greater understanding of the purpose of this research.

This distinction in the research design complements the pragmatic paradigm that is required

to ascertain attitudes and obstacles towards BL. It is an approach that attempts to integrate

positivist and interpretivist paradigms. The interpretivist paradigm indicates that the

researcher prioritises subjective investigation of specific phenomena in the social sciences

and therefore, the experiences of the participants should be shared directly with the

researcher. Furthermore, this indicates that the researcher is focused on the views of the

participants, on the broader context of such views and on applying the outcomes in order to draw understandings, interpretations and clarifications of social realities (Grix, 2010).

The positivist paradigm however, applies approaches as used in natural sciences and that demand objective analyses for social realities, in order to observe generalisations. (Cohen *et al*., 2007). The main criticism of positivism is the simplicity it uses to analyse human behaviour and social realities and deny the significance of individualism and intention. The pragmatic paradigm has been defined as the permission and motivation instinctively held by a researcher in relation to the research problems and the research process (Creswell, 2009). It is heavily based in philosophy and therefore can be applicable to qualitative, quantitative or mixed-method approaches. Creswell (2009) notes that the application of the pragmatic paradigm and a mixed-method approach has increased in recent years due to the increased scope to draw rational links between the research questions and the nature of the research. Through the pragmatic paradigm, data collection strategies, design and tools and processes for analysis can be justifiably interconnected. The approach can thus be seen to assist in addressing and investigating real-world problems and to effectively contextualise them.

Research traditions demonstrate the prevalent emphasis placed by researchers on the nature of society and science as they affect their research (Burrell and Morgan, 1979). In a number of cases however, it is difficult to justify the application of traditional research paradigms as they are often chosen for reasons of research convenience rather than philosophical reasons (Darlington and Scott, 2002). Bryman (2004) insists that research beliefs and philosophical perspectives are the guiding principles of research, it is therefore crucial that the pragmatic features of any social science research be acknowledged. The pragmatic paradigm therefore can represent a suitable approach for social science researchers investigating various elements of a research area and attempting to gain a connective and holistic understanding.

Such approaches to understanding can bring about positive impacts in the context being researched.

The quantitative research data were collected through a questionnaire, whereas the qualitative data were collected by carrying out interviews with the selected sample, in order to add value to the questionnaire responses and probe more deeply into the topics of concern.

The reason for using a questionnaire for collecting quantitative data in this research is that it was thought to be the most appropriate method for the research sample, given that the sample of this research is drawn from the Kuwaiti population, which is more comfortable and familiar with this type of survey than with interviews. This can be attributed to the restricted social and political environment. Given the Kuwaiti context, people respond better to a questionnaire than interview. Issues concerning the cultural norms should be taken into consideration when conducting interviews, in order to elicit and succeed in collecting the required research data (Kwan, Chun and Chesla, 2011). Religion, gender, local language and tribal systems could be the cultural norms that should be considered when conducting interviews in Kuwait.

On these grounds, having obtained the approval of the Dean of the SBEK to carry out a survey and partly to give necessary confidence to the participants agreeing to being interviewed (see appendix 1), a questionnaire was addressed to students, faculty teachers and top management staff. Given that collecting the qualitative data through interviews depended on the responses provided in the questionnaire, I had to wait for the respondents to return the questionnaires in order to decide whether to proceed with interviews. The main purpose of the qualitative part of this research was to engage more deeply with the respondents in order to gain a better understanding of the attitudes to BL and the challenges to its implementation. In other words, a qualitative data analysis was undertaken to clarify and deepen the issues

presented in the quantitative analysis.

I decided to use the qualitative method because of its many advantages, such as focusing on common surroundings, giving importance to meanings, perceptions and views, considering the process and not the outcomes and producing particular facts based on rules and theories (Abuallam, 2011). Hence, the qualitative method would help me explore the challenges which face the implementation of BL in the SBEK because it would enable me to listen carefully to the interviewees and form an impression based on their thoughts.

Creswell (2009) points out that qualitative data can be collected through various approaches, such as interviews, focus groups and observation. I decided to use two of these approaches: interviews and focus groups, in my research, though with different samples, as shown below.

Recalling Creswell, a combination of quantitative and qualitative approaches ('mixed methods' research) will allow different kinds of data to be obtained, which will increase the credibility of the research results and provide a valid overall picture (Creswell, 2009).

In addition, I used the outcomes of the quantitative data to gain an initial idea of the main points to do with the implementation of BL and its challenges; and for an indication of the research sample for the qualitative research.

The quantitative and qualitative phases were based upon random sampling, chosen through SBEK management, for both cultural and administration reasons. For the quantitative phase, 344 participants were chosen (N = 293 final year students, N = 43 faculty teachers and N = 8 senior management). The qualitative sampling consists of 43 participants (N = 7 college leaders/senior management, N = 10 teachers/faculty members and N = 26 students). The only exception was in the case of top management members during the qualitative phase, who were chosen purposively.

**4.2 Data collections methods**

Methodology is the discipline that provides researchers with different types of research methods and justifications; from these they can select the most adequate research methods (Thomas, 2009). Methodology can be used to identify the purposes of conducting a questionnaire and interviews, select the research sample and decide on the type of questions to ask (Wellington, 2000). Most significantly, methodology prepares the ground for selecting the methods of data collection and tools for analysis (Thomas, 2009).

Two techniques of data collection were used to answer the research questions. For the first phase, I used questionnaires for all the participants. I used the interview technique as my second phase, arranging individual interviews with the faculty teachers and top management and focus group interviews with the students.

In the following section, a full description of the data collection methods, their use and importance, are given.

**4.3 First method: Questionnaire**

> *Gather information by asking people directly about the points*
> *concerned with the research*
> *(Denscombe, 2010, p.56).*

The questionnaire is an efficient method of data collection that can be used for different types of research; it provides descriptive results, or discovers facts about behaviours, but equally it can be used to analyse relations among variables (Oppenheim, 2000). The advantage of questionnaires is that a large group can be targeted in a relatively short space of time (Denscombe, 2010). Oppenheim (2000) lists additional advantages of the questionnaire: it costs little, is easy to process and requires less interviewer training because it gives them a greater sense of research anonymity, the questionnaire gives respondents a better chance to

participate and the freedom to reply truthfully, even if they cannot meet the researcher because of other commitments or absence.

Questionnaires can be answered in different ways, according to the structure of their questions. The most frequently used structures are closed-ended questions (Alrashidi *et al.*, 2007). The structure of a closed-ended question, which is the easiest type provides a number of specific options for respondents to choose from (Alrashidi *et al.*, 2007). This type of questionnaire helps respondents to focus on the subject and allows for easier analysis of the collected data (Oppenheim, 2000). The disadvantages of this kind of questionnaire are that it does not allow respondents to present the reason behind the choice of a certain answer and in fact does not usually allow them to provide any further information (Abuallam, 2011). Moreover, this type of questionnaire can sometimes force respondents to accept a specific option despite not being certain about it, hence, provide an answer that does not reflect their beliefs (Abdullah *et al.*, 2006). Notwithstanding the importance of these weaknesses, carrying out interviews can mitigate them. The open–ended questionnaire allows more freedom for participants to express their views in their own words without limiting their choices to a precise set of answers (Denscombe, 2010). This can lead the respondents to reveal their motives and tendencies and clarify their answers (Abuallam, 2011). However, the weakness of this type of questionnaire involves leaving the respondents unguided, which may lead them, unintentionally to omit vital information (Alrashidi *et al.*, 2007). In this research, I used only the closed type of question, because it does not take long to answer, its results are comparatively easy to analyse and I could arrange interviews that would lessen the need for open questions.

### 4.3.1 The importance of using questionnaire

The main reason for choosing a questionnaire for my research was to understand as much as possible of people's concerns about the implementation of BL and to underline the important issues related to this implementation. The data analysis of this stage helped me to identify the most important points to investigate in the next stage of the research. Furthermore, as I mentioned earlier, since my sample consisted of students, faculty members and top management staff, the questionnaire seemed the most suitable research method for collecting information from them all, when it came to answering critical questions in particular and providing confidential information (Alrashidi *et al.*, 2007). This sample might have felt reluctant to answer questions about their relationships with their colleagues, the students, faculty and top management staff; they might feel more confident to reply anonymously and remain so when responding to critical questions which might assign blame or accountability to them, such as their views regarding the problems and difficulties of the organisation. In addition, a questionnaire seemed the most appropriate tool for my research because it is considered an easy method which does not require as much time and effort to complete as some other methods of data collection. Moreover, unlike interviews, answering a questionnaire does not need appointments to be made; it can be completed at any time (Oppenheim, 2000). Questionnaires are a perfect tool for saving time when dealing with a large population sample because it would not be realistic to carry out interviews with an entire population of the size in the present study.

This does not mean, however, that a questionnaire is entirely perfect and disadvantage-free. Clearly, questionnaires have their weaknesses as an educational research method. One of them is the risk that individuals may leave some questions unanswered, or may ignore the questionnaire as a whole. Another weakness is that there is no evidence whether the

respondents have responded to the questions in a questionnaire themselves, or provided truthful answers to them. With no idea of what is being asked, they may have conferred with friends or family members over the answers. This may influence a set of answers, worst of all, if the respondents are not serious about completing the questionnaire, they may leave it to others to answer its questions, despite having no idea of the topic. Such procedures could produce inaccurate data that does not reflect the respondents' opinions in the slightest.

In addition, preparing the most appropriate questions for an effective questionnaire requires hard work and care in choosing the right words (Denscombe, 2010). A further weakness is that questionnaires allow the intended meaning of the questions to be misunderstood; this may result in irrelevant and contradictory responses that could confuse the researcher. Furthermore, questionnaires may sometimes contain deceptive ('leading') questions, which hint at some desired response. In this case individuals will provide an answer, which meets the researcher's expectations instead of expressing what they really think (Alrashidi *et al.*, 2007). Finally, this tool allows the respondents to choose whether or not to return the questionnaires; thus there is a chance of losing some, which can affect the validity of the data collected.

**4.3.2 Design of the questionnaire**

The questionnaires were prepared after examining the literature in the areas of BL and e-learning. I also visited some universities in the Gulf area, which have recently implemented BL. The questionnaires consisted of two main parts, the first asking for general information related to the research variables, including gender, specialisation and the students' cumulative average scores; the second seeking to learn the gender, specialisation and experience of both faculty teachers and top management staff. The first part, for all

105

respondents, contained 7 items. The second part of the students' questionnaire consisted of 35 questions, while the faculty and top management were asked to consider 39 statements. These statements were distributed along seven dimensions, as follows: financial, administrative, academic, cultural, technical, skills and attitudes. Questionnaires with dimensions for both students and faculty teachers are provided in Appendix 2.

### 4.3.3 The validity of the questionnaire

Verification of the collected data is a key factor for assessing the reliability and validity of the information obtained, regardless of the way that it has been collected (Alrashidi *et al.*, 2007). According to Thomas, validity

> *[is] the degree to which the instrument measures what it is*
> *supposed to be measuring.*
> *(Thomas, 2009, p.107).*

This means that the validity of an instrument appears in its adequacy for measuring the item, which it was actually designed to measure. In this case, the purpose of the questionnaire was to obtain the opinions of students, teachers and top management on the attitudes to BL and the challenges of implementing it. The validity of data gathering instruments can be measured in several ways.

To ensure the face validity of this tool in my research, the questionnaires were presented to a group of experts who had experience of the elements measured by the questionnaire. The experts were my academic supervisor, who specialises in e-learning; a group of professors and doctors in the UOF, who specialise in the same field and a doctor of psychology, to check the dimension of attitudes as well as the remaining ones. Before reaching these experts, the questionnaire was sent to an academic translator to check the accuracy of the

translation into Arabic, the language in which most of the respondents would read it. They were then asked to check the clarity, word choice, layout, relation between each statement and its dimension and the general structure of the tool and to make any other comments or suggestions that occurred to them. The statistical analysis that was applied to the data is discussed in the quantitative chapter.

### 4.3.4 The piloting of the questionnaire

The next stage concerned the use of the questionnaire in practice, which would be tested in a pilot study. Before passing the questionnaire to the main study sample, I believed it was essential to carry out a pilot study, so as to assess the validity of the questionnaire as a survey method. The reason for the pilot study, according to Saunders *et al.* (2007) is to filter the questions included in the questionnaire to avoid any problems that the respondents might encounter in responding to the questions and therefore, avoid any problems in documenting the collected data.

The importance of a pilot study is recognised by Abuallam (2011) who advises researchers to try their questionnaires out on individuals who are in similar positions to the selected research sample. In terms of the procedures, I was influenced by Oppenheim, who stated that a pilot study can assist the researcher with wording as much as with procedural issues, such as the format of the introduction letter, who each letter should be addressed to, the sequence of the questions and how to reduce the percentage of non-responders (Oppenheim, 2000). Furthermore, conducting a pilot study would enhance the validity of the questionnaire (Bell, 2005) by testing it on volunteer students and faculty teachers, who would help to improve it as a whole.

For the pilot test, several supplementary questions prepared by Bell (2005) were put to the

volunteers, together with an information sheet explaining the aims of the study. The supplementary questions are as follows:

1. *How long did it take you to complete?*
2. *Were the instructions clear?*
3. *Were any of the questions unclear or ambiguous? If so, which ones and why?*
4. *Did you object to answering any of the questions?*
5. *In your opinion, has any major topic been omitted?*
6. *Was the layout of the questionnaire clear/attractive?*
7. *Any comments?*

*(Bell, 2005, p.147)*

I tried to make sure that the participants in my pilot test should have similar characteristics to the participants in the main study. In order to get permission to carry out a pilot test from the SBEK, I sent to the Dean of the school an official request from my supervisor. Nine students and three teachers were chosen at random by the school management to do the pilot test. All the resulting comments, suggestions and opinions were taken into account when modifying the questionnaire items.

### 4.3.5 Administering the questionnaires

After obtaining permission from the Dean, I sent out the questionnaires in September 2011 to the departments at the SBEK, enclosing information sheets on the purpose of the research. I telephoned the heads of departments to make sure that they had received the questionnaires. The departments arranged appointments for me to distribute the questionnaires myself to the students, as they had no means of contacting them. The faculty and top management received the questionnaires in their mailboxes.

## 4.4 Second method: Interviews

> *the interview is a face-to-face interpersonal role situation*
> *designed to elicit answers pertinent to the research hypotheses*
> *(Nachmias and Nachmias, 1996, p.232).*

The second method to be adopted was interviews, to provide rich, descriptive and in-depth information from participants. Interviews are appropriate for identifying behaviours, experiences, opinions, feelings, attitudes, beliefs, knowledge and background to achieve a deep and rounded understanding of the researched area (Alrashidi *et al.*, 2007).

The use of interviews is a fundamental procedure in almost all-qualitative research. The significance of using interviews, according to Denzin and Lincoln (2005), is that by using interviews, the researcher can reach unique areas of evidence.

The outcomes of the questionnaire survey revealed various critical issues regarding the challenges of BL in the SBEK. As a result, I had to carry out further research in order to examine the views of students, faculty and top management to explore how they thought these challenges could be met and identify their attitudes to BL. The most appropriate method to achieve this objective was to carry out interviews, since it was easier to collect such information face-to-face with respondents (Alrashidi *et al.*, 2007).

Interviews can take one of three forms: unstructured, semi-structured and structured (Denscombe, 2010). It was important to identify the most suitable of these for letting the study move on from the information extracted from the questionnaire. Considering the nature of my research, I decided to use the semi-structured interview form. The reasons for this decision will be discussed next.

## 4.4.1 Semi-structured interviews

McQueen and Knussen (1999) argue that the semi-structured interview is the most helpful

interview structure. Its approach allows the researcher to interact with the respondents, which encourages them to express their thoughts and concerns more freely than a structured interview or questionnaire would. It helped me to learn what the challenges were that might impede the implementation of BL.

Moreover, the semi-structured approach is considered to be flexible because it gives the interviewees a chance to express their views and provide answers from their own perspective. The flexibility of the semi-structured approach is also an advantage in enabling the respondents to develop their views and discuss more broadly the items raised by the researcher (Denscombe, 2010). The interviewer can, whenever necessary, either rephrase or change the order of the questions in order to obtain more information to serve the purposes of the research (Cohen *et al.*, 2007).

Furthermore, one of the important reasons for using the semi-structured method was that it gave me a chance to demonstrate the objectives of my research plainly and detect any ambiguity or misunderstanding regarding the issues of the interview. Most importantly, during the interview I was able to observe the body language of the respondents and note down my readings of it (Smith *et al.*, 1999). These advantages are to be found less in the other research tools.

Semi-structured interviews guided me to follow the interests and thoughts of the informants. They are thought to generate the richest data, in particular when the interviewer is inexperienced (Smith *et al.*, 1999). This approach was expected to encourage a wider range of opinion from the research participants, since it allowed them to express their views and ideas more freely than a questionnaire would. It is the most common and powerful way for researchers to understand the working of the human mind (Nachmias and Nachmias, 1996; Cohen *et al.*, 2007). I used two forms of semi-structured interview in this research. The first,

individual interviews, was used for the interviews with teachers and top management and the second, focus group interviews, was used with students. The purpose of conducting individual interviews is to provide respondents with privacy and enough confidence to express their views without being observed by anyone else. As an elite sample, they would appreciate this. Moreover, individual interviews were the preference of the entire faculty and top management. Individual interviews are, moreover, easy to control and easy to arrange (Denscombe, 2010).

### 4.4.2 Focus group interviews

Focus group interviews are becoming significantly popular in the field of social science, according to Denscombe (2010), Bell (2005) and Thomas (2009). In Denscombe's definition, a focus group is

> *A small group of people who are brought together by a moderator (the researcher) to explore attitudes and perceptions, feelings and ideas about a specific topic.*
> *(Denscombe, 2010, p.177).*

I carried out a focus group interview with four groups of students. According to Bell (2005), my role in this process was more like that of a moderator than a researcher. The idea of conducting a focus group is to focus discussion with a small number of participants, ranging between six and nine, on a specific point. They are usually invited by the researcher to discuss their views, emotions, perceptions and manners in relation to a particular topic (Denscombe, 2010). Laws *et al.* (2013) argues that, when a researcher seeks profound information, focus groups are the most efficient way to obtain the required data from individuals' thoughts on a particular topic, their reasons for having these thoughts and their perceptions of the reasons for things to be as they are. For the purposes of my study, I

adopted a semi-structured interview for the focus group so as to encourage them to provide detailed information on the critical issues concerning the implementation of BL.

This method has various strengths, which distinguish it from other research methods. One of these strengths is that it allows people to hold discussions over the issues in question in which one aspect or more brings agreement, while others bring disagreement. This open setting for discussion provides a healthy airing for issues of critical concern (Bell, 2005). To ensure that the answer provided by one of the group represents consensus, Laws *et al.* (2013) proposes that the researcher from time to time should ask whether this is what everyone believes, or whether all the other participants agree with the speaker (Laws *et al.*, 2013).

The other strength of this method is that it allows some participants to remember or reflect on a particular piece of information brought up by another participant (Abdullah *et al.*, 2006). Moreover, the focus group method provides a supportive setting in which the participants can share their experiences and learn from each other because they can express their feelings securely and comfortably (Denscombe, 2010). They also have enough time to relax, prepare and refresh their memories and clear their minds (Abdullah *et al.,* 2006). Further, focus groups usually generate a build-up of information, which enriches the study (Thomas, 2009). Finally I decided that interviewing students in a focus group was more appropriate than interviewing all the students individually because of the lack of time and need to make extensive arrangements.

Another reason for conducting focus group interviews is the cultural one; in Kuwait it is forbidden for female students to sit alone amongst male students, or with a male interviewer, although a group of females may work with a tutor.

However, the focus group method has some weaknesses, which I had to be aware of in advance. Denscombe (2010) and Abdallah *et al.* (2006) point out that a focus group method

may allow one of the participants to control the discussion and thus deprive the others of the chance to speak their minds. The focus group method provides enough space and time for those who are more confident in expressing their views in public, disregarding those who feel uncomfortable about doing this (Abdullah *et al.*, 2006). Darlington and Scott (2002) also confirm this weakness; they state that some individuals may feel uncomfortable talking about critical issues and such feelings may prevent them from talking about their personal practices before their colleagues (Darlington and Scott, 2002). Such feelings may also make them hesitant to reveal their views on critical social or political issues in open discussion (Denscombe, 2010). This method may in addition impose a time limit for each speaker to observe in expressing his/her thoughts (Darlington and Scott, 2002).

Moreover, in terms of writing down the answers, Denscombe (2010) asserts that it is sometimes difficult to document all the exchanged ideas and responses because, in most cases, participants interrupt each other or answer at the same time, which makes it impossible to record everything that some people say.

Denzin and Lincoln (2005), Denscombe (2010), Bell (2005) and Abuallam (2011) point out some steps that need to be taken to avoid these problems. These are: obtaining the consent of the participants to take part in a focus group or interview and ensuring that the participants are aware of the aims, the confidentiality and other ethical requirements; increasing management skills to control the discussion; employing advanced social skills similar to those needed for carrying out individual interviews such as flexibility, impartiality, assurance and excellent listening skills; maintaining a balance between the role of the interviewer, who should pay attention to the sensitivity of the questions and their impact on the respondents and the role of moderator, who facilitates the discussion; focusing the discussion on the essential issues, which should be explored in depth; avoiding sensitive issues at the beginning of the discussion and

starting instead with the least sensitive or with safe topics and waiting until it is clear that the participants are comfortable about discussing sensitive issues; engaging the participants who feel reluctant to contribute to the discussion by explaining how important their views are for the research; arranging the seating in a way that allows proper eye contact between all the participants and the researcher; checking that all the technological devices, such as microphones, are working and placed correctly.

### 4.4.3 Reflixivity

My role was that of a reflexive insider, in that I have been sponsored by SBEK. All participants were selected randomly by the school management, the only exception was in the case of top management members during the qualitative phase, who were chosen purposively. Upon meeting them I also explained that purposes of the research. None of the student participants knew me. About 20% of the teacher participants knew me as a previous student and a coming colleague. I also knew 3 of the top management staff. I noticed there was a difference between the teachers and top management that I knew and didn't know. Some of them that I knew elaborated in their responses more than others. It is important to note that I had been abroad for more than 6 years due to my studies and had not been in a contact with the teachers and the managers. Whilst this is positive in terms of being objective, it is important to note that my time abroad involved study and research in BL. This study involved both the Western and Middle Eastern context, providing me with a mind that can comprehend innovation in this field and practice that could be deemed unsatisfactory in certain conditions and environments. This will inevitably affect the way I perceive the responses even though best efforts are made to be objective. The results of the content analysis were based on my integrity in recording and interpreting the available information consistently and accurately and it was necessary for me to be self-critical and implement an analytical strategy that avoided researcher bias.

Although I identified my own personal reactions to the responses of the participants in the narrative account of the interviews, I tried to interpret the responses without researcher bias, so my own personal viewpoints did not contaminate the content analysis.

### 4.4.3 Design of the questions for individual and focus group interviews

After analysing the data from the survey study, interview questions for the participants were prepared. These consisted of about nine main questions for students, faculty and top management, with further subsidiary questions. See appendix 3

### 4.4.4 Preliminary considerations

Before carrying out the individual interviews and the focus group meetings, I considered the following points in order to achieve successful results: since the success of the interviews depends on basic factors such as the time, the location and the attitudes of the participants to the interview and the interviewer, I had to make sure that the time and place were appropriate for conducting the interviews and provide an encouraging atmosphere for all the parties involved; I had to bear in mind that the success of interviewing depends to a great extent on the characteristics of the researcher, including social skills and the ability to interact with the participants, whether verbally or non-verbally, so I tried to build a good relationship with the participants before conducting the interviews; the participants' inclination and willingness to respond to the questions being asked; the sensitivity of the researched issues and whether the participants are interested in discussing these issues, as well as the difficulties that they might have in responding to the questions (Abdullah *et al.*, 2006).

### 4.4.5 The piloting and validity of the focus group and individual interviews

To ensure the validity of the interviews and the focus group discussion, I sought help from experienced professionals who reviewed the questions prepared for the interviews and made comments and remarks. Accordingly, I amended some of the interview questions. Next, I had to test my improved research tool before applying it to my research sample. I carried out individual interviews and focus group discussions with some of my volunteers in the SBEK so as to test my interviewing skills. I recorded the answers, ran discussion sessions and trained myself to ask questions, listen to the responses, control discussions and encourage all the participants to take part in them. Some authors prefer the criterion of credibility rather than validity for interviews, while others use the word 'credibility' for the interviews instead of 'validity'. They believe that researchers can assess the credibility of their interviews by judging their transparency, consistency-coherence and communicability (Rubin and Rubin, 1995). To ensure transparency, I used a digital recorder player subject to the respondents' approval, to record all the interviews carefully, besides taking written notes. This made it possible to play back the interviews or read the transcript for each of the participants and allow others to read them and ensure that only relevant responses were extracted. From time to time I had to rephrase my questions to clear ambiguities that arose from participants' responses to ensure consistency-coherence and ensure that the participants spoke of their own experience rather than other people, in order to guarantee communicability. The interviewees were always invited to revise their responses.

As the research was conducted in Kuwait, the interview questions were translated into Arabic. I presented the interview questions in advance to professional editors who were Arabic specialists to ensure that the meaning of the translated questions had been accurately conveyed. I gave the participants the choice of a suitable place, time and conditions for the

interviews to take place, as most of the sample participants were busy during the working week and sometimes were unable to meet me because of their other commitments.

**4.4.6 The methodology used to conduct interviews and run focus groups**

Before conducting the interviews, a letter issued by my supervisor to prove that I was a research student in BL was addressed to the SBEK, to notify them about my research; see appendix 4. I processed my work by carrying out interviews with the focus group, which participated in the research, as well as interviewing individuals. The interviews were recorded within the timeframe shown below:

The first stage was conducted in January 2012, with the students in the focus group. A group of faculty teachers and top management staff were then interviewed individually. At the first stage I obtained a letter from my supervisor and addressed to the Dean of the SBEK seeking his approval to interview the faculty teachers and the top management staff individually and the students of the school in a focus group. Moreover, participants' information sheets, which showed the title and objectives of my research and its importance, were prepared together, with a set of consent forms.

After obtaining the approval of the Dean, I met the Dean's assistant and the Head of the Department of Curriculum and Instruction at the SBEK where I explained the importance of my research and gave them the participant information sheets and consent forms. The school management took responsibility for appointing a time for interviewing the students, which I was happy to agree with, while they left the faculty teachers and members of top management to choose their own times according to their schedules and availability. The Dean's assistant and the Head of Curriculum and Instruction helpfully asked the Heads of Department to allocate rooms in which to

carry out the interviews and to do whatever they could to help me.

The second stage, of interviews, took place in February 2012, starting with the individual interviews for the faculty members and top management staff, each interview lasting from 1 to 1½ hours. Most of the interviews were in offices in the school buildings, but some of the faculty particularly asked to be interviewed outside the school. The focus group interviews were conducted at the SBEK. I allocated 2½ hours for each male students' session, followed by a 20-minute break. For the female students, I allocated 2 hours for each session, followed by a 10-minute break. This difference was made in response to cultural factors, which dictated that females were expected to be at home if they had no classes to attend.

## 4.5 Ethical considerations and research difficulties

It was essential in producing the questions used in the focus group and the individual interviews to review the ethical standards relevant to carrying out such investigations. The questions took into consideration what Abdallah *et al.* (2006) point out in this respect. they assert that using interviews as a method for obtaining information in qualitative research raises a set of ethical issues and ethical concerns which link to any researcher's specific study. Therefore, the interview questions were developed with the support of my research supervisor in light of the Ethical Review Policy in the SBEK and the British Educational Research Association Ethical Guidelines (BERA). In compliance with this policy, I obtained a permit to carry out the study, I developed the Participant Information Sheet (see appendix 5) to be given to all the participants in the current research and I developed a "consent form" to document the participant's willingness to take part in the interviews (see appendix 6). Ethical issues also obliged me to obtain the permission personally by illustrating the goals

and importance of the study. The second important ethical step I made, involved obtaining the consent of the focus group sample to participate in the interviews, given that some students or teachers might be reluctant to provide specific information relevant to their experiences, whether positive or negative, due to a fear of being disciplined by top management.

In order to avoid this risk, I made the goals and purposes of the research clear to them and assured them that the information they provided would be treated with complete confidentiality and that their answers are used for academic purposes only. Furthermore, my strategy in writing the questions simply and in the Kuwaiti dialect seemed to create a friendly interviewing environment and gave the participants a sense of security. Moreover, I tried to write the questions in different forms to make sure that they were correctly understood. There was no problem with the participants. This could be attributable to the good relationship I had built up with them before carrying out the interviews, convincing them that this research would benefit everyone, their children and the whole country.

I anticipated another problem, that of asking to record the participants' responses on a digital recorder. The restrictive culture of Kuwait does not encourage the recording of female participants owing to social constraints. In addition, some administrative participants might have regarded it as somehow offensive to record their interview and might have refused to allow it. Since it was ethically necessary to get the interviewees' agreement to tape their responses, a request which might have contravened their cultural principles, I was honest and exact in telling them about the goals of the research, guaranteed the confidentiality of the provided information, explain the coding system of the interviews, ensure that their personal details would remain private and would not be revealed in the study and undertake to destroy the audio records once the dissertation is completed. By doing all these, I successfully

obtained an agreement to record everyone in the research sample. Although the interviewing process was challenging and sometimes difficult, I was fortunate in being able to do what I had hoped. Other than this, most participants, except the faculty teachers and the students, were appreciative, responsible and enthusiastic about being interviewed, despite the practical difficulties.

For example, one problem that faced me during the data collection was waiting for or collecting the students who would take part in the focus group interviews, which often wasted much time. It was challenging to bring them all to the same room at the same time during school hours.

Furthermore, I encountered some difficulties during the focus group interviews. For example, one of the participants took a long time to reply to one question; or participants attempted to dominate the discussion, preventing others from taking part in the interview. Nevertheless, this attitude was expected and handled carefully according to what I had read about conducting interviews.

 A more serious problem was that most of the faculty members in the SBEK were not able to help very much in either phase, possibly because of their already heavy responsibilities. However, although the school management had taken the responsibility of distributing my questionnaire to everyone in the sample, I received only a few (43) completed questionnaires back. I asked the school management why so few had answered and volunteered to distribute the questionnaires myself, an action which the school management approved. I asked the school if the faculty teachers had email addresses and was told that the teachers had them but did not use them. Eventually I found that the best way of distributing my questionnaire was individually to visit departments or the 200 teachers' offices and then return to collect each questionnaire, which was time-consuming.

Moreover, some of the interviews with faculty teachers were not regarded by them as a priority; they were not enthusiastic about allocating time for them within their working schedule. This too delayed the interviewing process. Often the interview times had to be cancelled and rescheduled in deference to other issues that came up. Some appointments were cancelled without previous notification. However, it was generally possible, given time, to arrange new appointments and find convenient points for interviews in coordination with the teachers' secretaries.

However, after a member of top management helped me to schedule the interviews and asked the faculty teachers to collaborate with me because of the benefit to the school, this problem diminished and the interviewees became more co-operative. Those faculty teachers who offered me only a few minutes were omitted from the total list of interviewees.

In some cases, I was left to wait for some time before my appointment with the interviewee could begin. To my knowledge, this may have happened for one of two reasons. The first is possibly because some of them were trying to avoid such a meeting. This was obvious from their repeated enquiries about the reason for interviewing them and why it was not sufficient for me to interview the students only. The second may be attributable instead to the state of their knowledge or in some cases to their heavy workload, although they had already agreed to be interviewed. For the sake of developing the country, the central government has spent much time and money on educational research. The present research is an example of its projects. Yet some members of management and faculty teachers do not feel responsible for co-operating in this work and do not see it as a priority. This seems to devalue its importance, at a time when every ministry contains departments in charge of conducting research on what it does. As Alqahtani (2012) says, some members of top management and faculty teachers are keen only on protecting their own positions and status and therefore maintain things as

they are and are unwilling to advance.

Another difficulty was the many hours of recordings that accrued from completing all the interviews, which required much time to transcribe in Arabic. I have to note that I also encountered some difficulty in arranging interviews of top management staff. This was due to the nature of their schedules, which necessitated frequent mobility and movement between their work place, the MOE and SBEK. This problem was dealt with by contacting their secretaries to arrange convenient times. The positive thing was that they agreed to be interviewed out of official working hours. Finally, I am glad to note that I acquired several interpersonal skills throughout the process of building up this research, such as enhanced researching skills, increased communication and interviewing skills and more developed problem-solving skills which fortunately enabled me to resolve in the end all the problems encountered.

## 4.6 Summary of the chapter

A number of methodological points were considered in this chapter. The strengths and weaknesses of the selected methods were discussed and as a result, the application of mixed methods appears to deliver better results towards achieving the aims of this research. Furthermore, the chapter provides the reasons for selecting the research sample that participated in the survey and interviews and also demonstrates the process of implementing the selected research methods. The ethical considerations of the research were also discussed in this chapter. One of the reasons behind using more than one method for data collection is that the researcher seeks to obtain more valid results that can help to achieve the objective of the research. I used these two methods so that they would complement each other. While the data collected from the questionnaire provided a general view of the challenges and attitudes

that face the implementation of BL in SBEK, the semi-structured interviews were used to examine those challenges and attitudes and obtain deeper information from the participants. The methods of analysing the quantitative and qualitative stages that I used are discussed in chapters Five and Six.

# Chapter Five: Quantitative Study

## 5.1 Introduction

The mixed-methods study employed in this research applied a sequential explanatory design (Creswell, 2009). A quantitative data collection technique (a questionnaire survey) was used to provide an initial evaluation of the obstacles to BL as perceived by a sample drawn from the college population in the School of SBEK in the state of Kuwait (N = 293 final year students, N = 43 faculty teachers and N = 8 senior management). This chapter considers the internal validity of the questionnaire utilised in this study. It discusses the concepts of operationalisation, normality and multicollinearity and its application. Appropriate methods of descriptive and inferential statistical analysis were applied in this study using SPSS version 18.0 to address the first six research questions:

RQ1: To what extent do the faculty teachers, senior management and final year students perceive that financial, administrative, academic, cultural, technical and skill dimensions represent potential obstacles to the implementation of BL?

RQ2: Do the perceived obstacles to BL vary significantly with respect to the gender, specialisation and GPA of the final year students?

RQ3: Do the perceived obstacles to BL vary significantly with respect to the gender, specialisation and experience of the faculty teachers?

RQ4: Do the attitudes towards BL vary significantly with respect to the final year students, faculty teachers and senior management?

RQ5: Do the attitudes towards BL vary significantly with respect to the gender, specialisation and GPA of the final year students?

RQ6: Do the attitudes towards BL vary significantly with respect to the gender, specialisation and experience of the faculty teachers?

## 5.2 Demographic Characteristics of the Participants

The frequency distributions (counts and percentages) of the demographic characteristics of the students (gender, specialisation and GPA) and the faculty teachers and senior management (gender, specialisation, experience and age) were computed. See appendix 7.

## 5.3 Analysis of Item Scores

The participants' responses to the questionnaire items were numerically coded into scores representing a hierarchy of perceptions ranked into an implicit logical order (i.e. 1 = Very low; 2 = Low; 3 = Unsure; 4 = High; 5 = Very High); however, the scores for each item could not strictly be analysed using parametric statistics (e.g. means and standard deviations) which assumed normally distributed variables measured at the interval level (i.e. with an equal interval between each score). This is because: it cannot be assumed that the participants perceived, for example, that the interval between Very low and Low was the same as the interval between High and Very high; it is theoretically impossible for ordinal categories ranging from 1 to 5 to be normally distributed (i.e. a frequency distribution described by a perfect bell-shaped curve); it does not make sense at all to add up or subtract the scores; e.g. a response of Very low (coded as 1) added to a response of Low (coded as 2) does not equal a response of Unsure (coded as 3). For these reasons statisticians recommend that parametric statistics should not be used to analyse item scores based on five point ordinal scales (Cliff, 1996; Kahler *et al.,* 2008; Mogey, 1999). Non-parametric statistics based on the median (central values) were therefore used to analyse the individual item scores.

## 5.4 Operationalisation of Variables

Operationalisation means converting concepts that lack clarity and precision into reliably measurable variables, termed scales or dimensions. With respect to the data collected using questionnaires, a scale or dimension should ideally consist of a cluster of at least three inter-correlated item scores hanging together to measure one unifying concept (Allen and Yen, 2002). In this study, the aim of combining clusters of item scores is to reinforce the systematic and reliable components, which consistently measure what the dimension is supposed to measure and to cancel out the inconsistent and unreliable components or items, caused by the respondents' guesswork, misconceptions, inattentiveness, misrepresentations, or other types of response bias, including acquiescence (i.e. the tendency to consistently provide positive or agreeable responses, either by agreeing to every question, without thinking or even when there is a doubt about a question) or polarised answer patterns (i.e. the tendency to consistently provide extreme responses). These types of bias are known to contaminate, slant, or distort the results of questionnaire surveys conducted in the Arab world and have been associated with communication styles which are stereotypically related with the Arab culture (Smith, 2004; Baron-Epel *et al.*, 2010; Harzing, 2006; Minkov, 2010). It was therefore necessary to eliminate biased responses before the dimensions could be operationalised. Reliability Analysis was conducted for this purpose.

## 5.5 Reliability

The internal consistency reliabilities of the dimensions extracted from the questionnaire items in appendix 8 were estimated using Cronbach's *alpha*. Cronbach's *alpha* which ranges in magnitude from 0 (no reliability) to 1 (perfect reliability) is one of the most widely used tests for the internal consistency reliability of questionnaire items (Hogan *et al.*, 2000;

Cronbach and Shavelson, 2004). The estimation of Cronbach's *alpha* assumes that at least three item scores measure one unifying concept in a logical direction, from the lowest to the highest level. If a cluster of items is multidimensional or reflects a mixture of different concepts, then Cronbach's a*lpha* tends towards zero. To comply with the assumptions of reliability analysis, the scores for several of the items in the questionnaires developed for this study had to be reversed. For example, a score of 1 was reversed to 5 and a score of 5 was reversed to 1 (denoted by R in Tables A.8 and A.9) as seen in appendix 8. Score reversal was achieved by subtracting each recorded score from 6. To ensure that all the dimensions were reliably measured, reflected by Cronbach's *alpha* between 0.5 and 1, some of the unreliable items, which did not contribute towards the measurement of a unifying dimension, were deleted and two of the proposed dimensions had to be combined to ensure that they were reliable. The deletion of inconsistent items and combination of certain dimensions to elevate reliability was an essential process because the statistical analysis could be meaningless if the dimensions were not reliably measured (Allen and Yen, 2002).

**5.6 Normality**

The combination of a cluster of reliably measured item scores creates a dimension measured at the interval level, suitable for parametric statistics, assuming its frequency distribution is normal (Knapp, 1990; Long *et al.*, 2003). To check that the frequency distributions of the dimensions for the final year students (Figure A.1) and faculty teachers (Figure A.2) were normal, they were visually compared against bell-shaped curves. Most of the scores tended towards the middle to higher ends of the five point scales. The most frequent scores were 3 (unsure) and 4 (high). Although the frequency distributions of the dimensions for the students and teachers were slightly skewed and deviated from perfect normality, they were

127

satisfactorily dome shaped to justify using parametric statistics.

## 5.7 Multicollinearity

The scores for the six dimensions tended towards multicollinearity (i.e. they were linearly related to each other). This was indicated visually by the matrix plots with linear trend lines drawn between the scores for each dimension for the final year students (Figure A.3) and for the faculty teachers (Figure A.4). Multicollinearity had implications with regard to the use of inferential statistical analysis to address the research questions. Because the dimensions were inter-correlated with each other, they could be combined into linear combinations of variables in order to perform MANOVA (Hair *et al.*, 2010). The types of statistical analysis and the dependent and independent variables used in this study are summarised in Appendix 9.

## 5.8 Kruskal-Wallis Test

The frequency distributions of the individual item scores (counts and percentages) and the median score for each item were computed. The median is the middle value of the data set. Kruskal-Wallis tests were applied to compare the grouped median scores with respect to the three groups of participants (final year students, faculty teachers and senior management) in order to address RQ1 and RQ4. The grouped median is the average of the values either side of the centre value in each group. The advantage of the Kruskal-Wallis test is that it operates on ordinal variables which can be ranked into a logical order. Unlike parametric tests such as Analysis of Variance, it does not assume that the variables are normally distributed or measured at the interval level (Sheskin, 2007). The test assumes at least three cases in each group. The null hypothesis was that the median scores were the same in each group. The

alternative hypothesis was that at least one of the groups had a different median. The prescribed significance level was α = .05, implying that the probability (p) of making a Type I error (i.e. a null hypothesis may be rejected when it should not, in fact, be rejected) was 5%. The decision rule was to reject the null hypothesis and accept the alternative hypothesis if $p \leq$ .05 for the Kruskal-Wallis statistic. If $p > .05$ then the null hypothesis was not rejected, implying there was insufficient evidence to identify a significant difference between the scores.

## 5.9 ANOVA and MANOVA

The aims of conducting ANOVA (Analysis of Variance) and MANOVA (Multivariate Analysis of Variance) were to compare the mean scores for the dimensions (the dependent variables) across specified groups of participants (the independent variables) to address RQ2, RQ3, RQ5 and RQ6. MANOVA is a form of ANOVA with more than one dependent variable. Testing the multiple dependent variables is accomplished by creating a new dependent variable as a linear combination of individual dependent variables. MANOVA has several advantages over ANOVA. By analysing several dependent variables simultaneously, there is a better chance of discovering which variable is important. MANOVA protects against Type I errors that might occur if multiple independent ANOVAs were conducted. In addition, MANOVA can reveal differences not discovered by ANOVA (Hair *et al.*, 2010).

ANOVA was used to test one dependent variable (i.e. ATTITUDES) whereas MANOVA was used to test five dependent variables simultaneously (i.e. FINANCIAL and ADMINISTRATIVE, ACADEMIC, CULTURE, TECHNICAL and SKILLS). The null hypothesis for each test was that the mean scores were the same in each group. The alternative hypothesis was that at least one of the groups had a different mean score. The

prescribed significance level was α = .05. The decision rule for ANOVA was to reject the null hypothesis and accept the alternative hypothesis if $p \leq .05$ for the univariate F test statistics. The decision rule for MANOVA was to reject the null hypothesis and accept the alternative hypothesis if $p \leq .05$ for the Wilk's lamda (λ) and multivariate F statistics. The effects between subjects were identified for each dimension using univariate F test statistics.

To assist the interpretation of the results, the mean scores were plotted using error bar charts. An error bar chart visualises the mean values as bars and the ± 95% confidence intervals as lines, either side of the mean values. A 95% confidence interval represents the theoretical range which captures the true mean value in 95 out of 100 samples.

Analysis of variance is based on several theoretical assumptions. If these assumptions are violated, then the statistical inferences may be compromised; however, years of practical use have demonstrated that the results are relatively robust if the assumptions are not met, particularly if the sample size is large and the sample sizes are equal in each group (Hair *et al.*, 2010). Homogeneity or equality of variance of the dependent variable(s) is assumed across all the groups in the sample design matrix. The null hypothesis of homogeneity of variance was tested using Levene's test. The decision rule was to reject the null hypothesis that the variances were equal if $p < .05$ for Levene's statistic. MANOVA assumed that the covariance matrices were homogeneous across the groups. The null hypothesis of equality of covariance matrices was tested using Box's test. This null hypothesis was rejected if $p < .05$ for Box's M statistic. MANOVA assumed equal sample size in each group. If the groups have different sample sizes, the sum of squares for the effect plus the error does not equal the total sum of squares. SPSS, however, provides an automatic adjustment for unequal sample sizes in MANOVA (Field, 2009).

**5.10 Sample Size**

The statistical inferences obtained using analysis of variance are extremely sensitive to sample size. A null hypothesis is more likely to be rejected when the sample size is large than when the sample size is low (Hair *et al*., 2010). A Type II error may occur (i.e. a null hypothesis may not be rejected, when it should, in fact, be rejected) if the sample size is too small. Consequently, a power analysis was conducted to determine the minimum sample size required for this study. Power is the ability of an inferential test to correctly reject a null hypothesis (Cohen, 1992). The minimum sample size depends upon the desired power, the prescribed significance level and the effect size (i.e. the proportion of the variance in the dependent variable explained by the independent variables). To achieve a desired power of .8 (the conventional level used in social science) and assuming a significance level of $\alpha = .05$ and a moderate effect size, the total sample size should be at least $N = 52$ (Cohen, 1992). If the effect size is low, however, the total sample must be increased to at least $N = 322$. In this study the sample size was $N = 293$ for final year students, $N = 43$ for the faculty teachers and $N = 8$ for the senior management. Consequently, assuming a low to moderate effect size, the sample size of the final year students was adequate, assuming that the sample design matrix contained sufficient students in each group; however, the sample size of the senior management was clearly much too small and the sample size of the faculty teachers was barely adequate. In order to ensure sufficient numbers of cases in each cell of the sample design matrix to conduct an analysis of variance, it was necessary to collapse some of the demographic categories, so there were larger numbers of cases in each category.

**5.11 Effect Size**

It is a commonly held misconception that rejecting a null hypothesis gives a special meaning to research findings and that the lower the p value, then the more important are the conclusions (Kline, 2004). The p value, however, is more closely related to the sample size than to the effects being measured and only provides a probabilistic inference as to whether or not the data were collected by chance. No information can be derived about the practical significance of research findings through using p values. Practical significance implies that the findings are meaningful, including the availability of measurable effects that have practical and important applications in reality (Kline, 2004). Rather than focusing on the p values, information that is much more meaningful can be derived by interpreting effect sizes. This is because, unlike p values, effect sizes remain relatively stable across different sample sizes and measure the strengths of the relationships between variables. Accordingly, the effect sizes $\eta^2$ (eta squared), reflecting the proportions of the variance in the dependent variable explained by the independent variables, were computed in this study to determine the practical significance of the findings. Cohen's (1992) "rule of thumb" for the effect size was applied (.02 = small effect; .15 = medium effect and .35 = a large effect.)

**5.12 Findings**

**5.12.1 Research question 1:**

**To what extent do the faculty teachers, senior management and final year students perceive that financial, administrative, academic, culture, technical and skill dimensions represent potential obstacles to the implementation of BL?**

The distributions of the item scores are presented in Tables A.10 to A.12 in appendix 10. The median scores for FINANCIAL and ADMINISTRATIVE ranged from 4 to 5 (high to very

high) among the students, 3 to 4 (unsure to high) among the teachers and 2 to 5 (low to very high) among the senior management. Senior management perceived that financial incentives were a low challenge (median = 2) whereas the students and teachers perceived this obstacle to be high (median = 4). The median scores for ACADEMIC ranged from 3 to 4 (unsure to high) among the students and 2 to 4 (low to high) among the teachers and senior management. The senior management perceived that BL allowing students to get help from others and weakening control over students were low obstacles (median = 2); however the students and teachers were unsure (median = 3). The median scores for CULTURE were 3 to 4 (unsure to high) for the students and teachers but high (median = 4) for the senior management.

The median scores for TECHNICAL were 2 to 4 for the students and teachers and 1 to 4 for the senior management. Most participants perceived that the availability of the Internet at home was a low or very low obstacle to implementation (median = 1 or 2). The senior management and teachers perceived this to be a low implementation challenge (median = 2) whereas the students perceived it to be high (median = 4). Most participants perceived that getting help from the technical team and raising the number of technicians were high challenges (median = 4 or 5).

The median scores for SKILLS ranged from 2 (low) to 4 (high) among the students and teachers and 2 (low) to 5 (very high) among the senior management. All the participants agreed that skills in the use of multimedia and electronic teaching methods were a low challenge (median = 2. Reliance on English and lack of training opportunities were high to very high (median = 4 or 5) challenges.

The perceived challenges to BL were ranked in order of grouped median score as follows: FINANCIAL AND ADMINISTRATIVE (4.00), CULTURAL (3.78), TECHNICAL (3.57),

SKILLS (3.57) and ACADEMIC (3.44). The median scores with respect to each group of participants ranged from 3.0 to 4.25. The Kruskal-Wallis tests indicated no statistically significant differences at α = .05 between the students, teachers and senior management with respect to their median responses to each of the five dimensions (Table 3).

**Table 3: Kruskal-Wallis Test to Compare Grouped Median Scores of Students, Faculty Teachers and Senior Management of Items Concering Challenges to BL**

| Dimension | Group | Grouped Median | Kruskal Wallis Statistic | p |
|---|---|---|---|---|
| FINANCIAL & ADMINISTRATIVE | Students | 4.14 | .856 | .652 |
| | Faculty teachers | 3.86 | | |
| | Senior management | 4.00 | | |
| | Total | 4.00 | | |
| CULTURAL | Students | 3.67 | 1.143 | .565 |
| | Faculty teachers | 3.67 | | |
| | Senior management | 4.00 | | |
| | Total | 3.78 | | |
| TECHNICAL | Students | 4.25 | 1.188 | .552 |
| | Faculty teachers | 3.20 | | |
| | Senior management | 3.00 | | |
| | Total | 3.57 | | |
| SKILLS | Students | 3.25 | 4.156 | .125 |
| | Faculty teachers | 3.20 | | |
| | Senior management | 4.14 | | |
| | Total | 3.57 | | |
| ACADEMIC | Students | 3.33 | .485 | .785 |
| | Faculty teachers | 3.33 | | |
| | Senior management | 3.43 | | |
| | Total | 3.41 | | |

**5.12.2 Research question 2:**

**Do the perceived obstacles to BL vary significantly with respect to the gender, specialisation and GPA of the final year students?**

With the exception of the TECHNICAL dimension, the assumption of homogeneity of

variance of the dependent variable across the groups of students was not violated, indicated by $p > .05$ for Levene's tests (Table 4). Box's $M = 122.294$, $p = .280$ indicated that the covariance matrices were homogeneous. Since the assumptions were not extensively violated, MANOVA was justified. The mean scores for the linearly combined dimensions varied significantly at $\alpha = .05$ with respect to specialisation and gender, indicated by $p < .05$ for the MANOVA statistics (Table 5). Gender, however, had no significant effect on the mean scores, indicated by $p > .05$.

**Table 4: Leven's Test for Homogeneity of Variance with Respect to Groups of Students**

|  | Levene's statistic | p |
|---|---|---|
| FINANCIAL & ADMINISTRATIVE | .662 | .704 |
| ACADEMIC | 1.206 | .299 |
| CULTURAL | .424 | .887 |
| SKILLS | 1.722 | .104 |
| TECHNICAL | 3.208 | .003* |

Note: * Significant at $\alpha = .05$

**Table 5: MANOVA to compare the Effect of Gender, Specialisation and GPA on Mean Scores**

| Effect | Wilks' λ | Multivariate F | p |
|---|---|---|---|
| GENDER | .992 | .449 | .814 |
| SPECIALISATION | .931 | 4.229 | .001* |
| GPA | .956 | 2.593 | .026* |

Note * Significant at $\alpha = .05$

The effects between subjects for each dimension with respect to the gender, specialisation and GPA of the students are presented in Table 6. The mean scores for the FINANCIAL and ADMINISTRATIVE and TECHNICAL dimensions varied significantly at $\alpha = .05$ with respect to specialisation. The SKILLS and CULTURE dimensions also varied significantly at

α = .05 with respect to GPA. The $\eta^2$ values from .03 to .05, however, reflected small effect

sizes. The effects of gender were negligible, indicated by effect sizes < .01.

**Table 6: Effects Between Subjects with Respect to Gender, Specialisation and GPA of Students**

| Independent variable | Dependent variable | Type III sum of squares | Mean square | F statistic | p | $\eta^2$ |
|---|---|---|---|---|---|---|
| GENDER | FINANCIAL & ADMINISTRATIVE | .199 | .199 | .619 | .432 | <.01 |
| | ACADEMIC | .012 | .012 | .028 | .867 | <.01 |
| | CULTURAL | .973 | .973 | 1.421 | .234 | <.01 |
| | SKILLS | .096 | .096 | .193 | .660 | <.01 |
| | TECHNICAL | .086 | .086 | .160 | .690 | <.01 |
| SPECIALISATION | FINANCIAL & ADMINISTRATIVE | 3.492 | 3.492 | 10.891 | .001* | .04 |
| | ACADEMIC | .309 | .309 | .707 | .401 | <.01 |
| | CULTURAL | .026 | .026 | .039 | .845 | <.01 |
| | SKILLS | .277 | .277 | .559 | .455 | <.01 |
| | TECHNICAL | 8.459 | 8.459 | 15.620 | <.001* | .05 |
| GPA | FINANCIAL & ADMINISTRATIVE | .085 | .085 | .266 | .606 | <.01 |
| | ACADEMIC | .163 | .163 | .373 | .542 | <.01 |
| | CULTURAL | 3.189 | 3.189 | 4.655 | .032* | <.01 |
| | SKILLS | 3.844 | 3.844 | 7.761 | .006* | .03 |
| | TECHNICAL | .132 | .132 | .243 | .622 | <.01 |

Note * Statistically significant at α = .05

The error bar charts illustrate the significant effects of specialisation on the FINANCIAL and

ADMINISTRATIVE and TECHNICAL dimensions and the significant effects of GPA on

the CULTURE and SKILLS dimensions. The students specialising in non-physical subjects

consistently perceived that there were higher obstacles to BL related to financial,

administrative and technical issues than the students specialising in physical subjects (Figure

A.5) as seen in appendix 11. The students with lower GPA scores consistently perceived that

there were higher obstacles to BL related to culture and skills issues than the students with

higher GPA scores (Figure A.6) in appendix 11.

**5.12.3 Research question 3:**

**Do the perceived obstacles to BL vary significantly with respect to the gender, specialisation and experience of the faculty teachers?**

The assumption of homogeneity of variance of the dependent variable across the groups of teachers was not violated, indicated by $p > .05$ for Levene's statistics (Table 7). Box's M = 38,468, $p = .797$ indicated that the covariance matrices were homogeneous. Since the assumptions were not violated, MANOVA was justified. The mean scores of the linearly-combined dimensions did not vary significantly with respect to the gender, specialisation, or experience of the teachers, indicated by $p > .05$ for the MANOVA statistics (Table 8).

**Table 7: Leven's test for Homogeneity of Variance with Respect to Groups of Faculty Teachers**

| Dimension | Levene's statistic | p |
|---|---|---|
| FINANCIAL & ADMINISTRATIVE | 1.050 | .415 |
| ACADEMIC | .355 | .922 |
| CULTURE | .801 | .592 |
| SKILLS | 1.056 | .412 |
| TECHNICAL | .866 | .542 |

**Table 8: MANOVA to compare Mean Scores of Teachers with Resoect to Gender, Specialisation and Experience**

| Effect | Wilks' λ | Multivariate F | p |
|---|---|---|---|
| GENDER | .781 | 1.964 | .108 |
| SPECIALISATION | .822 | 1.511 | .212 |
| EXPERIENCE | .940 | .445 | .814 |

The effects between subjects for each dimension with respect to the gender, specialisation

and experience of the teachers are presented in Table 9. There was only one statistically significant effect. The mean scores for the ACADEMIC dimension varied significantly at α = .05 with respect to gender. The effect of gender was relatively small, indicated by an effect size of .11. The error bar chart illustrates the significant effects of gender on the ACADEMIC dimension and the significant effects of GPA on the CULTURE and SKILLS dimensions. The male teachers clearly perceived that there were higher obstacles to BL related to academic issues than did the female teachers (Figure A.7 in appendix 11).

**Table 9: Effects Between Subjects with Respect to the Gender, Specialisation and Experience of Teachers**

| Independent variable | Dependent variable | Type III sum of squares | Mean square | F statistic | p | $\eta^2$ |
|---|---|---|---|---|---|---|
| GENDER | FINANCIAL & ADMINISTRATIVE | .372 | .372 | .898 | .349 | .02 |
| | ACADEMIC | 1.877 | 1.877 | 4.797 | .035* | .11 |
| | CULTURE | .101 | .101 | .130 | .721 | <.01 |
| | SKILLS | .071 | .071 | .220 | .642 | <.01 |
| | TECHNICAL | .001 | .001 | .003 | .958 | <.01 |
| SPECIALISATION | FINANCIAL & ADMINISTRATIVE | .045 | .045 | .108 | .744 | <.01 |
| | ACADEMIC | .059 | .059 | .151 | .700 | <.01 |
| | CULTURE | 2.849 | 2.849 | 3.674 | .063 | .09 |
| | SKILLS | .434 | .434 | 1.344 | .253 | .03 |
| | TECHNICAL | .217 | .217 | .490 | .488 | .01 |
| EXPERIENCE | FINANCIAL & ADMINISTRATIVE | .436 | .436 | 1.052 | .311 | .03 |
| | ACADEMIC | .081 | .081 | .207 | .652 | <.01 |
| | CULTURE | .152 | .152 | .197 | .660 | <.01 |
| | SKILLS | .020 | .020 | .063 | .803 | <.01 |
| | TECHNICAL | .005 | .005 | .011 | .916 | <.01 |

Note: * Significant at α = .05

**5.12.4 Research question 4:**

 **Do the attitudes towards BL vary significantly with respect to the final year students, faculty teachers and senior management?**

The scores for the items concerning the attitudes of the participants towards BL were consistently high (median = 4) or very high (median = 5) among the students, teachers and senior management (Table A.13 in appendix 12). The senior management, however, demonstrated a very high median score of 5 for six of the items concerning their attitudes, whereas the teachers and students achieved a very high median score of 5 for only one of the items. The Kruskal-Wallis test indicated statistically significant differences at $\alpha$ = .05 between the students, teachers and senior management with respect to their median responses to the ATTITUDES dimension (Table 10). The grouped median score for the senior management was 4.67, reflecting a very enthusiastic attitude towards BL relative to the students and teachers, whose grouped median scores of 4.11 and 4.13 respectively reflected relatively less enthusiasm.

**Table 10: Kruskal-Wallis Test to Compare the Grouped Median Scores of Students, Teachers and Senior Management for Items Concering Attitudes towards BL**

| Dimension | Group | Grouped median | Kruskal Wallis statistic | p |
|---|---|---|---|---|
| ATTITUDES | Students | 4.13 | 8.010 | .018* |
|  | Faculty teachers | 4.11 |  |  |
|  | Senior management | 4.67 |  |  |
|  | Total | 4.31 |  |  |

Note: * Significant at $\alpha$ = .05

**5.12.5 Research question 5:**

**Do the attitudes towards BL vary significantly with respect to the gender, specialisation and GPA of the final year students?**

The error bar chart (Figure A.8 in appendix 13) illustrates that the mean ATTITUDES scores for the students specialising in non-physical subjects tended to be consistently higher than for their counterparts specialising in physical subjects. This effect was manifested across males and females and the three GPA levels. The assumption of homogeneity of variance was not violated indicated by F (7, 285) = 1.007, p = .427 for Levene's test, justifying the use of ANOVA. The results of ANOVA are presented in Table 11.

**Table 11: ANOVA to Compare Mean ATTITUDES Scores with Respect to the Gender, Speialisation and GPA of the Students**

| Source of variance | Type III sum of squares | Degrees of of freedom | Mean square | F statistic | p | η2 |
|---|---|---|---|---|---|---|
| GENDER | .715 | 1 | .715 | 1.304 | .254 | .04 |
| SPECIALISATION | 4.051 | 1 | 4.051 | 7.393 | .007* | .03 |
| GPA | 1.175 | 1 | 1.175 | 2.144 | .144 | <.01 |
| Error | 158.357 | 289 | .548 | | | |
| Total | 4698.633 | 293 | | | | |

Note * Significant at α = .05

There was only one statistically significant effect. The mean scores for the ATTITUDES dimension varied significantly at α = .05 with respect to specialisation, however, the effect of specialisation was small, indicated by $\eta^2 = .03$.

**5.12.6 Research question 6:**

 **Do the attitudes towards BL vary significantly with respect to the gender, specialisation and experience of the faculty teachers?**

The error bar chart (Figure A.9 in appendix 13) illustrates that the mean ATTITUDES scores for the faculty teachers did not appear to vary systematically with respect to their experience, gender, or specialisation. The assumption of homogeneity of variance was not violated, indicated by $F(7,35) = .335$, $p = .93$ for Levene's test, justifying the use of ANOVA. There results of ANOVA indicated no significant effects (Table 12). The mean scores for the ATTITUDES dimension did not vary at $\alpha = .05$ with respect to the gender, specialisation, or experience of the teachers and the effect sizes were negligible ($\eta^2 < .01$).

**Table 12: ANOVA to Compare Mean ATTITUDES Scores with Respect to the Gender, Specialisation and Experience of the Faculty Teachers**

| Source of variance | Type III sum of squares | Degrees of freedom | Mean square | F statistic | p | $\eta^2$ |
|---|---|---|---|---|---|---|
| GENDER | .022 | 1 | .022 | .047 | .830 | <.01 |
| SPECIALISATION | .053 | 1 | .053 | .115 | .736 | <.01 |
| EXPERIENCE | .111 | 1 | .111 | .243 | .625 | <.01 |
| Error | 17.874 | 39 | .458 | | | |
| Total | 725.802 | 43 | | | | |

**5.13 Summary**

The perceived challenges to blended learning were ranked in order of grouped median score as follows: FINANCIAL and ADMINISTRATIVE (4.00), CULTURAL (3.78), TECHNICAL (3.57), SKILLS (3.57) and ACADEMIC (3.44). Despite individual differences between the median scores for each item, there were no statistically significant differences between the students, teachers and senior management with respect to their median responses

to each of the five dimensions. The grouped median score in terms of attitudes of the senior management was 4.67, reflecting a very enthusiastic attitude towards blended learning relative to the students and teachers, whose grouped median scores of 4.11 and 4.13 respectively reflected relatively less enthusiasm.

The statistically significant results of the quantitative stage of the study at $\alpha = .05$, were limited to: the students with lower GPA scores perceived that there were significantly higher obstacles to BL related to culture and skills issues than did the students with higher GPA scores; the male teachers perceived that there were significantly higher obstacles to BL related to academic issues than did the female teachers; the attitudes of the senior management towards BL were significantly more positive than the teachers and students; the attitudes of students specialising in non-physical subjects were significantly higher than for their counterparts specialising in physical subjects. Although every attempt was made to ensure that these statistical inferences were valid and did not violate the theoretical assumptions, the application of the results of statistical tests in order to support educational management and policy decisions is controversial.

The magnitudes of the differences between the attitudes of the different groups of participants were minimal because the effect sizes were small, so it is likely that the results may have relatively limited practical significance with respect to making educational policy decisions regarding the implementation of blended learning. The lack of significance at $\alpha = .05$ for most of the tests conducted in this study did not provide evidence to infer the absence of an effect of demographic and contextual factors on the attitudes of the participants. Failure to reject a null hypothesis implies only that: a Type II error was made, because the sample size was too small; the data violated the theoretical assumptions of the test, or; nothing meaningful can be concluded, so judgment should be suspended (Fraenkel and Wallen,

2010).

Due to this difficulty of interpreting inferential statistics, it was essential in this study to follow the quantitative stage by a qualitative stage, adopting a sequential mixed methods design, as recommended by Creswell (2009). Although the quantitative stage facilitated a statistical comparison of the attitudes of the participants, it might not explain the multitude of subtleties and nuances that differentiated the attitudes of each individual participant at an individual level. Consequently, the content analysis of the individual responses of the managers, teachers and students to my interview questions, produced more useful information than the statistical analysis with respect to making educational policy decisions regarding the implementation of blended learning at SBEK.

# Chapter Six: Qualitative study

## 6.1 Introduction

The quantitative survey provided the initial evaluation of the obstacles to BL perceived by a sample drawn from the college population in the SBEK based on the use of a questionnaire. A qualitative method (interviews) was subsequently implemented to provide greater insights than could be obtained using the questionnaire alone. The sample for the qualitative method consists of 43 participants (N = 7 college leaders/senior management, N = 10 teachers/faculty members and N = 26 students). This chapter clearly describes the concept of content analysis method that has been used to analyse research data. In addition, it presents the related methodological issues regarding this stage (e.g. triangulation, response bias, translation and reflexivity). The results of the content analysis are presented systematically in six sections in this chapter. Each section considers the evidence for one of the six research questions, as follows:

RQ7: What qualitative primary themes can be extracted from the interviews?

RQ8: What qualitative primary themes describe obstacles to BL?

RQ9: How do the quantitative survey dimensions compare with the qualitative primary themes?

RQ10: Do the qualitative primary themes vary with respect to the groups of participants?

RQ11: What qualitative sub-themes are concerned with obstacles to BL?

RQ12: What qualitative sub-themes are concerned with solutions to the problems?

The qualitative analysis was to interpret the units of communication (i.e. one or more verbatim sentences stated by each participant) applying the methods of content analysis

described by Krippendorff (2004) and Neuendorff (2002). The purpose of the content analysis was to interpret, sort, code, classify, tabulate and analyse the frequencies of each unit of communication, but not to record all the details of what was said, as in the narrative/descriptive analysis. The next stage was triangulation, to compare and contrast the information collected from different sources.

## 6.2 Content Analysis

The content analysis did not involve the testing of hypotheses, but aimed to achieve a more comprehensive understanding of the perceived obstacles to implementing BL at SBEK than could be achieved by statistical analysis of quantitative survey data alone. Unlike the statistical analysis, which summarised the quantitative data obtained using the questionnaire and generalised the results to the population, the qualitative analysis explored the richness, depth and complexity of the obstacles to BL, as perceived by each unique individual, leading to a generalisation of the results towards theoretical propositions. One of the central elements of content analysis is identification of themes. It is also one of the less recognisable elements, because researchers rarely describe the discovery of themes explicitly (Creswell, 2009). The identification of themes to an extent depends upon the researcher's intuition and may be difficult to define as they include ideas, insights and concepts rather than only factual information. Approaches to content analysis may be top-down where pre-defined themes are extracted prior to the interview phase or may be bottom-up where themes are not pre-defined and become apparent during review of interview responses. A bottom-up approach was used in this study. The analysis involved searching for, thematically classifying and coding each unit of communication by interpreting the manifest or latent intentionality of the messages that the respondents conveyed with respect to: their knowledge, experience and

145

understanding of the obstacles to BL; their perceived solutions to the obstacles. Each unit of communication was classified into a primary theme, reflecting the overall manifestation of what was said concerning a unifying concept. Sub-themes were then identified, corresponding to further manifestations, which qualified and extended the primary themes. The direction of each theme with respect to the obstacles to BL was divided into "Yes" or "No" depending upon whether the theme was perceived to be an obstacle or not. The direction of each theme with respect to finding solutions to the obstacles was divided into "Positive" or "Negative" depending upon whether the obstacle was perceived to be solvable or unsolvable.

## 6.3 Thematic Coding

Each unit of communication was coded with an alphabetic code, referring to the primary theme (e.g. BU for Budget and AP for Administrative Plans), followed by a number referring to the sub-theme (e.g. BU1 for Lack of Equipment and AP1 for Plans Imposed by Authority). Each thematic code was identified with a participant, using an alphanumeric code, defined by L1 to L7 for the college leaders, M1 to M10 for the college teachers/member of faculty and S1 to S26 for the students. Sample of coding scheme can be seen in appendix 15.

## 6.4 Triangulation

After the content analysis, triangulation was performed, to identify commonalities or convergences and discrepancies or divergences between the themes extracted from the interview responses and the responses to the questionnaire survey. In social science, triangulation is applied in order to cross-examine data and information collected from a

146

variety of sources. Triangulation aims to make information more credible by demonstrating that information from several sources can be aligned to the same theme. Therefore, that information can be described as more credible than if it had been derived only from one source. The use of only one method can encourage a researcher to be overly confident in that method and its findings. The use of two methods, as in this study, offers a greater hope that the two methods will produce similar information and therefore similar conclusions and mutually support credibility (Creswell, 2009). However, if the data collected from the quantitative and qualitative approaches is inconsistent, then conclusions become questionable. In this way, triangulation can result in conflicting findings because the application of different tools to collect information from different sources does not guarantee equivalent results (Denzin, 2006). This is due to the nature of questionnaires and interviews which necessarily only collect participants' subjective beliefs and perceptions and are influenced by the attitudes that participants wish to present about themselves to others. Such subjective realities are not guaranteed to accurately represent participants' actual beliefs or their real life experience or actions, implying that their responses to both questionnaires and interviews may be biased (Paulhus, 1991).

The primary and sub themes extracted from the collected data were cross-checked with the concepts presented in the literature review so as to be sure that they were consistent with the collected data as regards the challenges of BL. The reason for this step was to test whether the challenges extracted from the categorised themes on this issue aligned with the theoretical framework of the research. Such an approach is judged to have strengthened the findings of the survey by its evidence-based information. Evidently, if the study can produce well-interpreted data, which are coherent with the relevant literature in the research, it will support the reliability of its results.

## 6.5 Response Bias

Response bias is defined as information that distorts or slants the findings of a questionnaire or interview survey because it is intentionally or unintentionally untrue, or is only partially true (Paulhus, 1991). Participants do not always mean what they say. Thus, researchers who use interviews as a data collection method commonly report that they experience response bias, making it difficult to interpret what participants really mean. In this study, it is possible that certain communication styles commonly associated with the Arab culture may contribute to response bias (Abuallam, 2011; Smith, 2004; Baron-Epel *et al*., 2010; Harzing, 2006; Minkov, 2010). Such styles may include a tendency to agree with others or provide socially acceptable responses rather than clearly state personal views; a perception of educational and social status as lower than the researcher and so only reinforcing what they perceive the researcher's opinion to be; or participants may simply be very polite and prefer to avoid argument or social risk-taking and so will provide responses that they think will please the researcher. These types of responses can lead to the information collected being affected by acquiescent response bias (Paulhus, 1991). It is not known which, if any of the responses provided by the participants at the interviews conducted by the researcher in this study could be contaminated by acquiescent response bias. It is possible that a few responses may have been misleading, potentially limiting the reliability of the findings. The researcher therefore had more confidence in evidence that was supported by several sources, rather than information supported by only one source, which could potentially be distorted by response bias. For example, if only one person mentioned an obstacle to BL, then this could potentially be biased; however, if two or more people agreed, then it was more likely to be reliable information. Also, the responses have been revised and approved by the participants, particularly in the focus group interviews to make sure that I did not misunderstand them.

## 6.6 Translation

In a similar fashion to the approach taken with the questionnaire statements and interview questions, recordings made at the interviews were translated from Arabic into English. This was a potential limitation, in terms of differing linguistic and thought patterns, as was the potential for Arabic to English translation problems. Linguistic devices that are indigenous to the Arabic language can only be approximated in English translations, and so there is a possibility that English translations of Arabic responses in interviews may not fully represent all of the potential meaning of the Arabic responses (Abuallam, 2011). However, the interview responses were presented to an Arabic linguistics specialist centre to ensure that the meanings of the translated interviews were accurately conveyed.

I would like to raise the issue of applying inter-rater reliability to analysis. Inter-rater reliability is based on the same instrument being used by two or more raters and therefore is a reliability measure of the extent to which raters agree (Phelan and Wren, 2013). The second rater method was not applied to this study. It was evident that second rater method mainly uses the information obtained during the interviews to come to a conclusion: the behavioural gradation of the participant may have been lost and so this approach is limited (Nordsletten *et al.*, 2013). A specific personality disorder was researched and achieved inter-rater reliability via watching a video of the original interview. Whilst a video can be watched again to gain clarification where required, the video process distorts the behavioural subtleties of the interviewee when compared to the more authentic behaviours shown in face-to-face interviews. This approach resulted in poor observational criteria (Jane *et al.*, 2006). Time is a further issue with using a second rater, as it lengthens the time it takes to estimate homogeneity and correlation between scores. Therefore, this might affect research schedules for students and researchers. In the course of my research,

sensitivity around certain cultural and management themes encouraged me not to use a second rater. For example, some faculty teachers do not wish to be known to have criticised management and some female students want to use blended learning but are concerned about the perceptions of their families. For this reason, I have permission to use the data I have gathered for the purposes of my research only, not to share the data. Where experienced during the interaction with participants, I have attempted to provide a description of expressions, tone or emphasis of the participants while providing responses. This should help the reader to realise the flavour of the interview and responses.

## 6.8 Findings

### 6.8.1 Research question 7:

**What qualitative primary themes can be extracted from the interviews?**

The frequency distribution of the 12 primary themes concerned with the perceived obstacles to BL, extracted from 214 units of communication, are presented in Table 13. All the primary themes were supported by at least six respondents and were therefore considered to be reliable.

**Table 13: Frequency Distribution of 12 Primary Themes Extracted from 214 Units of Communication Concerned with Perceived Obstacles to BL**

| Primary Theme | Frequency | Percent |
|---|---|---|
| 1.Attitudes | 40 | 18.7% |
| 2.Qualifications/Skills | 26 | 12.1% |
| 3.Administrative Plans | 24 | 11.2% |
| 4.Culture & Traditions | 22 | 10.3% |
| 5.Budget | 20 | 9.3% |
| 6.English Language | 18 | 8.4% |
| 7.College Environment | 14 | 6.5% |
| 8.Workload/Class Size | 12 | 5.6% |

| | | |
|---|---|---|
| 9.Computer Laboratories | 12 | 5.6% |
| 10.Technical Staff | 12 | 5.6% |
| 11. Internet Access | 8 | 3.7% |
| 12. Training Courses | 6 | 2.8% |
| Total | 214 | 100.0% |

Positive or negative attitudes comprised the most frequently observed primary theme (18.7%) followed by the Qualifications/Skills of faculty and students (12.1%), Administrative Plans (11.2%) and Culture and Traditions (10.3%). Obstacles associated with Budget, English Language, College Environment, Computer Laboratories, Faculty Workload /Class size and Technical staff each represented between 5% and 10% of the total number of primary themes. Internet Access and Training Courses each represented less than 5% of the total number of primary themes.

### 6.8.2 Research question 8:

**What qualitative primary themes describe obstacles to BL?**

The primary themes were divided into those that were perceived to be obstacles (coded as Yes) and those that were perceived not to be obstacles (coded as No). Of the 146 responses that were coded as Yes, the primary themes that were most frequent were Administrative Plans (14.9%) and Qualifications/Skills (12.2%) closely followed by Budget, English Language and College Environment (9.3%). The primary themes that were perceived to be the least frequent obstacles to BL were Training Courses (4.0%) Attitudes (2.7%) and Faculty Workload/Class-size (2.7%).

**6.8.3 Research question 9:**

**How do the quantitative survey dimensions compare with the qualitative primary themes?**

One of the main differences between the questionnaire and the interview responses was that, at the interviews, a high proportion of the responses were concerned with the positive or negative attitudes of the participants towards the implementation of BL, whereas the questionnaire focused directly on only five dimensions of obstacles to BL. An attempt was made to triangulate between the quantitative data, based on the frequency distributions of the questionnaire responses and the qualitative data, based on the frequency distribution of the interview responses (Table 14). Based on the questionnaire responses, the perceived challenges to BL were ranked in order of grouped median score as follows: $1^{st}$ = FINANCIAL and ADMINISTRATIVE (median = 4.00), $2^{nd}$ = CULTURAL (median = 3.78); $3^{rd}$ = TECHNICAL (median = 3.57), $4^{th}$ = SKILLS (median = 3.57) and $5^{th}$ = ACADEMIC (median = 3.44).

**Table 14: Triangulation between Quantitative Survey and Qualitative Primary Themes**

| Dimension | Questionnaire | Interviews |
|---|---|---|
| | Median score | Percent of "Yes" codes for Primary Themes |
| FINANCIAL& ADMINISTRATIVE | 4.00 | Budget = 9.5% <br> Administrative Plans = 14.9% <br> Total = 24.4% |
| CULTURAL | 3.78 | Culture and Traditions = 8.1% <br> Total = 8.1% |
| TECHNICAL | 3.57 | Computer Laboratories = 8.1% <br> Technical Staff = 6.8% <br> Internet Access = 5.4% |

| | | Total = 20.3% |
| --- | --- | --- |
| SKILLS | 3.57 | Qualifications /Skills = 12.2% |
| | | English Language = 9.5% |
| | | Training Courses = 4.1% |
| | | Total = 25.8% |
| ACADEMIC | 3.41 | Faculty Workload/Class-size = 2.7% |

Based on the interview responses, the five dimensions concerned with the perceived obstacles to BL were ranked in a different order, based on the percentage of Yes codes associated with the primary themes as follows: 1st = SKILLS (25.8%); 2nd = FINANCIAL and ADMINISTRATIVE (24.4%); 3rd = TECHNICAL (20.3%); 4th = CULTURAL (8.1%) and 5th = ACADEMIC (2.7%). Lack of skills was high on the list of obstacles discussed at the interviews, because a high frequency of the responses focused on the perceived low levels of Qualifications/Skills of some of the faculty and students and also their limited use of the English Language. In the questionnaire, however, most of the respondents agreed that skills in the use of multimedia and electronic teaching methods were a low challenge (median = 2) whereas reliance on English and lack of training opportunities were high (median = 4) or very high (median = 5). These findings represented a lack of consistency between the responses to the questionnaire and the information elicited from the interviews with respect to the perceived technical skills and qualifications of the staff and students. The high median scores for the questionnaire items and the high frequency of interview responses converged with respect to the FINANCIAL and ADMINISTRATIVE dimension. The responses to both the questionnaire and the interviews reflected that financial and administrative issues were near the top of the list of important obstacles. The median scores for the FINANCIAL and ADMINISTRATIVE dimension in the questionnaire ranged from 4 to 5 (high to very high)

among the students, 3 to 4 (unsure to high) among the teachers and 2 to 5 (low to very high) among the senior management. At the interviews, almost one quarter of the responses that were concerned with obstacles to BL (24.4%) emphasised the inadequacy of the budget and the failure of the administrative plans. Challenges related to culture and traditions were rated second in importance using the questionnaire, but were not considered to be so important at the interviews. The median scores for the CULTURE dimension in the questionnaire were 3 to 4 (unsure to high) for the students and teachers and consistently high (median = 4) for the senior management. In contrast, at the interviews, only 8.1% of the responses were concerned with obstacles associated with culture and traditions. In the questionnaire, most participants perceived that the TECHNICAL dimension was a moderate to high obstacle to the implementation of BL. The problems posed by getting help from the technical team and raising the number of technicians were considered to be high (median = 4) or very high (median = 5). The senior management and teachers perceived that accessing the Internet was a low implementation challenge (median = 2) whereas the students perceived it to be high (median = 4). At the interviews, there was also a high frequency of responses (20.3%) expressing concern with the shortage of Computer Laboratories (8.1%) the slowness of the Technical Staff in responding to problems (6.8%) and the limited Internet Access at the college (5.4%).

The median scores for the ACADEMIC dimension in the questionnaire ranged from 3 to 4 (unsure to high) among the students and 2 to 4 (low to high) among the teachers and senior management. Relatively few of the interview responses, however, were concerned with perceived obstacles associated with academic issues (2.7%). There was some concern from the teachers about the increase in Faculty Workload/Class-size. In comparison, in the questionnaire, about one third of the respondents agreed that high student numbers impeded

the implementation of BL.

**6.8.4 Research question 10:**

**Do the qualitative primary themes vary with respect to the groups of participants?**

The frequency distribution of the Yes and No codes for the perceived obstacles varied between the three groups (Leaders/Management, Teachers/Faculty and Students) who participated in the interviews (Table 15). The groups were relatively similar with respect to the themes that they perceived were not obstacles (about one third of the themes were coded as No). The percentages of the Yes codes indicated that the Teachers/Faculty perceived the highest proportion of obstacles (43.5%) followed by the Leaders/Management (30.4%) and the Students (26.1%) who perceived the least. In comparison, the analysis of the questionnaire data indicated no statistically significant differences between the students, teachers and senior management with respect to their responses to the items concerning obstacles to BL.

**Table 15: Frequency Distribution of Yes and No Coding for Perceived Obstacles to BL**

| Respondents | Perceived Obstacle | |
| --- | --- | --- |
| | No | Yes |
| Leaders/Management | 22 | 46 |
| | 34.2% | 30.4% |
| Teachers/Faculty | 24 | 62 |
| | 34.2% | 43.5% |
| Students | 22 | 38 |
| | 31.6% | 26.1% |
| Total | 68 | 146 |
| | 100.0% | 100.0% |

**6.8.5 Research question 11:**

**What qualitative sub-themes are concerned with obstacles to BL?**

The frequency distribution of the sub-themes extracted from the interview responses concerned with obstacles to BL are presented in Table 16. The sub-themes extracted from the statements of two or more respondents are emphasised, because they are more likely to be reliable. A sub-theme extracted from a unit of communication provided by only one person may be biased, or represent an extreme viewpoint. Consequently, the emphasis on certain themes in preference to others was not based on my own personal viewpoint, but upon the consistency and reliability of the available information, indicated by the frequencies of the responses. Within the primary theme of Attitudes, which was the most frequent, only four responses were coded as Yes, reflecting the unwillingness of four participants to participate in BL because of negative attitudes. In contrast, a large number (36) of the responses were coded as No, reflecting no obstacles and implying a high level of optimistic attitudes about BL.

**Table 16: Frequency Distribution of Sub-themes Concerned with Attitudes to BL**

| Primary Theme | Sub-theme | Frequency | Perceived Obstacle | |
| --- | --- | --- | --- | --- |
| | | | Yes | No |
| Attitudes | Willingness | 12 | 4 | 8 |
| | Flexibility | 8 | 0 | 8 |
| | Communication | 6 | 0 | 6 |
| | Enthusiasm | 6 | 0 | 6 |
| | Motivation | 4 | 0 | 4 |
| | Pedagogic | 2 | 0 | 2 |
| | Student satisfaction | 2 | 0 | 2 |
| | Total | 40 | 4 | 36 |

Most of the responses indicated positive attitudes to the advantages of using BL, which was very useful for them in their different levels of study. L2 said:

> *'Blended learning is an interesting factor that links the student with the content. It increases students' skills and drives teachers to look for new things to speed up the learning process. Moreover, it can increase our ability to review new studies and increase the interaction between students and their knowledge.'*

L1 added

> *'I think it saves time and effort as well as contributing by collecting and retrieving information easily combined with the ability to exchange information rapidly.'*

Both respondents mentioned positive attitudes resulting from BL, including new skills and faster retrieval of information. This seemed to have a positive impact on willingness, communication and flexibility in line with some of the themes identified in Table 4.

A teacher specialising in BL, who had taught students in the previous year before conducting a study, remarked:

> *'[My] study to compare the effect of blended learning on achievement used two groups. One of them studied with blended learning. The findings were encouraging, showing differences in achievement in favour of the blended learning group. Even their satisfaction was higher.'*

S3 was optimistic:

> *'I'm a married student with children and other social commitments and I suffer when I have to attend daily lectures for long periods. This affects my life and my family, so my experience with blended learning is very encouraging, as I can do my work and communicate easily as well as finding the information I need on site.'*

She added:

> *'If I don't understand something when I am at home with my children and husband, I can send an e-mail or communicate with colleagues on the net, noting that this way costs little and*

*it's faster if we want to study for exams or exchange opinions.'*

S3 mentioned the flexibility aspects of using BL, whilst working from home. It allows her to communicate when required using asynchronous methods that could be easily continued if required. This feeling of flexibility was not an isolated incident but is further backed up by M7 below from a different perspective. M7, while remembering his graduate studies in the United States of America and how BL reduced time and effort while at the same time feeling sorry for the situation in the college, said:

> *'At the time of my graduate studies I was living in an area 45km from the university. The teacher always sent us an e-mail or a message if he wasn't coming, that was all. Imagine, here I can't communicate with my students to apologise so they come all the way here and must suffer because of the distance and waste of time.'*

S5 smiled:

> *'For me it was an interesting thing, there were many media in my education. I saw videos on the sites and I took part in forum dialogues. This type of learning motivated me and linked me with my colleagues inside and outside the college.'*

S1 said:

> *'It was fun and I liked it and I was better at it than on a traditional course where I used to play with my telephone or look out of the lecture-room window because I had to sit for two hours without participating. How can I achieve anything on a course that I hate?'*

S5 and S1 commented that pedagogy bridged by a variety of media can enhance students motivation; it can further provide perspectives that allow students to discover concepts in an abstract way. Alsalem (2009) also mentions a coincidental increase in interaction and contentment. On the other side of spectrum we have boredom that can creep into the mind of students. It is paramount for any teacher to remove such negative attitudes in the classroom by engaging their learners. M6 identified the issue of boredom that can possibly be alleviated

158

using BL as part of the pedagogical approach:

> *'I think this method facilitates the teacher's work and increases the interaction with students because using only one teaching method is boring. I think that e-learning beside the traditional methods will be interesting and motivating.'*

S19 added another perspective on the advantages of BL:

> *'For me as an employee, blended learning with its different tools gave me freedom to choose the time and place of study and contributed in organising my time. Through the site I can easily study in my free time; it is flexible in the selection of time and activities.'*

Most of the respondents agreed that BL contributed in one way or another to enhancing their achievement and the scores in the course were high. S19 felt that the flexibility offered by BL increased her enthusiasm and motivation to study further. Flexibility is a powerful theme that relates to respondents in different ways, invoking mind-sets that feel more positive (Graham, 2006; Sharpe *et al.*, 2006).

S15 said:

> *'I think this strategy had helped in increasing my achievement because of the flexible studying environment and the different teaching methods that met my needs as a young student.'*

S9 added

> *'Blended learning gives a wealth of information. In the past we were restricted to one book that we had to study for exams - this was the only goal we had. But with this course I can increase my knowledge and look at different resources for one subject. The teacher explains the topic and then we go to electronic sites for enrichment.'*

S9 relates the views back to pedagogic underpinning that engages the students in different ways; this case provides an argument for `scaffolding` where the learner reinforces concepts related by the teacher but further explored through independent study via BL (Alsharhan,

2011). But with these advantages I also found other responses regarding the high positive attitudes to BL. This was clear from the optimistic answers and the smiles on the respondents' faces, as well as their increased confidence.

When I asked a faculty member about his attitude to BL, M5 said with a smile

> *'I love this type of learning and I used it in my teaching when I was abroad. I think students are eager and I can tell this from my past experience. They always compare themselves with other students in the University of Kuwait, and my experience with students tells me that 90%-95% of the attitudes are positive. Most of them want blended learning.'*

M5 makes a clear distinction about the drivers for BL, one of them being a demand from the students. This might strengthen the idea of student-centred learning.

BL can break down the barriers of communication as observed by S2 where a person may be an introvert, but with the help of technology such learners can express their thought and contribute to group activities.

S2 said loudly and enthusiastically,

> *'My experience with blended learning material is great. The teacher set topics for discussion on forums, and I saw the students' awareness. You know that some people are shy in face-to-face discussions, but I felt a positive contribution not only a passive one. I feel more confident now.'*

In contrast to these positive attitudes to BL in the college some female students, including S1, said:

> *'I prefer the traditional method with or without motivation. I don't prefer technology because I am not good at it and don't like it.'*

The negative attitude may be ascribed to the lack of computer skills among students; as S11 said:

> *'I don't like to use modern devices and I forget how those things work. When I study a course I want to be good at it because I don't like it.'*

160

The negative attitudes seemed to originate from a resistance to change. This could be resulting from a deficiency in ICT skills or lack of confidence. Some of the teachers seemed confident with the approach, but the resistance to change could be due to other factors that they don't wish to disclose. With regard to participants' willingness in the future to use BL in their learning or even teaching, the reactions and responses were encouraging. They wanted to use it as soon as possible, imagining that if they were decision makers they would hasten to implement it.

L4 said:

> *'For sure I am going to interact with it, this increases one's confidence and skills.'*

L3 said:

> *'If it was my decision I would implement it directly.'*

S3 said:

> *'I want it in all courses from now.'*

M9 said:

> *'Integrating electronic learning will be an important issue for the development and progress of our college.'*

The interviews gave the participants a valuable opportunity to openly express their willingness and enthusiasm to implement BL at the college and to discuss its benefits, such as flexibility, elevated levels of satisfaction, motivation, communication and pedagogic advantages. Consequently, the interview responses were instrumental to this mixed-method study because they provided insights into the mainly positive attitudes of most of the respondents towards the implementation of BL that were not elicited using the questionnaire. Statistically significant differences were identified between the students, teachers and senior management with respect to their median responses to the ATTITUDES dimension in the

questionnaire. The grouped median score for the senior management was 4.67, reflecting a very enthusiastic attitude towards BL relative to the students and teachers, whose grouped median scores of 4.11 and 4.13 respectively reflected relatively less enthusiasm. This difference between the three groups of participants was not evident in the interview responses, where only four respondents lacked willingness for BL. With this one exception, all three groups of interviewed participants expressed positive optimistic attitudes towards the implementation of BL.

**Qualifications/Skills**

Faculty members of higher education institutions represent the educated class in society, so people do not look at them as they look at the holders of other jobs. The faculty member has many advantages socially and financially compared with those in other educational positions and they are therefore required to be innovative and hard working.

Through the interviews and the analysis it was clear that few of the participants believed that any lack of skill in the faculty members, in the technological domain in particular, prevents them from integrating BL in the SBEK. Within the theme of Qualifications/Skills, which was the second most frequent, six responses were coded as No, reflecting that few participants believed that the qualifications and skills of the staff were not perceived to be an obstacle (Table 17).

**Table 17: Frequency Distribution of Sub-themes Concerned with Qualifications/Skills**

|  |  |  | Perceived Obstacle | |
| --- | --- | --- | --- | --- |
| Primary Theme | Sub-theme | Frequency | Yes | No |
| Qualifications/ | Younger faculty have technological skills | 6 | 0 | 6 |

| Skills | | | | |
|---|---|---|---|---|
| | Job security and evaluation of faculty | 6 | 6 | 0 |
| | Older faculty do not have technological skills | 6 | 6 | 0 |
| | Students do not have technological skills | 4 | 4 | 0 |
| | Student admission criteria are too low | 2 | 2 | 0 |
| | Students need refreshment courses | 2 | 2 | 0 |
| | Total | 26 | 20 | 6 |

It was perceived that most of the younger faculty had the technological skills to cope with BL. Most of the responses (20, 77%) were coded as Yes, reflected that the qualifications/skills of the older staff and/or students were considered to be obstacles. Six responses were concerned with older teachers not being as skilled as the younger teachers. Six responses pointed out that many teachers felt secure in their jobs, irrespective of their lack of technological skills because they were not evaluated. The other responses were concerned with the lack of technological skills of the students, the admission criteria for students are too low and that students need refreshment courses (Table 19).

Faculty teachers are divided into two categories: the majority, who have studied abroad in the last decade and the graduates from Arab countries, who have worked in the school for more than 15 years. The latter number is declining, due to the policy of the college to give scholarships for study in Western countries only.

L5 from the administration answered with confidence

> *'For me as a leader in the school I might say that 70%-80% of the faculty are qualified because they are young and have graduated from the best universities in the United States, Britain and Australia, where they experienced blended learning and I think they have no problem in that, I think simple training courses will qualify them more for this project.'*

L5 added that the second category of teachers,

> *'...were old teachers [who had worked with traditional teaching methods for more than 15 years.] I think they will find*

*a real difficulty in using electronic learning because they have
lost the skills and it will be difficult to change them.'*

The time frame referred to by L5 was an era where BL was relatively unknown even in the

West. This would mean that colleagues that appear to have lost the skills may not have ever

acquired them. L7 confirmed that the college administration accepted the principle that the

teachers who had graduated from foreign universities could tackle electronic learning, but

with a mixture of enthusiasm and regret he continued

> *'The previous administration did well by forcing all new
> teachers to obtain the international computer driving license,
> ICDL, in order to qualify as teachers. However, I am sorry to
> say, due to political and social pressure old teachers were
> excluded from this decision.'*

In the first instance, logic indicates that many of the students interpreted the limited use or

failure to use this technology as a sign of shortage of skills. S23 said:

> *'Why they don't use technology? They are not good at it '*

S3 added with annoyance:

> *'Yes, for two years I didn't use e-mail in my education. What is
> the problem with the faculty members?'*

The issue is not only the technological skills of the faculty members obstructing BL but their

willingness to apply it. This may of course sometimes be linked to skills, recalling the above

division into the categories of graduates of an American or British university, as a source of

prestige, or graduates of an Egyptian or Jordanian university, with less prestige. The same

categorisation will remain while there are new teachers and old teachers. M6 said:

> *'The problem of old faculty members being unconvinced by
> electronic learning or even computer technology is that they
> are not good at it and afraid of change. They have no
> experience of using technology in education and so resist it,
> considering the unknown as an enemy.'*

Some of the respondents consider that even if technological skills and persuasion were no

problem, there would be others, as L1 said:

> *'The skills of the faculty are very good, though I suppose they are qualified – but the challenge is the job security they feel and the high living standards as well as the absence of real control and evaluation.'*

M9 added

> *'The security status felt by faculty and top management and the absence of a clear system to reward the hardworking and punishing the lazy make all feel the college as his own and they can do anything they want'.*

What can be added from this quotation and from my experience in the college is that faculty members are not obliged to do anything except give lectures. However well he teaches, or how good an impression he makes on students and how well he understands them, or how much research he does, nothing else matters to the school.

With regard to the student respondents in the sample it can be said that they generally believed that they needed to develop their skills and enhance their achievement level (Zhao *et al.*, 2002; Alkandari, 2011). However, they do not suppose that the integration of electronic learning is the only step in development. Part of the sample thinks that the students themselves pose a challenge to the introduction of BL because there are so many of them. Meanwhile, most of them confirmed their high opinion of students' technological abilities, since it is part of their education these days.

 L1 said, regarding student admissions and required GPA:

> *'The general environment is a traditional one which prevents the implementation of this strategy for many reasons, such as the huge numbers of students. The admission criteria are too low because of political considerations. The rates are 75% for girls and 70% for boys. You are talking about 4000-5000 students each year, and this is a very high number.'*

About technological skills of applicants, S16 said:

> *'I think students have good technological skills in general.'*

M8 added

> *'I think students are better than teachers now at using technology. Students have practised with different types of technology during their study courses; they never stopped until they entered this college.'*

Moreover, he added,

> *'Students might need refreshment courses or specialised ones since they haven't used it for one reason or another for more than three years..they might need refresher courses especially considering the rapid developments in technology.'*

There was acknowledgment by students and staff regarding the technological skills that students have on entry. These are generally acquired through societal use of technology as a communication medium. This is not enhanced further by the college for students learning. Triangulation revealed that the interview responses were consistent with the questionnaire, with respect to the perceived lack of technological skills of the staff and students. The majority of respondents (62.8% of the teachers and 68.8% of the students) disagreed with the statement that "I have good skills in the use of electronic teaching methods".

**Administrative Plans**

The respondents' answers suggest that the support of management is an essential and fundamental need for any educational project, for without an enlightened and planned administration there will be no effective, successful and continuous work. Therefore, the absence of such support, according to the sample, is a challenge to any effective developmental work in any organisation, not only in the technological field. The sample saw many ways in which administrative support was lacking. Within the primary theme of Administrative Plans, no responses were coded as No, reflecting that the ways that the

administrators planned the future of the college were unanimously considered to be obstacles (Table 18).

**Table 18: Frequency Distribution of Sub-themes Concerned with Administrative Plans**

| Primary Theme | Sub-theme | Frequency | Yes | No |
|---|---|---|---|---|
| Administrative Plans | Procrastination/Complications | 18 | 18 | 0 |
| | Instability of administrative staff | 2 | 2 | 0 |
| | Plans are college responsibility | 2 | 2 | 0 |
| | Plans imposed by authority | 2 | 2 | 0 |
| | Total | 24 | 24 | 0 |

Of the 24 responses associated with this theme coded as Yes, 18 of them reflected that there was much procrastination and many complications when dealing with the college administration. Two participants were concerned with the instability of the administrative staff over a time of changing policies. There was a disagreement between four respondents, two of whom suggested the plans were the college responsibility and the others suggested authority imposed them. The absence of a known strategic plan in the school is clear. In addition to many studies, most of the respondents felt that every educational or non-educational institution in the world must have a strategic plan and a clear mission; and there must be other executive plans to carry out the strategic plan (Garrison and Kanuka, 2004; Alsawi, 2011; Hossamo, 2011). Further, the sample thinks that the college must have annual plans in addition to the strategic plan, one leader in the school (L6) said, in this regard:

> *'I haven't heard of any strategic plan and I haven't discussed any. I think these plans must be imposed by the authority since it controls the funds for our school.'*

L2 added regretfully:

> *'I've been a leader and department manager for a year and I say there is no clear administrative plan at all. As a teacher*

167

*here for years, I didn't see any such thing. It is something dangerous and difficult to carry through. I think the administration would need a long time to evolve a plan [but if it did] then it would be convinced of the value of projects like blended learning.'*

M5 disagreed with the responsible people who blame the authority, as the sponsor of the college, for the absence of such plans:

*'Honestly, I have never heard of any such plan in the school since I was recruited. The administration must bear its responsibilities and not blame the authority. The authority is only a financial source organising the distribution of the budget to the college, whereas the responsibility for the misuse of money and lack of planning lies with the college itself.'*

A small portion of the sample was reluctant to express an opinion and claimed that plans existed, the problem lying in their execution, since coordination meetings and workshops are held to coordinate work, priorities and goals. However, none of this ever gets put into action, so what begins as a planning problem ends as a problem of implementation at the end. L5 said:

*'Plans exist and we work accordingly, but I'm afraid when it comes to implementing them, everything stops. For example, we started a curriculum and courses development plan and we worked hard for 3-5 years to prepare it. But we were surprised after finishing the work that all this effort was locked away in a drawer with no decision to implement it or even without any logical justification. The problem is the seriousness of the administration.'*

When I asked him, 'Did they provide the faculty or even top management with any plan?', he shyly answered 'No.' One of the administration problems agreed on by the faculty members is the absence of a unified standard to deal with teachers and their requirements. The presence of many standards is attributed to tribal relationships or to mutual interest, but there is no institutional set of standards aspect based on work needs. M5 said:

*'Recently, yes, I applied electronic learning in its most primitive form because that's the only material in the school.*

*This was a personal initiative of my own. I asked for a server to load my modules on and the administration told me that one was available. After six months I asked again for the server, but now they told me that it was unavailable. As I know how things go in the college I went to an influential person who intervened personally on my behalf. The administration approved my request even though it was late. They gave up and I think their attitude has no credibility at all.'*

The problems of the administration do not end there. In addition to double standards and a lack of credibility, deliberate procrastination and complications prevent the rights of the faculty from being granted.

M6 said with extreme anger:

*'...when I was appointed to the college I went to collect my computer. The administrative section that is responsible and must know the needs of teachers and students didn't give us our computer because their staff doesn't know us. The system they use is not entitled to give out information so they asked for written permission from top management to deliver the computer. This is a defect and an administrative as well as technological delay for a department known to operate computers. I could have taken away a computer by making one call, but I tried to follow the rules and regulations.'*

M2 summarised the previous by saying with annoyance:

*'To approve any suggestion you need the following: kissing the nose of somebody then taking his signature, and other signature, and other signature then you must convince this and that. Where is the order? Where is the management, are we still under the tribal system?'*

Kissing nose is a tribal custom that expressess one's need of urgency when making a request.

Questions were raised about the failings in this educational institution and the administrative crisis that will affect the coming generation. The sample indicated that the political situation in the country has led to a new generation of decision makers, which in turn has led to instability for the administrative staff resulting in distraction from their work. Each

administration looks to gain credit for itself by rejecting all the efforts of previous administrations, instead of looking to the general order; all this leads to a major challenge to the project of BL, the sample pointed out. M4 said:

> 'In the past, the previous administration tried to make a comprehensive plan to develop the college and there were meetings listing the needed headlines. However, those efforts ended with the changes in the administration, the team could not continue when a new administration doesn't build on the efforts of the previous one, even for projects that were 90% complete. It was cut short because the previous administration hadn't lasted long. Each new one only works to correct the mistakes of the one before or to gain glory for itself.'

One of the most serious administrative defects agreed upon by most of the respondents – which showed extreme reservations about it – is the issue of the slowness and bureaucracy of the administration, as well as the tendering system which takes so much time that it squanders the effectiveness of some programmes and projects (Adas and Abu Smais, 2011). In the view of the sample, the school, like the rest of the public sector, faces many difficulties in implementing BL. M5 said:

> 'The course documents and tenders system take a long time to award any project to a particular company. Each tender takes from six months to a year and if it takes longer we need to submit the project again, as happened with a construction project in a school… I think this is a dangerous administrative aspect.'

A faculty member confirmed this point by considering this system as a defective one, even with plans, strategies and budgets; if these things are related to this system they will all be useless and will not achieve any goals. M6 illustrated this:

> 'Imagine if we asked for essential things for blended learning such as white-boards, computers etc. under this system. In my experience we would wait for two years until they approve a tender in that financial year. This would mean that new equipment would have reached the market by that time, in addition to the time wasted for students and teachers.'

S17 was puzzled by the lateness in adopting BL. He considered his status and that of his colleagues:

> *'Time is a big constraint for any project and this [i.e. what we are receiving] is not education and there are many institutions in the country. I want to practise this type of learning before I finish study, if not me, the next generation, we want actions not words.'*

M2 commented ironically on the weak and bureaucratic procedures for any action in the college:

> *'There is a course of documents and a routine that kills innovation and projects. Receiving a personal computer needs the signature of more than 7 people. So what will happen if we want to apply electronic learning in a modern form? In the current situation I think it is a dream.'*

Complexity is further added when authorised signatories cannot be found in their offices, this could lead to several visits for each signature, cumulating several hours of paid staff time. However, the procedures needed by a top management member when he wanted to hold a conference were even more dismaying; his words convey his frustration:

> *'I had an idea to hold a conference on the level of the science department to discuss more development. The administration told us that they would provide everything, even holding the conference abroad and in the most important universities. But the number of complicated procedures for seeking approval surprised me. The issue even went as far as the ministers' council. I realised that the whole issue was following a killing routine and that approval was granted on the basis of favouritism.'*

**Culture and Traditions**

Most of the participants consider the society to be a conservative Islamic one, founded on the Islamic religion in its rules and dealings, together with Arabic traditions passed from one generation to another. Although these traditions and customs may change with time, most of

the people observe and follow them and the aim of my question was to explore whether the culture of the society as represented in its religion, traditions and customs may form a barrier to using technology in education or integrating BL in the SBEK. Most of the respondents think that the culture of the society is a challenge since it is a closed society. But some of them believe that the society has passed this issue and religion does not prevent this development, despite some traditions of the Bedouin family; dealing through e-mails or the Internet is, however, not a problem at all.

Within the primary theme of Culture and Traditions, ten responses were coded as No, reflecting that gender differentiation and open communication were not perceived to be obstacles (Table 19). Twelve responses coded as Yes, however, were conflicting and expressed concern about the difficulties of maintaining gender differentiation in a BL environment. Only two respondents considered unsuitable Internet content to be an obstacle.

**Table 19: Frequency Distribution of Sub-themes Concerned with Culture and Traditions**

| Primary Theme | Sub-theme | Frequency | Yes | No |
|---|---|---|---|---|
| Culture and Traditions | Gender differentiation | 14 | 10 | 4 |
| | Open communication | 6 | 0 | 6 |
| | Unsuitable Internet content | 2 | 2 | 0 |
| | Total | 22 | 12 | 10 |

L1 told me with religious examples that according to his experience:

> *'...there is a kind of embarrassment in some issues related to the interaction between male and female students, as there are some people who reject this. Even in the Western world there are restrictions about this issue. It is an intrinsic matter – not leaving a man and woman alone or you will find the devil their third partner. There must be restrictions and everyone knows his limits. Nothing must be open for everything.'*

He added:

> *'The evidence for my words is that there is a campus for males and another campus for females. All this is to reduce the interaction between the two. This must be taken into consideration in the case of electronic learning.'*

L1 seems to be undermining the notion of professionalism in teaching and is making an assumption that any contact will lead to unprofessional behaviour. After talking about the religious domain, M6, a female faculty member confirmed this:

> *'You can't control this. Aysha (the Prophet's wife) said that the best thing for a woman is not to see a man. As a female teacher I've taught my female students that looking men in the eye will reduce shyness. For me this is a religious thing but the conditions of the country require male teachers and this is a well-known disadvantage.'*

However, she was not so critical of the effect of letting males and females mix in public:

> *'Mixing when others are around is not bad but allowing a man and woman to be alone together is bad. Modern technology may lead to this so I reject it because our society does.'*

L1 and M6 seem to assume unprofessional conduct, but M6 feels that direct interaction in private could lead to unacceptable behaviour. However, media such as discussion boards would actually mimic communication between male and female in public. This would reduce the argument for the prohibition of all form of interaction using technology.

M1 talked about his experience as the effect not of religion but of social habits where a woman's independence is reduced:

> *'It is not the religion but the traditions that we must change according to the religion. Imagine me teaching a group of female students whose husbands don't allow them to have their own e-mail but instead use the husband's inbox.'*

However, one of the most important things I concluded from the responses is that the responses divided into two on this question. In my experience, most female students who come from Bedouin tribes or live in areas which have little experience of technology never

interact or participate very effectively even in interviews, not because they would prefer not to but due to the pressure of family, husband and society. In contrast, urban families tend to give daughters more freedom for controlled interaction with the other gender even if the family is a religious one. All the female students whom I met in different locations wore the Niqab. For example, S8, one student who was very religious, said:

> 'Yes, I don't feel that there is anything in the Islamic religion forbidding my communication with my male teacher through the Internet but there are wrong habits which would make this electronic communication the wrong thing to do without supervision. My parents and brothers have a mistaken mental image that the Internet is a devastating thing.'

S5 described the case of some female students:

> 'In some families female students are prevented from dealing with male teachers. Some of them are even afraid of asking male teachers questions and this affects their achievement. What will happen in case of technology? For me, I totally don't agree on this issue.'

M1, who has experience of integrating electronic learning in the college and the problems which this raises with the administration, said:

> 'Through my own efforts I tried to use electronic learning via the Internet in my education for females but I was surprised when a complaint was made against me in the administration by some parents, worried that my conduct might do damage. This is a great challenge.'

Yet others considered that traditions and customs are not a challenge to this project or to communication through the Internet, in particular for the current generation. They think that we have solved this problem because it exists only for the older generation. L5 said:

> 'There is nothing to surprise this generation of families, I think parents in this generation have gone past the old perspective.'

M2 added:

> 'I don't think that there is a person in the meantime who doesn't have an e-mail address. I think the positives of the

> *Internet are more than the negatives and our society has gone beyond this suspicion.'*

M4 said:

> *'I think our society is open today. Even parents accept the technology now everyone has an i-Phone or Blackberry.'*

S17 added:

> *'As a female student, I can see that these traditions and customs have a limited effect and the society is mainly open but with certain restrictions.'*

Another issue is the effect of religious views on the curriculum and educational content (Alsharhan, 2012). Some religious students, both male and female, reject things, which threaten to oppose Islam and this calls for a deep study of such issues before implementing BL. S14 said:

> *'I hope that in blended learning there will be no music, dancing or bad women in any electronic activity or in any educational content.'*

Triangulation of the interview responses with the questionnaire responses indicated a convergence of views regarding conflicts of opinion regarding gender differentiation. Over half of the respondents agreed that "Social custom in Kuwait will preclude male teachers from direct or indirect interaction with female students outside school" and less than one half agreed that "Because of the unethical content, I found the Internet is a danger."

**Budget**

The budget represents the main pillar in any technological project in educational institutions (Zaiton, 2005; Roger, 2000), for with too little money no project can continue. Within the primary theme of the Budget, four of the twenty responses were coded as No, reflecting the fact that financial aspects were not perceived to be obstacles. (Table 20)

**Table 20: Frequency Distribution of Sub-themes Concerned with Budget**

| Primary Theme | Sub-theme | Frequency | Yes | No |
|---|---|---|---|---|
| Budget | Lack of equipment | 6 | 6 | 0 |
| | No private sector funding | 6 | 6 | 0 |
| | No financial obstacles | 4 | 0 | 4 |
| | Expenditure on unimportant things | 2 | 2 | 0 |
| | Increasing student numbers | 2 | 2 | 0 |
| | Total | 20 | 16 | 4 |

Most of the participants considered that in many ways this is one of the obstacles to the implementation of BL. Sixteen responses coded as Yes, however, were conflicting and expressed serious concern about the difficulties of maintaining a BL environment with a restricted budget. The major financial issues, identified by Aljarf (2004) and Mhehe (2002) and by twelve responses, were the lack of money to buy basic equipment to support BL and the lack of private-sector funding at the college. With regard to the lack of equipment, all responses coded as Yes. Participants agreed that the designated budget for the school was too low to permit BL. They reflected warm enthusiasm for the concept of BL and deplored the weakness of their budget in a rich oil country.

L1 said, very sadly:

> *'In one of the richest countries of the world it seems that the budget is not open. For example, when we ask for printers as faculty members as a right, they tell us "there is no budget".*

M2 added:

> *'Absolutely no, I don't think our budget is big enough. First I think the real needs must be determined and I think those real needs are not studied. To give you one example, my course is in kinetic education and sport training and there ought to be a laboratory, which would cost 200.000 KD. Do you know that I don't have a single piece of equipment to train my students on?'*

Two responses coded as Yes related this inadequate budget to the great size of the college, its many locations, multiple sections and the formidable number of enrolled students. Most of them confirmed that the current budget is not enough to implement BL. L4 said:

> *'As far I know…..no. With regard to the school, I think the budget doesn't fit the abilities and the development we would wish, even on the section level nor the general level, its current status is not suitable.'*

Elsewhere, he added:

> *'The budget is not enough at present for the school's requirements and I think it will not be. I have spent fourteen years in the college and every time we ask for equipment for our section, they say there is no funding for it.'*

L5 explained:

> *'Of course the budget is related to the school size. It is one of the biggest colleges and therefore the budget is big. At the same time, it has to bear the huge burden of the high number of students, more than 15,000 male and female students, and this number may increase dramatically.'*

The issue of the budget goes beyond student numbers; something more dangerous as perceived by the sample, namely, the issue of corruption or the expenditure on unimportant things. This is a misuse of the budget, which goes on purchases irrelevant to the college, faculty and students.

M4 said:

> *'I don't have any connection with the financial issues as I am still new in this job but I notice that many of the facilities and items of equipment that we ask for are not supplied in time. I think if there is a budget it is spent on other things, unimportant things, which are not a priority for me as a teacher or for my students.'*

He became more angry about the poor financing of the school as he went on:

> *'Yes, there is a budget for official missions or faculty conferences or other scientific tasks that in fact don't play any vital scientific role. I think the money goes on tourism and*

> *trivial things – it should be spent on useful things for the college.'*

With regard to the financial constraints mentioned by L5 and M4, expenditure on ICT should be seen as investment. With regards to what was mentioned by M4, BL has been very effective in the West in supporting economies of scale.

In contrast to the extreme position of some respondents, four responses were coded as Yes, reflecting the confidence that the college budget was no obstacle to such a project. They considered it an excellent one. However, some of them connected the budget with the main provider, the public authority in control of applied learning and training.

L7 said:

> *'The budget is open for any development for any person or any college needing to be developed. I don't see any obstacles unless it failed to satisfy the top management in the authority. I don't think there are any financial obstacles in the college to things related to the development of education or to integrating technology.'*

She said, moreover:

> *'I don't see any problems in the budget as I was on the budget committee and another committee related to development. All you need is to list this in the budget from the beginning of the year with an application from the department or the college.'*

M7 confidently added that the authority controlled a large budget but added:

> *'There is no complete financial independence in the college, although I can't think of any financial problem that might hinder the design of any project in the school.'*

From the above comment it is clear that the college has no financial independence, since its financial policy is linked to that of the public authority in control of applied education and training, which evaluates projects before approving or rejecting them.

Through these interviews I found evidence of double standards in dealing with higher

education institutions in Kuwait. Most of the members of top management and faculty members explained that it is strictly forbidden for the school to accept donations or funding from the private sector for any educational or constructional purpose or even for expansion. This prevents the use of any external resources; the source of this prohibition is the civil service bureau to which the college is responsible. Some interpret this as a sign that the budget is believed to be suitable.

M8 said sarcastically:

> *'Any donation or funding from outside the School is forbidden, because they say the official budget is enough. Even if you wanted to buy a computer in your office or a printer with your own money, it would not be allowed either.'*

L5 from his own standpoint explained why the participation of the private sector was forbidden:

> *'... because anyone who gives must take and the school justifies [this rule] by its desire to keep education away from politics. However, a discussion with a faculty member yielded information about the big companies which equip the laboratories and facilities of the Education faculty in the University of Kuwait. These are of course independent from the civil service.'*

I checked this information when visiting the UOF and observed the large size of the donations by companies that had given their names to labs or other buildings. This shows what they want; it is more important than the existence of a marketing team to supervise such activities in the UOF. M9 said with a sigh:

> *'Look at the University of Kuwait, its buildings, its labs, things that make you feel proud and honoured. All these are owing to the help of the private sector. They make our own labs and buildings and classrooms look pathetic.'*

Triangulation of the interview responses with the questionnaire responses indicated a

convergence of views in terms of conflicts of opinion regarding budget issues. The questionnaire data indicated that 53.5% of the teachers and 87.5% of the senior management perceived that "It costs too much to implement BL in our school", whilst 51.2% of the teachers perceived that "The school budget does not cover enough items."

**English Language**

All of the participants concede the importance of using and learning English in education nowadays, since it is a major life skill and most information and Internet engines rely on English. However, not all the sample agreed that proficiency in English was a barrier to the use of BL in the college.

Within the primary theme of English language, only two responses were coded as No, reflecting that two participants believed that English language was not an obstacle (Table 21). Of the 16 responses associated with this theme coded as Yes, 12, 75% of them reflected that both faculty and students at the college had difficulties in using the English language. Four commented that the dominance of the English language on the Internet was an obstacle, although one pointed out that Arabic Internet was possible.

**Table 21: Frequency Distribution of Sub-themes Concerned with the English Language**

| Primary Theme | Sub-theme | Frequency | Yes | No |
|---|---|---|---|---|
| English Language | Students have difficulties | 8 | 8 | 0 |
| | Faculty have difficulties | 6 | 4 | 2 |
| | Internet | 4 | 4 | 0 |
| | Total | 18 | 16 | 2 |

Top management and teachers divided according to where they gained their qualifications: the younger ones with degrees from English speaking countries (showing the policy of the college in the last decade) and the older ones who graduated from Arab countries and have worked in the college for more than 15 years. However, the students' answers do not correspond with this division.

L1 expressed his opinion with extreme confidence:

> *'Most of the faculty has no problem with English language. However, I think students have a real problem in this area.'*

M3 confirmed that not all faculty members are facing this challenge:

> *'I think more than 80% of the faculty are good at English because they studied abroad. The remaining 20% consists of graduates from Arab countries and teachers with 20 years' experience here.'*

A female teacher, M6, admitted this situation and said:

> *'I've been a teacher here for long time. Yes, I am not good at English and this is a problem for me.'*

Like Magalhaes and Ali (2008) who found in their study that English language is an obstacle in implementing E-learning in companies in Kuwait, Some of the respondents said that English language is a challenge for them, preventing them from using the material in libraries and on electronic sites. This will affect the future effectiveness of early years' teaching of English in Kuwait.

M7 said:

> *'Some female students suffer from this problem, and it has been my problem since the first day in the college after graduating from Britain. I asked students to visit some English sites but I was surprised when they told me they were not good at English. How can future teachers face new challenges without this skill?'*

S4 admitted shyly:

> *'I face a problem in using English language, this prevents me from understanding many things on the Internet.'*

M8 added:

> *'The rules of research and modern studies are in English. This is something that can't be mastered by our male and female students.'*

Meanwhile, M9 underestimated this challenge in the solutions that he offered:

> *'English is a challenge because sites and Internet are in English but I know it can be turned into Arabic or given Arabic as a supporting language. I think there is a problem but it is not a serious one.'*

Triangulation revealed that the interview responses were consistent with the questionnaire; where over half of the respondents considered that reliance on English in databases and the Internet form a major obstacle to the use of BL.

**College Environment**

Within the primary theme of the College Environment, no responses were coded as No, reflecting that the poor college environment was unanimously considered to be an obstacle (Table 22).

**Table 22: Frequency Distribution of Sub-themnes Concerned with College Enviroment**

| Primary Theme | Sub-theme | Frequency | Yes | No |
|---|---|---|---|---|
| College Environment | Increasing student numbers | 6 | 6 | 0 |
| | Lack of equipment/facilities | 6 | 6 | 0 |
| | Noise, dust, heat | 2 | 2 | 0 |
| | Total | 14 | 14 | 0 |

Of the 14 responses associated with this theme coded as Yes, 6, 42.8% reflected problems

associated with increasing student numbers and 6, 42.8% were concerned with the lack of

equipment and facilities. Two responses, 14.2%, complained about the noise, dust and heat.

Comparing the UOF with private universities, I found that the SBEK environment is amongst

the biggest challenges to BL for, unlike that of the private universities, it lacked an

environment which could provide psychological relief to students and teachers and induce

them to stay. Students in the SBEK only wait for the end of lectures to escape from the

uninviting atmosphere. The worst features of this are the increased number of students and

the inappropriateness of the study rooms, because they lack not only integrated electronic

learning but also many kinds of equipment. Respondents from all groups felt this. L1 said

with anger:

> 'The current environment is worse than you imagine. How can
> this happen in one of the richest countries in the world? Even
> the table you are sitting at has no drawers or even pens.
> Dusters and so on you must take to class yourself.'

M9 concentrated on the damaging effect of these conditions on his teaching, his flexibility

and creativity:

> 'This environment doesn't allow us to think in a modern way. I
> graduated from one of the best universities in the UK and to
> begin with I was motivated to work, but I was shocked by my
> surroundings. Even now, there are echoes down the halls, dust,
> heat, cold, the air-conditioning doesn't work, the corridors and
> chairs are dirty. This environment doesn't help you to work.'

The participants also discussed how propitious this was for any electronic project and agreed

that it was not suitable at all for the reasons cited above and the big numbers in every class.

L4 explained clearly:

> 'Currently the college environment is not suitable for any kind
> of electronic learning; this means that the source of the
> problems is related to many other aspects. I am talking about
> the admissions policy, which is adapted to satisfying only the

*politicians. Student numbers are increasing dramatically every year.'*

S2 added sadly:

> *'The school building is not suitable in general as the classrooms are not prepared for electronic learning. Even the size of them is not suitable for the student numbers. Classrooms have no curtains to keep the heat down and you can see the reflections of light on the board.'*

M3 was enthusiastic to give details:

> *'Buildings are too old and the general atmosphere in the college is traditional, so it is not possible to implement this strategy for many reasons. For example, the classes are so big – you can find more than 80 students together in one class that lasts three hours. The class is sometimes too crowded for me to use different teaching methods so I use lecturing only. See for yourself.'*

Triangulation revealed that these responses were consistent with the questionnaire, where 70.6% of the respondents agreed or strongly agreed, "Our school environment is not ready yet for BL to be implemented".

**The Technical Issues**

Within the three primary themes concerned with technical issues, only two responses were coded as No, because two participants were pleased with the support of the technical support staff. Of the 32 responses associated with this theme, 30 of them were coded as Yes, reflecting a wide series of problems associated with technical issues, including limited access to computers, the age of the computers, the shortage of computers and lack of printers in the Computer Laboratories (Table 23).

**Table 23: Frequency Distribution of Sub-themes Concerned with Technical Issues**

| Primary Theme | Sub-theme | Frequency | Yes | No |
|---|---|---|---|---|
| Computer laboratories | Limited access to computers | 4 | 4 | 0 |
| | Shortage of computers | 4 | 4 | 0 |
| | Computers are too old | 2 | 2 | 0 |
| | No printers in computer laboratories | 2 | 2 | 0 |
| Technical staff | Slow service | 6 | 6 | 0 |
| | Poor staff training | 2 | 2 | 0 |
| | Quick service | 2 | 0 | 2 |
| | Shortage of technical staff | 2 | 2 | 0 |
| Internet access | No Internet access | 8 | 8 | 0 |
| | Total | 32 | 30 | 2 |

There were also complaints about the shortage of technical staff, their poor training and their slow service. These were identified by several studies (Cuban *et al.*, 2001; Wang et al., 2010). No Internet access on the campus was another serious obstacle for students. This was seen as representing an undervaluing of students and a breaching of their rights in comparison with other students in Kuwaiti universities. I was surprised not by the slow response of the technical staff but by the restricted services for teachers and administrative staff and the ignoring of students. L1 said:

> *'Our technical help for teachers was slow to arrive. If you called them today they came two days later.'*

But other participants ascribed this slow service to the qualifications of the technical team.

L3 said:

> *'They are few in number and not qualified. This is the reason for the delay in answering teachers.'*

M6 added:

> *'There is a big failure in training the technical staff - as teachers we suffer from the delay in answering our requests.*

> *When I had a problem with a computer I went to a private maintenance firm for the repair.'*

M7 told me a personal story:

> *'There is a member of the technical staff in the college but he is too slow. When I was with my students in the show hall, the only hall with "Data Show", we had a computer problem. But though we called the technician and waited for two hours, he didn't show up.'*

However, some respondents praised the effectiveness of the technical staff. L4 said:

> *'My experience with the technical staff is very good, I called them to repair my computer and they came and did the work in two hours.'*

The second technical issue that angered the participants in general and the students in particular was the lack of Internet access in the college. This was also identified by Elhersh *et al*. (2010). Internet access restricted to the offices of teachers and administrators, but not in the classes and halls. I heard many bitter answers about this. When I examined the situation closer I felt sorrow and anger because education here is for the purpose of certification and not for learning.

S9 sarcastically said:

> *'We have no connection with the Internet inside or around the college. The coffee shops have got the Internet but the university hasn't.'*

S23 added:

> *'The situation is bad and shameful – there is no Internet in classrooms or outside. There is no wireless network.'*

Teacher M9 reported:

> *'I was forced to buy a router for the Internet and paid up for the sake of quality in education. I bought a "Data Show" too for the same reason. The situation is very bad.'*

One of the top management admitted this, interrupting to stop me from talking:

> *'There is a big shortage in providing Internet access for the students.'*

The other issue impeding BL mentioned in the responses is the shortage of computer laboratories in the college that would allow students to do their homework or search for more material. S4 said:

> *'We have more than 15,000 students in the college, both males and females, on two campuses. Do you know there are only four computer labs!'*

M9 said:

> *'The recent computer labs are not enough and students are always complaining that they are over-crowded.'*

The issue goes beyond this shortage, which affects students' achievement negatively; these labs are also ineffective and involve unreasonably complex procedures before they can be used. S19 said, hanging his head a little:

> *'The problem is not only the shortage of computers but the fact that they are too old. When one of them stopped working I shut it down and went out because I know the technical staff would not come.'*

S7 added:

> *'As a student I can't use these computers unless a supervisor comes to open the laboratory. If no one comes, we can't use the computers.'*

S6 commented:

> *'The story of computer labs is too long; the lab closes at 4 o'clock. Is this an environment to encourage learning?'*

Another student added an important point with which most of the participants in the discussion agreed. It is the existence in the school of a shop for computers and printing while there are no printers in the computer labs. S19 was astonished to find a shop of this kind when the college could easily bring printers to the lab.

> *'One time I was forced to go to this shop to get something printed. This cost me a lot of money and I suspect that somebody is profiting from this situation.'*

Triangulation revealed that the interview responses concerning technical issues concurred with the questionnaire responses. For example, less than half of the respondents agreed that "Computer labs are easily available in the School" whilst over three quarters complained that "I don't get help from the technical team when I call them" and "The school needs to raise the number of technicians".

**Academic Issues**

Within the two primary themes concerned with academic issues, 8, 44.4% of the 18 responses were coded as No, because some teachers perceived that BL would only be a burden at first. In time, the workload will decline. Four others who believed that BL would increase their workload contradicted this assertion. There were six complaints about the lack of professional development programmes for the teachers (Table 24).

**Table 24: Frequency Distribution of Sub-themes Concerned with Academic Issues**

| Primary Theme | Sub-theme | Frequency | Yes | No |
|---|---|---|---|---|
| Faculty Workload / Class size | BL is a burden at first | 8 | 0 | 8 |
| | BL increases workload | 4 | 4 | 0 |
| Training courses | No professional development Programmes | 6 | 6 | 0 |
| | Total | 18 | 10 | 8 |

The sample is divided in supposing that the integration of BL will lead to an increase in the faculty quorum in the SBEK and consequently challenge the implementation of BL. Some of them fear that BL will increase their traditional workload according to a theoretical

perspective related to the task of communicating with students in the course of electronic learning.

L1 said after deep thought:

> *'I think the high workload due to the increased number of students makes electronic learning difficult, especially because electronic learning requires a lot of interaction with students through e-mails and other means and this will lead to increased pressure of work, hindering the teacher from doing other things like research, or any administrative tasks.'*

M1, a teacher suffering from a heavy workload, answered without hesitation:

> *'For example I teach three courses; each course contains 70 students. Can I communicate with them all without affecting my research work or personal life?'*

In their opinion, those and other examples indicate that any other responsibility imposed on the teacher in the near future with a high number of students would form an additional and intolerable load. This fact leads to the faculty teachers having no time to do additional tasks (Seavers, 2002; Ismael 2009).

In contrast, another group of the sample thinks that BL is a burden for teachers only at first and while the project is getting established, but will not continue to be one. They say that the use of technology will reduce the teacher's load which will facilitate the sending of work and the provision of feedback. Some of the respondents said that even if it is a burden at first, in the end it would do the students the greatest favour, because the state aims to provide everyone with the best possible educational opportunities and the issues of workload and time can be solved later.

On these lines, M4 said enthusiastically:

> *'Frankly the project at the beginning needs follow-up and may take time and effort, but after that the teacher will be comfortable, especially when he gets used to electronic books and he can arranges his interaction with students and plan his*

*schedule.'*

L5 added

> *'No. I am against the idea that blended learning may be an obstacle to teachers, especially if we were able to reduce face-to face meetings with students and used Internet meetings instead.'*

Some members of the sample suggested initial solutions to deal with the problems resulting from the current state of teaching or the supposed pressure, if any, praising the blended method and showing their willingness to participate effectively in it.

M2 said:

> *'The current classes are big and I think students have no chance to ask questions or express their view. This leads us to think seriously about electronic learning for their sake. It may take some hard work to begin with but it will bring many advantages for education and we can find satisfactory solutions for teachers.'*

M3 confirmed the above:

> *'No. No, on the contrary it doesn't need too much time, as some teachers think. All the time and effort is in the establishment stage such as electronic courses and tests and in the communication stage at first. Afterwards, the effort will be less and the interaction will be electronic not face-to-face as it is now.'*

With regard to the professional development in SBEK, analysis of interviews showed that participants know about the training courses provided by the school for the teachers and administration members only. Those courses are by and large not effective and do not attain the intended goals because they are mostly attended for the purpose of promotion. Teachers who attend them can add a new item to their CV; what type of course is not nearly so important as how often the teacher attends them. Others consider that these courses have a hidden aim: the financial benefit to trainers from outside the school. They adhere to no clear

standards and would not encourage the implementation of BL in the college.

L1 said:

> *'There are no professional development programmes in this school; those are prepared by the management because there are training courses every semester in 2 weeks' time, I think every semester has 3-4 courses for two or three days. These courses don't meet our needs, I smell corruption in this issue.'*

A female faculty member strongly made this point:

> *'As a teacher, if I want to develop myself I must go to private centres as Ibn AL-haythem centre is not competent in its programmes or trainers. With regard to your question about the suitability of the training policy to the implementation of blended learning, my answer is NO.'*

M8 added:

> *'Professional development is weak here. The training policy is not suitable even to the name of the school. Once I saw programmes in technological training about PowerPoint; they were simple while one of the appointing terms in the school is to have ICDL, So, what is the benefit of those courses?'*

Inconsistent views about BL adding to the workload were also reflected in the questionnaire responses, where 30.3% of the teachers agreed that "My workload of traditional learning prevents me from adding BL to my teaching" whereas 53.5% disagreed. The obstacle concerning the lack of professional development programmes expressed at the interviews was consistent with the questionnaire responses, where 79.1% of the senior management agreed "It is difficult to train each teacher how to design courses electronically."

**6.8.6 Research question 12:**

**What qualitative sub-themes are concerned with solutions to the problems?**

Seventeen sub-themes were extracted from the 94 units of communication classified under the primary theme of Solutions to the Problems (Table 25).

**Table 25: Frequency Distribution of 17 Sub-themes Related to Solutions to the Problems Extracted from 94 Units of Communication**

| Sub-theme | Frequency | Percent | Negative | Positive |
|---|---|---|---|---|
| 1. Awareness | 14 | 14.9% | 0 | 14 |
| 2. Financial Incentives | 12 | 12.8% | 2 | 10 |
| 3. College Environment | 8 | 8.5% | 2 | 6 |
| 4. Professional Development/ Training | 8 | 8.5% | 0 | 8 |
| 5. Religion and Ethics | 8 | 8.5% | 0 | 8 |
| 6. Administration | 6 | 6.4% | 0 | 6 |
| 7. Other Incentives | 6 | 6.4% | 2 | 4 |
| 8. Strategic Plan | 6 | 6.4% | 0 | 6 |
| 9. Financial Independence | 4 | 4.3% | 0 | 4 |
| 10. Gradual Implementation | 4 | 4.3% | 2 | 2 |
| 11. Private sector funding | 4 | 4.3% | 2 | 2 |
| 12. Role of Teacher | 4 | 4.3% | 0 | 4 |
| 13. Admissions Policy | 2 | 2.1% | 0 | 2 |
| 14. Evaluation of teachers | 2 | 2.1% | 0 | 2 |
| 15. Increase number of staff | 2 | 2.1% | 0 | 2 |
| 16. Marketing | 2 | 2.1% | 0 | 2 |
| 17. Media | 2 | 2.1% | 0 | 2 |
| Total | 94 | 100.0% | 10 | 84 |

The majority of the sub-themes (14, 14.9%) were concerned with raising awareness of the issues involved in implementing BL. All 14 of the responses were positive, implying long-term benefits for the college and students by increasing awareness. Triangulation revealed consistency with the questionnaire responses, where over 85% of the teachers and senior management agreed "Students, faculty members and management are not aware enough of BL".

Increasing awareness of BL as a solution to the problems was closely followed by the sub-theme of financial incentives (12, 12.8%). All but two of the responses in this sub-theme were positive, implying that financial incentives would be useful to evoke staff to develop

BL programmes. This was not consistent with the responses to the questionnaire where less than half of the teachers and managers were aware that "There are financial incentives for using BL or electronically designed courses."

Solutions to address the problem of the poor College Environment, lack of Professional Development/Training and the importance of maintaining the Islamic ethic of honesty and sincerity each accounted for 8.5% of the units of communication in the primary theme. Only two responses were negative, stating that "Given the current situation, the organisation cannot implement BL", implying that recommendations concerning improving the college environment in order to implement BL are essential. Over 80% of the questionnaire responses agreed that "Lack of organised programmes to train staff and students in preparation for BL will prevent it from being implemented" implying that the suggestion to implement Professional Development/Training is also essential.

Improvement to the Administration and the formulation of a Strategic Plan each accounted for 6.4% of the units of communication in the primary theme. In view of the high frequency of responses concerned with the obstacles caused by the college administration in both the interviews and the questionnaire, 'it is evident that the improvement of administrative planning is essential'.

The participants proposed many suggestions and solutions but all focus on issues such as teaching students the importance of BL, the need for e-learning, the need for a special strategy and also on suggestions related to the college environment and equipment, finding a new training policy and other sets of suggestions to be discussed in this context.

From the answers of the participants it is clear that there are many solutions, starting from establishing a scientific climate for all concerned to convince them of the importance of electronic learning through integrating BL in the SBEK. This would need the enlightenment

of students and faculty members, because they think that the process would not succeed unless all parties engaged effectively in it. Moreover, the sample extended this awareness to parents as well, since they affect children and have religious or social considerations. L2 said:

> '... [Of the] three main domains, first are people who deal with technology ... society must be prepared for ... the importance of technology in education. What you are doing as a researcher is part of this effort.'

L7 added in confirmation:

> 'The solution is in finding a comprehensive awareness not only among students and teachers but parents, too. This can be done through introductory workshops.'

M1 added a new dimension:

> 'The awareness process must include the spread of technological security as a concept to observe all the social and religious norms.'

L3 stated the importance of awareness in the current situation:

> 'First we must educate faculty members about the importance of technology and how to use it in education. The ones who have practised traditional teaching for 15 years will resist this change and so they should be re-educated.'

L5 clarified the practical side of educating:

> 'Awareness must be spread over everyone. This is the responsibility of the School and the responsibility of faculty members and other people. The most important thing is a countrywide decision to use blended learning, as it is a way to connect to the rest of the world. This will put us into the global village - education is a house in this village. It is a need, not a luxury or anything else.'

Meanwhile S7 made an suggestion, which he thought, would create a good impression on the students:

> 'I propose educative trips to Kuwait University to see how electronic learning operates there.'

194

S13 immediately said:

> *'Why don't we hire a classroom in the University of Kuwait for one academic year to hold model blended lessons for our students, at least once.'*

The strategic plan suggestion is a common and important proposal by the participants, who see in such a plan a clear path for initiating the project in the next few years. From the responses it can be seen that all the participants wanted to know the aspects of this plan and the desired goals. Most of them thought that without a comprehensive plan the college could not develop into a modern college.

M2 concentrated on the use of other universities' expertise, in particular those which had tried this type of learning, because it would save time in preparing the plan:

> *'The administration must find a plan to implement blended learning and benefit from other universities' experience, even the experience of the Ministry of Education. This must include an accurate evaluation and general survey, including teachers, students and the environment.'*

L5 added:

> *'We must ask other public or private organisations for help and supervision in preparing the plan to ensure [its] success.'*

M1 confirmed the need to determine the technical steps and practical plan containing all the technical and administrative details as well as the desired goals. He said:

> *'The integration process must be studied carefully within the type of technology, its level and form of integration. The issue is important and it isn't a random selection. We need a comprehensive study.'*

The participants talked more clearly about incentives and related issues than any other issue. Some of them mentioned all types of incentives for faculty members to co-operate, of both financial and psychological kinds, since there are many inducements, such as money, or promotion to supervisory jobs for faculty members to work in a certain way. Others

considered psychological incentives better than financial ones, while a third party thought

that this was a two-edged weapon and were cautious about recommending it. L1 recalled the

experience of the UOF:

> *'Recently one of the teachers' responsibility was to use blended learning or electronic learning, but if it was applied here I think the financial incentive would be a good one to use. For instance, at the University of Kuwait, each teacher who employed electronic learning at its inception was given 400 KD and this left a good impression on teachers.'*

L2 said:

> *'The financial incentive is an important thing but before it works the environment must be ready.'*

He added:

> *'I think is very important. Sometimes I use my own money for the sake of students, I think incentives are important since they enable teachers to raise the students' level of learning.'*

As seen above, the responses expressed the desire of the sample to use financial incentives as

a means to introduce this method of education. They confirmed that their intense interest

would decline if a comprehensive system for incentives was not forthcoming, in the belief

that adding to a teacher's workload should be recompensed by more money (Alkandari,

2011). This is discussed by M7.

> *'I will tell you a story. A while ago, the administration decided to give an extra 1000KD to anyone whose workload was above 13 units. There was rivalry among the faculty members to take on new units though in past they had refused additions to their work. This is a situation where financial incentives are very important.'*

M5 agreed:

> *'Financial incentives are very important – essential; it is enough to look at the conflicts between faculty members on the teaching load every summer semester.'*

However, another group of participants disagreed with the previous view; they considered

that faculty members do not deserve more than they already get. Some time ago, salaries were increased and so were the compensations for additions to workload and summer semester teaching, more than 5000 KD, as mentioned above. L3 clarified:

> *'I don't think the faculty needs incentives; they get more salary than their responsibilities warrant. They collect 3000 KD for very traditional teaching.'*

Financial incentives were not alone; there are also psychological incentives forming an important and continuous system of motivation, which helps in preparing any new list of compensations. Some faculty members prefer supervisory positions to money, L5 said:

> *'Look, financial incentives are very important but we must pay careful attention to psychological incentives for the faculty members, for example supervisory positions or promotions and other privileges.'*

However, what amazed and annoyed me was what had been said by one faculty member, M9; he said:

> *'In case of approving incentives and there was a resistance of the faculty members and they didn't use electronic learning because they didn't need those raises or they didn't want to work, what would we do?'*

This made me wonder about realistic and practical solutions to solve this problem, as the teacher in the public sector is not controlled effectively.

L7 said:

> *'I suggest to solve this problem the issuance of a decision to bind all teachers and before this we need a comprehensive evaluation system. The problem is that teachers are not evaluated now; once in his job, no one has authority over him.'*

M3 described the current situation by saying:

> *'I'm afraid the current system in the college doesn't instil competitiveness so the hardworking is the same as the lazy one.'*

From those responses I note that participants saw the importance of partial rules to evaluate teachers; rules for incentives and punishment are needed in the college.

It was clear from the responses of the sample that there must be a special team to supervise the professional development and technical qualifications of the college members. The mission of this team should be to determine the general policy for training according to a timed plan and designated goals. Moreover, participants indicated the need to find technical experts to supervise this team, since faculty training and students to acquire the basic skills to implement electronic learning according to the selected technology were important in SBEK.

M1 said:

> *'Faculty and students need training, yes, regardless of the skills of faculty or students, training programmes are very effective in integrating electronic learning.'*

M9 added:

> *'I think up to now most of the faculty and students have been good at using electronic learning. However, the nature and type of technology calls for a special type of training. I think it depends on the time when the technology is implemented.'*

M2 said enthusiastically:

> *'We must ask them [departments] about the needs for courses and skills then refer this to the general policy of the college.'*

Meanwhile, M5 concentrated on the conditions needed to appoint supervisors under the development and training policies in the college. Moreover, he confirmed the use of public effort to implementing BL in other sectors:

> *'I think those professional development programmes must be supervised by faculty members, not ordinary administrative*

*employees who have no experience of teaching.'*

He continued:

> *'It is very important to use the experiences of UOF and its experts or the MOE in deciding the nature of the training programmes and their levels, Each of those institutions has its own electronic learning centre.'*

It is noted that this project would have a great impact on the culture of Kuwaiti society, including its religious and ethical norms, Some participants focused on considerations of sincerity and honesty because this is the way of gaining God's satisfaction at the Day of Judgment and religious motivation is an important motivation at another level beyond issues of the standard of living or job merits. M6 said:

> *'The Islamic religion urges us to work with sincerity and the prophet Mohammad – peace be upon him – said that wisdom is the goal for the believer wherever he found more deserving people. Technology is very important and must be used for the sake of students. This is not a personal interest in jobs and money, but something that must be done to help these students and to earn God's satisfaction.'*

M9 indicated the essential goal of the college of education:

> *'We teach in this school to give our students the concepts of education and its ethics. If we refused to implement blended learning because of money or administrative problems we would not be able to provide the students with these ethics and after graduation how would they then transmit them to their students?'*

S13 added a practical suggestion to enhance the concepts of sincerity and honesty and acknowledge God in our work:

> *'I suggest carrying out national and religious programmes in the school at the beginning of the year to remind teachers about the importance of mastering work and sincerity, to motivate them to work for the good of the country.'*

L3 added strongly:

> *'We need to give and not just take. I suggest enhancing the*

199

> *faith and spiritual aspects by hosting lectures by religious people and scholars.'*

Looking into the current state of the college, the teacher is the main pillar in education as he/she is the source of knowledge and the only speaker in the class and no one can debate anything he/she says. This has been the pattern dominant in the college for decades and there is no need to abolish this role altogether. Therefore, the respondents did not want to do so. L2 said:

> *'I suggest that we concentrate in preparing for blended learning on the importance of the teacher's role and not cancelling it. We mustn't frustrate the teacher by taking away any of his authority.'*

M9 said:

> *'The computer doesn't cancel the role of the teacher. I suggest a general policy to integrate electronic learning and designate the role of each party involved.'*

From the answers of the sample it was clear that there is a desire to overcome the financial problems, which obstruct the project in SBEK. Therefore, participants excitedly suggested solutions to them. L4 said:

> *'The easiest way to implement blended learning is through the budget provided by the government. They must give us an independent budget as they did for the electronic learning project in the University of Kuwait.'*

He added a word on the role of legislation as an effective and rapid cure:

> *'I suggest submitting a proposal to the parliamentarians who are responsible for development, in order to avoid any administrative obstacles from the government. If most members agree on it, then it can be brought into law.'*

This legislative solution – as it might be called – was accompanied by another solution, which is open to Kuwait in dealing with challenges; it is to address the fourth authority, the media. M4 suggested:

> *'To implement blended learning, we need to discuss this issue on the media, because decision makers and top management members are afraid of losing their positions through the influence of the media. This is my suggestion for the budget.'*

New legalisation is needed to determine a new budget. Some participants wondered whether the prohibition on the use of private funds should be cancelled, since this would cut the use of public funds and be in the interests of the students and also the country.

M9 said:

> *'Though we are a rich country I would stress using the services of the private sector in this process. Look at Kuwait University – its geology and geography laboratories and its admissions division are all funded by the private sector.'*

He was sure that any system preventing the use of private sector funds should be cancelled. In addition, M7 called for the convening of a marketing team to persuade private firms to invest in the college, as well as UOF:

> *'The college must know how to work. The University of Kuwait has a professional marketing team, which knows how to work for the benefit of students. Why don't we have such team in our college?'*

It is clear that there is a need for the school to be financially independent and have a budget removed from the control of the authority. M8 said:

> *'We will remain in a circle of problems if we don't have financial independence.'*

Anger and dissatisfaction obviously surround the current school conditions, as they are incapable of housing BL at an institutional level. The participants proposed many suggestions that may be realistic or at least temporarily feasible until a new building is put up by the government as part of the development plan. M9 thinks that given the current situation, the organisation cannot implement BL:

> *'It is possible as a first stage to hire a building or a school*

> *from the Ministry of Education and prepare it for an electronic*
> *learning project. This could be done – most public and private*
> *schools do this or else wait until their new building is ready.'*

M3 confirmed the need for authentic studies to reveal the inappropriateness of this

environment before looking for other solutions; he advised:

> *'Experts and specialists must study the current environment to*
> *evaluate the needs and requirements and show the validity of*
> *the building or ways that it could be modified.'*

However, M5 suggested some initial solutions if the building is not suitable:

> *'We need to renew computer labs, we need new computers,*
> *wireless services. Those are straightforward solutions. I*
> *suggest integrating blended learning in a simple way.'*

Participants considered that the existence of an independent administration such as the UOF

has would contribute to the development of the school according to the proposed plans. It

would not add any complications because it would appoint qualified people to supervisory

jobs. M1 said:

> *'First, we don't need managers only; we need leaders to lead*
> *the work and propose initiatives. This wasn't available in any*
> *of the previous administrations.'*

Other responses discussed the issue of administrative independence as an urgent need in

development. Administrative dependence on any other organisation will not benefit the

decentralisation of decisions, because each link in the chain is forced to follow the others.

Regarding this issue, M9 proposed an unprecedented step, which had never been mentioned

in the history of Kuwaiti education:

> *'I suggest asking parliament to pass a law on the privatisation*
> *of the Higher Education sector. This would create*
> *competitiveness and bring many advantages.'*

L3 added something about the role of administration and responsibility in the revolutions of

the modern world:

> *'I suggest the establishment of a development centre to supervise and evaluate the rapid changes in the world of training, including blended learning of course.'*

One of the most important solutions for implementing BL is gradual implementation, taking account of many considerations, the first of which is to conduct an evaluative study to investigate the strengths and weaknesses of any project. It was also said that a period of preparation of one year or more is needed for changes in any teaching style used in the college. However, others preferred incremental change because they were still accustomed to the old system.

M3 said:

> *'Honestly, we need a trial period for any project or proposal to apply electronic learning, for example, using it in one section or more to study and evaluate the experiment to determine its validity for our society.'*

S23 disagreed:

> *'There is no need to apply blended learning partially because it doesn't need more than a week for induction.' He added 'I agree with the complete implementation of any electronic project after a time of deep study because the faculty and students are ready. All they need is a refresher programme such as other universities offer.'*

There was much demand from the administration and faculty members that the number of students should be reduced, because the present large classes affect the quality of teaching and hence students' development and achievement. Some faculty members said that there must be ways to tackle the increasing numbers of students that exceeded the capacity of teachers and the teaching environment. M9 said:

> *'I suggest the raising of admission averages. We don't want a policy of simply satisfying popular demand. The admissions grade in Kuwait University is 85% while in our college it is 70%.'*

Meanwhile, M5 commented

> *'I suggest an increase in the number of faculty members or working seriously to integrate electronic learning.'*

In this primary theme, twenty-six of the suggestions to solve the problems were initiated by participants, some of these suggestions were more like wishes. They were not consistent with any of the questionnaire responses. They included financial independence for the college, including private-sector funding, the gradual implementation of BL, not compromising the role of the teacher, improving the admissions policy, implementing evaluation for teachers, increasing the number of staff and using marketing and media strategies. All of these were considered positive solutions, apart from four responses, specifically gradual implementation was not necessary and private sector funding may not be possible in practice.

## 6.9 Conclusions

It appears from the analysis of the interview responses, that the implementation of BL in the SBEK faces administrative, technical, financial, skills, cultural and academic challenges. However, the participants generally agreed that BL should be implemented on account of its advantages and potential for students. Having looked through all the themes, it seems that no single theme is not linked to any of the others. The most prevalent theme seems to stem from the management and administration of SBEK, which has a knock-on effect on many of the different themes. Financial issues were also near the top of the participants' list of important obstacles. Academic deficiencies among the students, including lack of technical skills and limited proficiency in the English language, have been explored. Concern was expressed about the extra teaching and administrative workload required to implement BL and the need for more training and professional development for the teachers. Cultural and religious

beliefs may result in difficulties in implementing BL. However, the attitudes of most of the participants in this study towards the implementation of BL at SBEK appeared to be positive and optimistic.

# Chapter Seven: Discussion and Conclusion

## 7.1 Introduction

This chapter is presented systematically in six sections. The first section summarises the findings to address the twelve research questions, without reference to the literature. The second section critically interprets the answers to the research questions, with reference to previous research discussed in the literature review. The third section discusses the practical implications of the findings, with reference to the implementation of BL at SBEK. The fourth and fifth sections provide recommendations for future research. Finally, the overall conclusions are presented.

## 7.2 Summary of Findings

The findings were based on a mixed-methods study with a sequential explanatory design. A questionnaire survey provided a statistical analysis of the obstacles to BL perceived by a sample of 344 participants drawn from the college student and staff population. The subsequent qualitative survey involving interviews with 43 participants provided greater insights than the questionnaire. Twelve research questions were addressed as follows:

**RQ1. To what extent do the faculty teachers, senior management and final year students perceive that financial, administrative, academic, cultural, technical and skill dimensions represent potential obstacles to the implementation of BL?**

The perceived challenges to BL were ranked in order of grouped median score as follows: FINANCIAL and ADMINISTRATIVE (4.00), CULTURAL (3.78), TECHNICAL (3.57), SKILLS (3.57) and ACADEMIC (3.44). The grouped median scores for the items in each dimension were clustered into a narrow range from 3.0 to 4.25 implying a central

206

tendency for the participants to be generally unsure or to perceive that the challenges to BL were relatively high. Despite individual differences between the median scores for each item the Kruskal-Wallis tests indicated no statistically significant differences at $\alpha = .05$ between the students, teachers and senior management with respect to their median responses to each of the five dimensions.

**RQ2. Do the perceived obstacles to BL vary significantly with respect to the gender, specialisation and GPA of the final year students?**

Gender had no significant effect on the perceived obstacles to BL. The students specialising in non-physical subjects consistently perceived that there were significantly higher challenges to BL related to financial, administrative and technical issues than did the students specialising in physical subjects. The students with lower GPA scores consistently perceived that there were significantly higher obstacles to BL related to culture and skills issues than did the students with higher GPA scores. The effect sizes, however, were small, implying that the results, although statistically significant, had limited practical significance.

**RQ3. Do the perceived obstacles to BL vary significantly with respect to the gender, specialisation and experience of the faculty teachers?**

There was only one statistically significant effect at $\alpha = .05$ among the teachers. The mean scores for the ACADEMIC dimension varied significantly with respect to gender. The effect size of gender was relatively small. The male teachers perceived that there were higher obstacles to BL related to academic issues than did the female teachers. There was insufficient evidence to establish significant differences between the responses of the

groups of teachers with respect to the other dimensions.

**RQ4. Do the attitudes towards BL vary significantly with respect to the final year students, faculty teachers and senior management?**

Statistically significant differences at $\alpha = .05$ were identified between the students, teachers and senior management with respect to their median responses to the ATTITUDES dimension. The grouped median score for the senior management was 4.67, reflecting a very enthusiastic attitude towards BL relative to the students and teachers, whose grouped median scores of 4.11 and 4.13 respectively reflected relatively less enthusiasm.

**RQ5. Do the attitudes towards BL vary significantly with respect to the gender, specialisation and GPA of the final year students?**

The mean ATTITUDES scores for the students specialising in non-physical subjects were significantly higher at $\alpha = 05$ than for their counterparts specialising in physical subjects, with respect to both males and females across three-part levels. The effect size however, was very low, indicating that the differences between the students had limited practical significance.

**RQ6. Do the attitudes towards BL vary significantly with respect to the gender, specialisation and experience of the faculty teachers?**

The attitudes of the teachers towards BL did not vary significantly at $\alpha = .05$ with respect to their gender, specialisation, or experience. The effect sizes were negligible. There was insufficient evidence to establish any differences between the attitudes of different groups

of teachers.

**RQ7. What qualitative primary themes can be extracted from the interviews?**

Attitudes comprised the most frequent primary themes extracted from the interview responses, followed by the Qualifications/Skills of faculty and students, Administrative Plans, Culture and Traditions. Themes associated with Budget, English Language, College Environment, Computer Laboratories, Faculty Workload /Class size, Technical staff, Internet Access and Training Courses each were the least frequent.

**RQ8. What qualitative primary themes describe obstacles to BL?**

The primary themes that most frequently described obstacles to BL were Administrative Plans and Qualifications/Skills, closely followed by Budget, English Language and College Environment. The primary themes that were perceived to be the least frequent obstacles to BL were Training Courses, Attitudes and Faculty Workload/Class-size.

**RQ9. How do the quantitative survey dimensions compare with the qualitative primary themes**?

One of the main differences between the questionnaire and the interview responses was that, at the interviews, a high proportion of the responses were concerned with the positive or negative attitudes of the participants towards the implementation of BL, whereas the questionnaire focused directly on only five dimensions of obstacles to BL. Based on the questionnaire responses, the perceived challenges to BL were ranked in order of grouped median score as follows: $1^{st}$ = FINANCIAL and ADMINISTRATIVE, $2^{nd}$ =

CULTURAL, $3^{rd}$ = TECHNICAL, $4^{th}$ = SKILLS and $5^{th}$ = ACADEMIC. Based on the interview responses, the five dimensions concerned with the perceived obstacles to BL were ranked in a different order, as follows: $1^{st}$ = SKILLS, $2^{nd}$ = FINANCIAL and ADMINISTRATION, $3^{rd}$ = TECHNICAL, $4^{th}$ = CULTURAL and $5^{th}$ = ACADEMIC. The analysis of the questionnaire data indicated no statistically significant differences between the students, teachers and senior management with respect to their responses to the items concerning obstacles to BL.

**RQ10. Do the qualitative primary themes vary with respect to the groups of participants?**

The three groups were relatively similar with respect to the themes that they perceived were not obstacles. The Teachers/Faculty perceived the highest proportion of obstacles, followed by the Leaders/Management and the Students perceived the least.

**RQ11. What qualitative sub-themes are concerned with obstacles to BL?**

**Attitudes**

Almost all the interviewed participants expressed positive optimistic attitudes towards the implementation of BL.

**Skills**

It was perceived that most of the younger faculty had the technological skills to cope with BL. In contrast, the technological skills of old staff and students were considered to be obstacles. Many teachers felt secure in their jobs, irrespective of their lack of technological skills, because they were not evaluated. Triangulation revealed that the

interview responses were consistent with the questionnaire, with respect to the perceived lack of technological skills of the staff and students.

**Administrative plans**

The ways that the administrators planned the future of SBEK were unanimously considered to be obstacles. Most respondents agreed that there was much procrastination and many complications when dealing with the college administration.

**Culture and traditions**

Triangulation indicated a convergence of views of the interview and questionnaire responses regarding conflicts of opinion about gender differentiation. Over half of the respondents agreed that "Social custom in Kuwait will preclude male teachers from direct or indirect interaction with female students outside school". Less than one half agreed, "Because of the unethical content, I found the Internet is a danger."

**Budget**

Financial constraints were not perceived to be obstacles by a few of the participants.

**English language**

The majority of the respondents suggested that both faculty and students had difficulties in using the English language. Some commented that the dominance of English language on the Internet was an obstacle.

**College environment**

The poor college environment was unanimously considered to be obstacle.

**Technical issues**

The majority of the participants reported problems associated with technical issues, including limited access to computers, the age of the computers, the shortage of computers

and lack of printers in the computer laboratories. There were also complaints about the shortage of technical staff, their poor training and their slow service. No Internet access on the campus was another serious obstacle for students. Triangulation revealed that the interview responses concerning technical issues concurred with the questionnaire responses.

**Academic issues**

Some teachers perceived that BL would only be a burden at first. In time, the workload would decline. Some contradicted this, believing that BL would increase their workload. There were several complaints about the lack of professional development programmes for the teachers.

**RQ12. What qualitative sub-themes are concerned with solutions to the problems?**

**Raising awareness**

The majority of the sub-themes were concerned with raising awareness of the issues involved in implementing BL. All the responses were positive, implying long-term benefits. Triangulation revealed consistency between the interview and questionnaire responses. The teachers and senior management consistently agreed, "Students, faculty members and management are not aware enough of BL".

**Financial incentives**

Increasing awareness of BL as a solution to the problems was closely followed by the sub-theme of financial incentives as a solution to the problems. This was not consistent with the responses to the questionnaire where less than half of the teachers and managers were aware that "There are financial incentives for using BL or electronically designed courses."

**Other solutions**

Solving problems associated with the poor college environment, lack of professional development/training of teachers and the importance of maintaining the Islamic ethic of honesty and sincerity were highlighted at the interviews. Most of the questionnaire responses agreed that "Lack of organised programmes to train staff and students in preparation for BL will prevent it from being implemented" implying that the implementation of Professional Development/Training is essential. Improvements to the administration and the formulation of a strategic plan were also perceived to be essential. Many other suggestions to solve the problems were initiated by a few participants. They were not endorsed by the majority of participants and were not consistent with any of the questionnaire responses. They involved financial independence for the college, including private sector funding, the gradual implementation of BL, not compromising the role of the teacher, improving the admissions policy, implementing evaluation for teachers, increasing the number of staff and using marketing and media strategies. All of these were considered positive solutions, apart from four responses, specifically gradual implementation was not necessary and private sector funding may not be possible in practice.

**7.3 Interpretation of Findings**

The findings of this study were generally consistent with the results of similar studies carried out concerning the implementation of BL elsewhere, described above in the Literature Review, as follows:

### 7.3.1 Attitudes

Participants' attitudes indicated concern about the educational field (Mager, 1984). To implement any innovation successfully, all participants should have a positive attitude towards it (Alsultan, 2010; Abu Qudais *et al*., 2010). Therefore, it was gratifying to identify the many positive and optimistic attitudes of most of the participants in this study regarding the implementation of BL at SBEK. Evaluation of the participants of BL showed very positive feedback, which might facilitate any coming innovation.

The responses from participants highlighted the manner in which the simplicity, innovation and creativity behind the BL model can positively impact on the attitudes required for a continuous BL project to succeed in any educational institution. Khan (2005) emphasises this aspect, noting that creative technology applications can maintain continuity in e-learning as well as support positive attitudes towards e-learning. Students expressed concerns relating to BL, which can be largely ascribed to challenges related to skills, cultural elements and language. Alshinaq and Doomi (2010) note that student attitudes towards BL can be negatively impacted by limited technological skills, including specific skills related to the electronic learning process, as well as communication skills. The BL process and its contents largely require a degree of proficiency in English, and this may also affect student attitudes towards BL, particularly students who are less proficient in English who may encounter more technical problems when using BL. Participants suggested that training and refreshment courses in relevant skills prior to commencing blended learning courses may help to ameliorate this.

### 7.3.2 Planning and leadership

It is generally agreed among educational researchers that planning and leadership are the major challenges facing the implementation of BL (Alsharahan, 2012). It is evident from the results of this study and those conducted elsewhere, that an apparent absence of planning and leadership is a major obstacle (Abdulhakeem, 2010). It is ironic that the senior management at SBEK appeared to be very enthusiastic about BL relative to the students and teachers who displayed relatively less enthusiasm. Perhaps the senior management do not fully recognise the practical issues involved in implementing such a program.

Garrison and Kanuka (2004), Alsharhan (2011) as well as Hew and Bush (2007) similarly stressed the vital role of institutions in developing the required vision, policies and plans to allocate the appropriate resources and to provide reliable support mechanisms to ensure the successful functioning of the BL system. It appears, however, that although the managers at SBEK had positive attitudes towards the implementation of BL and may have considered some of the potential solutions to the obstacles, they had not yet developed their own visions of exactly what they wished to attain. Additionally, they did not ensure that teachers shared the same vision.

The senior management had not yet provided teachers with a clear image of the attainable goals or the results expected from the BL initiative to integrate the new technology into the curriculum. Procrastination/complications, staff instability and the view that the plans were not the responsibility of administrators were the major criticisms of the teachers. For instance, some decisions, such as those related to establishing an organised periodical training course for the non-qualified academic staff or decisions concerning obtaining funds from an outside source for the purpose of a BL project infrastructure establishment, were not made by the administration. These decisions could be delayed for years due to

existing administrative procedures. This problem is not unique to SBEK. Many other studies have demonstrated that lack of leadership, organisation and a clear vision are obstacles to integrating technology and implementing BL (Alsawi, 2011; Hosamoo, 2011; Adas and Abu Smais, 2011; Lawson and Comber, 1999; Fox and Henri, 2005; Shiek, Mohammad and Ateya, 2005; and Mhehe, 2002).

Another issue that was raised through the interviews was that administrators and teachers might lose control of the educational process in the presence of modern technologies that would limit or reduce the in-person communication process between administration, staff and students. They indicated concern that reducing face-to-face time might encourage students to become careless about their studies, which might affect their learning.

Studies conducted in Arab countries (Alkayat, 2010; Alshammari, 2007; Alzaabi and Doomi, 2012; Alilian, 2009; Alkhader, 2008; Alenaizi, 2010; Abdullah, 2013; Almutairi, 2011; Alshammari, 2009; Alfadhli and Khalfan, 2009) argued the opposite, namely that BL helped to increase students' achievement and critical thinking.

Through my studying at SBEK, I noticed that managers and teachers preferred to control others in person. This could relate to the educational and cultural roots in Arab countries. Hofstede, *et al.* (2010) and Alqahtani (2012), for example, mentioned that there is a tendency for leaders in Arab countries to enjoy giving commands and managing people. This could justify why some managers and teachers refused reducing face-to-face class time.

One thing that I would like to raise here is the role that the MOE plays in monitoring and evaluating higher education in Kuwait. Besides blaming the SBEK management for not having a strategy or a vision, I would largely blame the MOE. MOE is the body which is responsible for education in Kuwait and the guarantor of its success (MOE, 2011). How

can a training school which is responsible for preparing future teachers not have its own strategy and plans? According to my findings, the MOE in its attempts to develop higher education in Kuwait, shows a failure to monitor properly. Any attempt to develop something without being based on a clear policy for monitoring and evaluating could lead to negative outcomes and wasted effort.

According to the MOE's strategy (MOE, 2011), the MOE alone is responsible for coordinating and integrating the institutions of higher education and the public education sector under the general umbrella of education. Future teachers who graduated from SBEK, who didn't use technology for four years and who have only been taught in face-to-face ways are allowed to teach in BL schools. This suggests that MOE and SBEK are not properly integrated and also raises the issue of how teachers are prepared. Tony Blair (2012), in his capacity as a consultant for the Kuwaiti government, set out his vision for Kuwait in 2030. His paper emphasises the relative lack of interest on the part of the Kuwait government in the teaching profession and highlights the issue of teacher training. This tends to confirm what I have called the lack of coordination between MOE and SBEK. He adds that Kuwait urgently needs to address higher education, stating that any future vision for Kuwait demands the establishment of a high level, efficient higher education sector capable of producing creative and genuinely talented graduates.

### 7.3.3 Teachers

It is important that the teachers, who deal directly with the students because they examine and evaluate them, can identify what students need, their strengths and their weaknesses with respect to the implementation of BL (Atia *et al*., 2008). Accordingly, the teachers who participated in this study recognised some of the deficiencies of the students. For

example, they highlighted their lack of technical skills and limited proficiency in the English language as obstacles to the implementation of BL. Another obstacle highlighted by the teachers in this study and elsewhere involves the extra workload required to implement BL. The extra time needed for interactions and feedback between students and teachers in a BL programme was previously identified by Ismael (2009).

### 7.3.4 Culture

The Kuwaiti culture, particularly the need to preserve religious principles, must be kept in mind when developing BL programs in Kuwait. Some teachers working in Arab countries have found it difficult to use the Internet because of the students' cultural and religious beliefs (AlWahaibi *et al.*, 2008; Alsultan, 2010). Some of the respondents in the current study highlighted this obstacle. Some individuals indicated that 'due to unethical content, the Internet is dangerous'. Some feared seeing uncovered women and hearing Western music while engaged in BL activities.

Another element related to the culture in Kuwait is gender differentiation. SBEK does not allow male and female students to mix in classes or on the same campus (PAAET, 2011). Participants expressed concerns relating to the necessary expansion of network technology in order to support the BL educational process. This holds specific relevance for conservative communities in which tradition and religion influence the ways in which men and women interact. Respondents expressed concerns that traditions would be weakened and that this would impact negatively on the community. Further concerns were expressed that network developments could eventually dilute the characteristic customs and traditions of the existing society by opening it up to the traditions of other communities. Specifically, some respondents expressed concern that opening up

information technology could affect the composition of the community, and some individuals were particularly concerned about opening up communication between men and women.

Some of the participants in the study highlighted gender differences as obstacles to the implementation of BL, although triangulation revealed convergence between the questionnaire and interview responses. Over half of the respondents agreed in the questionnaire that it was an obstacle that "Social custom in Kuwait will preclude male teachers from direct or indirect interaction with female students outside school" and ten interview responses out of fourteen were coded by Yes, reflecting that gender differentiation is an obstacle. There were gender differences with respect to the responses of the participants to the questionnaire, although the mean scores for the academic dimension varied significantly with respect to gender. This occurred because the male teachers perceived that there were higher obstacles to BL related to academic issues than did the female teachers. The effect size was relatively small.

Although cultural obstacles play a big role in preventing BL implementation in Arab countries, introducing e-learning technology would help culturally conservative Arabian countries to overcome some of the interaction limitations caused by religion and culture (Alkandari, 2011; Alsultan, 2011; UOF, 2012). For example, male teachers in the School of Sheraa Law in UOF use video conference to teach female students.

As seen during the course of this thesis, culture plays an important role not only in the findings and the results, but also across the entire data gathering process, including the choice of research design and tools. As I am sponsored by the SBEK, in Kuwait, it would be a cause of concern if I were to use only qualitative approaches in my theses. Using only qualitative approaches would not give sufficient credibility to my findings, according to

SBEK management. The education system in Kuwait is influenced by the American system, which is heavily influenced by quantitative approaches. Using a mixed methods approach would help to overcome this cultural problem in addition to delivering the advantages mentioned in the methodology chapter. The second impact of culture on the data gathering was the choice of tools. In Kuwait, due to religious reasons, some families of female students refuse to allow these students to sit alone with a man, which led me to choose a focus group interview method in order to overcome this cultural challenge. Generally, I would recommend that researchers consider culture as it impacts the way in which we look at research, not only our results.

## 7.3.5 Skills

The lack of technical and language skills, as well as limited professional training courses to implement e-learning, has been raised by many studies as serious challenges (Alsawi, 2011; Elhersh *et al*., 2010; Cuban *et al*., 2001; Shiek, Mohammad and Atyeh, 2005; Aljarf, 2004; Wang, Cowie and Jones, 2010). The results of this present study also highlighted the lack of technical and language skills, as well as professional development of the teachers, as obstacles to the implementation of BL.

Importantly, respondents considered training courses to be a necessary and routine process by which to gain academic promotion or to support resume development; however, some respondents indicated that the value of such courses is limited as they do not always develop knowledge or meet the development goals of professional employees. In relation to English language skills, every participant emphasised the importance of English language proficiency as a means to success in modern educational processes. This is applicable to both course instructors and learners because course content relies on the

English language. Academic staff who were either already proficient in English or holding degrees from English-speaking counties or from educational institutions with English as the key instructional language indicated in their responses that they did not consider language as an obstacle to the BL process. For older staff members, those with more than 15 years of experience at the college, those who had graduated from Arabic universities and had attained limited English language skills were considered as a challenge to the BL process. The majority of student responses demonstrated that English language proficiency would be a key limitation in their use of BL. This can be attributed, in part, to limited English language curricula in earlier educational stages. Blair (2012) shows that Kuwaiti students' results in international academic achievement tests for English, science and mathematics were modest.

### 7.3.6 Financial issues

Scarcity of resources, such as technology, technical assistance, time or rewards, may also contribute to problems implementing BL (Rogers, 2000). Ismael (2009) suggested that implementing BL requires a suitable budget and that it is crucially determined by the technology to be used. The limited financial support for the BL strategy impacts both directly and indirectly on other aspects, including the negative impacts on academic staff training as well as shortfalls in available technology, equipment and materials required for implementing a BL strategy. From an administrative perspective, the decision-making process for financial allocations are complicated as they are tied to political decisions (Alsharhan, 2012). It is hoped that with the establishment of the University of Jaber, financial independence will be obtained. This might reduce any political impacts on implementing BL.

Limited funding creates academic job insecurity, and some responses highlighted that the lack of financial resources places those implementing BL at a disadvantage as they would be required to put in extra work for little personal gain, thus representing a source of fear for many staff. The availability of financial resources impacts the availability of various resources, including technology, staff rewards and technical support (Rogers, 2000). Some institutions, including the UOF, offer financial incentives to motivate staff to use BL (Alkandari, 2011). This approach can be helpful in encouraging teachers to participate in developing technological processes (Mosely, 2005).

The respondents in this study also agreed that financial resources were an obstacle. The responses to both the questionnaire and the interviews reflected that financial issues were near the top of the participants' list of important obstacles to the implementation of BL at SBEK. The major financial issues were the lack of money to buy basic equipment to support BL and the lack of private sector funding, which the regulations of SBEK prohibit.

One more issue relating to finances is that starting implementation of BL requires a double budget to cover all expenses. This is because of the cultural aspect of SBEK that prohibits males and females from mixing in classes or on campuses.

Although my study found that budget is an obstacle in SBEK, Blair (2012) reported that education spending in Kuwait is amongst the highest in the world. The spending levels range from 6.2% to 8.3% of the Gross Domestic Product, whereas in other countries the percentage is much lower; for instance, 3.1% in Singapore and 1.3% in the United Arab Emirates. A rich country with a small population and a long experience in higher education such as Kuwait has the potential, as regards education, to be one of the most successful countries in the region. However, the billions of dollars that Kuwait spends on

education are not leading to good enough results. According to a United Nations report in 2008, while Kuwait is one of the world's biggest spenders on education, it has suffered a significant reduction in educational outcomes (Blair, 2012). The shortage of money in SBEK might support the findings of my study as some of the participants attributed it to several different factors as (e.g. corruption, misjudgment of its needs, funds misspent elsewhere). In my research I was never able to verify how much the government pays to SBEK or UOF or how SBEK or UOF use their government funding.

### 7.3.7 Technical issues

Technical considerations relate specifically to administrative and financial functions, including the provision of computer laboratories or teaching rooms that are suitably equipped with technological resources. This is also connected to administrative decisions that allow service providers to begin building the technical infrastructure for the project and provide the necessary technical support via a qualified technical team. A key reason behind considering technical elements as an obstacle to the implementation of BL can be attributed to delays in funding allocation and decision-making.

Responses relating to issues surrounding technical staff clearly showed that the provision and availability of a highly skilled technical support team is a key project issue; of similar importance is an automated process that relies on the effective continuity of the system in order to save money, time and effort. The availability of such a technical team also helps with preventing long-lasting technical issues that could adversely affect the process of education technology. Zaiton (2005) highlights that to successfully implement a BL system, adequate resources and technical support staff must be available alongside suitable equipment to support blended learning applications, including software, hardware

and sufficient and easy Internet access. Limited funding is an obstacle faced by many educational institutions that cannot offer full-time employment for technical staff, an element often considered by decision-makers to be a drain on institutional budgets (Hew and Brush, 2005). My study identifies this as a possible reason behind SBEK employing only two or three technicians for all students, teachers and management staff at the school. Nyirongo's (2009) study on technical challenges at Mzuzu University concluded that the availability of technical assistance is a key element in the success of BL implementation.

## 7.4 Practical Implications

Based on the findings of this study, action is recommended with respect to solving administrative, technical, academic and student issues, as follows:

### 7.4.1 Administrative issues

Although the senior managers of SBEK are the ones who will ultimately make the decisions, they need to consider in more detail the attitudes of teachers towards implementing BL before definite policy decisions can be made. More understanding is needed concerning the best pedagogic BL practices, the kind of educational experiences that should be introduced by the new approach, the ways in which the new approach challenges current traditional practice. The process of developing a strong policy which encourages the move to a BL system should also take into consideration that the administrators need to focus on other issues, such as the reasons why SBEK seeks to use a BL mode, what exactly the innovation will entail, faculty expectations and the ways in which this new approach will be managed at the administrative level (Garrison and Kanuka, 2004).

### 7.4.2 Technical issues

The poor technical infrastructure at SBEK is clearly a problem. Limited access to computers, computers that are too old, no printers in computer laboratories, shortage of technical staff and Internet access were cited. Technical issues can, however, be resolved in time, assuming that financial support is forthcoming and the capacity of the computer network and technical services can be expanded. Other solutions have been mentioned previously in the literature; these solutions may be applied as a partial solution to the issue of financial shortages. Cuban *et al.* (2001) suggest that employing students to provide technical assistance offers a financially friendly solution to overcoming technical obstacles. Setting up an Internet wireless network instead of moving straight to the building of new computer laboratories offers another technical solution which can help to save the budget (Lowther *et al.,* 2003).

### 7.4.3 Academic issues

At SBEK, teachers should ideally be open to changes set out by educational managers and politicians with regard to the implementation of BL, and thereby accept the basic premises of educational reform. However, it is recognised that adapting to change is not always easy. Mostly, teachers all over the world tend to react negatively to changes imposed upon them from above without consultation. For example, most teachers in the UK opposed almost all proposals described in the white paper entitled "Higher Standards, Better Schools for All", which was introduced by the UK government under Prime Minister Tony Blair in 2005 (Wrigley, 2006). More consultation with teachers is therefore recommended before BL is implemented at SBEK. In particular, issues associated with workload need to be satisfactorily resolved. However, reducing time spent in classroom-based teaching is a solution suggested

by Alsharhan (2012), although currently this is prohibited by SBEK regulations. The formation of groups of suitable qualified teachers to help other teachers with course material preparation is a solution to this obstacle offered by Lim and Khine (2006).

It is evident that more training and professional development for teachers involved in the implementation of BL is required at SBEK, not just in the practical use and applications of technology, but also in more innovative approaches to combining online and face-to-face teaching, including the use of prescriptive models, focusing on pedagogic issues (e.g. Alexander, 2001; Blignaut and Trollip, 2003; Collis and Moonen, 2001; Conrad, 2000; Garrison and Anderson, 2003; Laurillard, 2000; 2002; Mayes and Fowler, 1999; Salmon, 2002).

The senior management in this study, however, expressed concern in both the questionnaire and interview responses, that "It is difficult to train each teacher how to design courses electronically." They may not be aware that many universities have created a specialist team which consists of a professional instructional designer, expert in the field, to overcome any deficiency in faculty skills regarding course content and use of technology (Alhazani, 2013). This can help in speeding up the implementation of BL. Another solution may be to bring in professional instructional designers to train interested faculty members in order to help other faculty members who may be more resistant to BL innovations.

The teachers in Kuwait are not accustomed to detailed external scrutiny of the quality of teaching and learning, similar to that which regularly occurs in higher education institutions elsewhere in the world. For example, more than 160 assessments of teaching quality in University departments within the UK were conducted by the Quality Assurance Agency's (QAA) audit and review teams between 2008 and 2009 (QAA, 2009a). More focus on quality

assurance, involving the evaluation of the performance of individual teachers and the improvement of teachers who are not performing adequately, is essential to ensure that BL is implemented effectively at SBEK. For example, formal methods of quality assurance should be developed, including regular opportunities for the students to provide feedback to the teachers, as performed routinely at other universities. Managers should organise professional development seminars or discussion forums where teachers can learn from each other's and the learners' experiences with BL at a local level (Alseaid, 2011).

### 7.4.4 Student issues

It is evident that some students may have inadequate computing and Internet skills to benefit from BL. The students should be given intensive training before they can make the best use of virtual learning environments for instance. It is also important that SBEK be aware that many students encounter financial hardship as a result of enrolling in a BL course. It is possible that providing preferential rates for computer stores and Internet providers could support BL students. Bates (2005) comments on an e-learning course in which low-cost rental schemes and free loans of computers were available. All students paid a technology fee, in addition to their course fee, and this additional fee was applied to support students technologically by improving local area networks. The funds were also used to make public computers more easily accessible and available on campus, and to provide docking ports for portable computers.

Higher education in Kuwait is not underpinned by the concept of Personal Development Planning (PDP). (PDP) supports individuals in planning their professional and personal development in a structured and supported way. It creates opportunities to reflect on existing achievements and skills and to use this reflection as a platform from which to plan future

development. PDP is designed to build a capacity in students to plan, manage, evaluate and reflect upon their own learning (Alseaid, 2011). It also helps to identify and develop their own study skills, habits and attitudes, in order to become self-assured independent learners (QAA, 2009b). It is recommended that students enrolled in BL programs should be encouraged to develop PDP portfolios. The students should also be assessed with respect to their self-discipline and ability to learn independently. Students must possess these qualities to maximise the benefits from BL. This recommendation, however, may be difficult to implement in practice. Alebaikan and Troudi (2010) highlighted the relatively low level of students' self-discipline on e-learning programmes in Saudi Arabia, which may also be manifested by students in Kuwait.

### 7.4.5 Use of English

The dominant language of the Internet is English, and there is a limited amount of Arabic content online. A natural result of this has been that non-English speaking Arab students and teachers have been slow to begin using Internet technology. The current limited Arabic content is partially explainable by the lack of local availability of people skilled in coding and digitising webpages, and also by the high costs of local web-hosting services. This means that the practical ability to produce, distribute and access Arabic content online is limited (Abdelraheem, 2006). The majority of the respondents in this study suggested that both faculty and students had difficulties in using the English language. Some commented that the dominance of English language on the Internet was an obstacle; however, the development of websites in Arabic in the future may help to alleviate the problem. Currently, it is evident that more training in English is necessary before the students can benefit from most Internet resources. Currently, students only undertake two

English courses in SBEK, which my research findings suggest is insufficient. Such training will also benefit students who aim to become part of the international labour market, which does not recognise Arabic and prefers those who speak English (Aljarf, 2008); however, it is recognised that the extensive use of English may threaten the status of Arabic and the development of Arabic Internet resources is imperative. According to the implementation strategy for the teaching of English at all education stages including kindergarten stage within public sector, it is expected that this challenge might be overcome within several years.

## 7.5 The Future

Although many limitations and challenges exist to the development of e-learning in the Arab world, optimism for the future of e-learning remains. In a review of the current situation of e-learning in Saudi Arabia, Alkhalifa (2009) assistant professor at the Information Technology Department, King Saud University, Riyadh, commented: "I would expect these constraints to diminish over time as more students reap the advantages of distance education, whilst the government and universities appreciate the need to extend and improve tertiary education opportunities and take advantage of technology." The same optimism could also be applied to Kuwait.

## 7.6 Recommendations for Future Research

The need for more consultation to develop more detailed plans for implementing BL, the need to eliminate response bias in surveys and the evaluation of the characteristics of managers in higher education are recommended.

### 7.6.1 More consultation

Both the quantitative and qualitative stages of this study highlighted that the respondents perceived numerous obstacles to implementing BL at SBEK, associated mainly with improving the administration, formulating a strategic plan, enhancing the poor college environment, solving the financial constraints, developing new pedagogic practices, expanding professional development/training for teachers and realising the importance of maintaining Islamic and cultural ethics. It is recommended that further research needs to be conducted, involving consultation with stakeholders, to elicit more detailed opinions, aiming to work out practical solutions to these important issues, before more definite recommendations can be made to implement BL at SBEK.

### 7.6.2 Elimination of response bias

It is recommended that if the questionnaire used in this study is administered again, then it should be interspersed with items designed specifically to measure and eliminate acquiescent response bias. The standard solution to avoid respondents from consistently endorsing one end of each item scale is to include conflicting items, (i.e. some items should have negated counterparts). For example, an item such as "It costs too much to implement BL in our school" could be conflicted by another item aiming to elicit the opposite response, such as "It will not cost too much to implement BL in our school". If some respondents consistently provide affirmative answers to pairs of conflicting questions, then they are clearly responsible for acquiescent response bias, by agreeing to every question, without thinking or even when they are in doubt about a question. Such vague responses clearly demonstrate acquiescent bias and should be eliminated from the survey. Paulhus (1991) set forth many other assessment methodologies and means through which to rectify acquiescent responses.

### 7.6.3 Personal characteristics of managers in higher education

The GLOBE survey's major finding was that the characteristics of managers are contextual, meaning that they are embedded in the organisational norms, values and beliefs of their culture (House *et al.*, 2004). Business managers in Kuwait scored significantly lower than elsewhere on team-oriented, charismatic and participative qualities and the extent to which they engaged in risky future-oriented behaviours. They scored significantly higher on self-protective traits, namely face-saving, self-centredness, status-consciousness, conflict induction and reliance on formal procedures. It would be of value to conduct a survey to determine if the managers of higher educational institutions in Kuwait possess the same personal characteristics as business managers; if so, then these stereotypical characteristics may potentially influence their attitudes. Ultimately, these personal characteristics determine the ways in which the managers create a vision for the future and decide the future development of BL in Kuwait. Consequently, a better understanding of the mind-sets of the managers of higher education institutions in Kuwait would be salutary, because it may help to underpin how decision making processes can be developed in a Kuwaiti context. If the attitudes of the managers are an obstacle, then it is possible that a distributed leadership approach, involving not just the decisions of the managers, but also the teachers, may be more productive.

### 7.7 Final Conclusions

This mixed-methods study applied a sequential explanatory design. A questionnaire survey was conducted to provide an initial statistical evaluation of the obstacles to BL perceived by a sample of senior management, teachers and students drawn from the

population in the SBEK. An interview survey was subsequently conducted to provide qualitative insights based on themes that could not be obtained using the questionnaire. The main conclusions are as follows:

The attitudes of most of the participants in this study towards the implementation of BL at SBEK appeared to be positive and optimistic; however, many obstacles were identified, consistent with the findings of other researchers working on BL at other educational institutions in the Arab world and elsewhere. An apparent absence of planning, vision and leadership emerged as the major challenge that faces the implementation of BL at SBEK. Financial issues were also near the top of the participants' list of important obstacles, due to the perceived lack of money to buy basic equipment to support BL and the lack of private sector funding. The teachers highlighted the academic deficiencies among the students, including lack of technical skills and limited proficiency in the English language, that need to be addressed. Concern was expressed about the extra teaching and administrative workload required to implement BL and the need for more training and professional development for the teachers. Cultural norms may result in difficulties in implementing BL because of the perceived unethical content on the Internet; combined with the social custom in Kuwait of precluding male teachers from direct or indirect interaction with female students outside school. Based on the findings of this study, urgent action is recommended with respect to addressing the administrative, technical, academic and student issues involved in the implementation of BL at SBEK.

In view of the apparent lack of vision of the SBEK senior management, I recommend that the collection of more information from the stakeholders is essential before definite policy decisions can be made. Taking into account the many limitations of the current study, more research is needed to create a clear vision for the future. The best pedagogic BL

practices that should be introduced must be ascertained. The resources that are needed to introduce them and who should be involved in making policy decisions, must be determined. Without such understanding, implementing BL programs at SBEK will pose a considerable challenge to policy makers, resulting in the possible failure of BL, with little chance for realising its many benefits.

Finally, speaking reflexively as a Kuwaiti, I believe that as a consequence of my difficult journey along the many roads followed to complete this study, I have become a confident researcher with a significant contribution to make to the evolution of BL and to the national development of my beloved State of Kuwait. As far as I am aware, this is the first study to tackle the challenges of implementing BL in Kuwait, the Arabian Gulf and Middle Eastern countries. This study is unique in its sample selection; it is the first study to include senior management, faculty and students. Most previous studies included only teachers, only students, or both, but not senior management. This study is differentiated in the diversity of dimensions and the themes that have been tackled, particularly relating to culture and attitudes. To my knowledge, this is the first study to apply a mixed methodology, combining questionnaires and interviews to investigate challenges and attitudes towards BL. Most previous studies only utilised a questionnaire.

One of the most significant aspects of my study is the way it illuminates the crucial significance of the cultural and linguistic context for the successful introduction of BL. This was particularly true in terms of the role of gender in influencing responses to the initiative. One of the issues that I discovered is that some participants prefer to see women with their heads covered. They expressed concerns regarding e-content design that may depict women or music considered to be unsuitable. In Kuwait, due to cultural reasons, some families of female students refuse to allow these students sit alone with male teachers. This could be a

great challenge for the implementation of BL in Islamic and Arabic countries in terms of using one-to-one online activities. To overcome this cultural dynamic, I chose focus group interviews. Generally, I would include this component to the list of advantages of focus groups mentioned in the literature. Although some technologies support the Arabic language, this study is unique in identifying insufficient English language skills as a challenge to the implementation of BL in the education sector in Arab countries. English is the dominant language of the Internet, and all the new technologies and databases are in English; therefore, many Arab students would find it difficult to use these tools in the context of BL. This study corresponds with the report conducted by Tony Blair (2012) who highlighted the education crisis in Kuwait and specified the need to integrate e-learning with students in higher education in order to meet future challenges. He also insisted on the need and importance of improving the preparation of teachers in Kuwait. This study also aligns with the MOE e-learning objectives mentioned in the second chapter, which focus on the importance of integrating e-learning into the education system. SBEK is supervised by the MOE which, in turn, is responsible for the public institutions in Kuwait. It comes in alignment with the education section of the latest five-year plan of the government, as mentioned in the second chapter. Technological innovation cannot be approached in isolation without holistic and systematic review of SBEK. The findings of this study suggest to the management that a review should incorporate the wider cultural and organisational aspects to enable inoovation that will help SBEK to move forward in the implementation process.

Finally, I have proposed a road map as a strategy for implementing BL in SBEK as I felt the need for a more structured approach to introducing BL in SBEK. This might help the current management, new University of Jaber management and other institutions in Gulf, Arab and elsewhere to take further steps in implementing BL (see appendix 16).

# APPENDICES

## Appendix 1: SBEK permission

تهديكم عمادة الكلية أطيب تحياتها وتمنياتها لكم بدوام الصحة العافيــة ،

ويرجى التكرم بالعلم بأن صاحب العلاقة المذكور أعلاه سوف يقوم بعمل بعــض المقابلات مع أعضاء هيئة التدريس بكلية التربية الأساســية ضــمن متطلبــات الحصول على درجة الدكتوراه في المناهج وطـرق التـدريس والمعنونــة بـــ (معوقات تطبيق التعلم المدمج في كلية التربية الأساسية ) .

وجريا على ما تعودناه منكم من تعاون صادق بناء يرجى التكرم بتــسهيل مهمة المذكور في الالتقاء بالسادة أعضاء هيئة التدريس بقسمكم العلمي.لإجراء المقابلات.

### مع خالص الشكر والتقدير،،،،

عميد الكلية

أ.د. عبد الله مهنا المهنا

نسخ لكل من :
- مكتب العميد
- الملف :
- المكتب الفني .

## Appendix 2: Questionnaire items and dimensions

Pre- Questionnaire questions:

Gender, qualifications (Degrees, ICDL etc…), age, position, experience, GPA, availability of PC or laptop, Internet usage and experience in BL.

## Table A.1

## Questionnaire for Students (Reverse Scored items Indicated by R)

| DIMENSION | Item | |
|---|---|---|
| FINANCIAL | 1 | The lack of financial incentives will prevent teachers from using BL |
| | 2 | It cost too much to implement BL |
| | 3 | I think money is an obstacle that can prevent implementing BL |
| ADMINISTRATIVE | 4R | Senior management pays attention to the trends in pedagogical development |
| | 5 | Students, faculty members and management are not aware enough of BL |
| | 6 | Our school environment is not ready yet for BL to be implemented |
| | 7 | Implementing BL before modules and departments are ready can cause problems |
| ACADEMIC | 8 | High student numbers impede the implementation of BL |
| | 9 | BL will add to students' workload |
| | 10 | BL requires great interaction between students and teachers |
| | 11 | I need only face-to-face contact in my learning |
| | 12 | Integrating e-learning in my school will allow students to get help from others to do their homework |
| | 13 | BL will weaken teacher`s control of students |
| CULTURE | 14 | Social custom in Kuwait will preclude male teachers from direct or indirect interaction with female students outside school |
| | 15 | My culture encourage me to use face to face interaction |
| | 16 | Because of the unethical content , I found the Internet is danger |
| TECHNICAL | 17R | Computer labs are easily available in the School |
| | 18R | The Internet is readily available at home |
| | 19R | I have good availability of the Internet at school |
| | 20 | I don't get help from the technical team when I call them |
| | 21 | The school needs to raise the number of technicians |
| SKILLS | 22R | I have good skills in the use of multimedia |
| | 23 | My lack of experience in using BL would prevent me using it |
| | 24 | The reliance on English in databases and the Internet form a major obstacle |
| | 25 | |
| | 26 | The lack of training opportunities will not help me to become involved in BL |
| | 27R | The lack of organised programmes to train staff and students in preparation for BL will prevent it from being implemented |
| | | I have good skills in the use of electronic teaching methods |

| DIMENSION | ITEM | |
|---|---|---|
| ATTITUDES | 28 | I like using BL |
| | 29 | BL will meet students' needs |
| | 30 | BL will motivate students to lifelong learning |
| | 31 | BL will increase students' critical thinking |
| | 32 | BL will increase students' achievement |
| | 33 | I need computers in my education |
| | 34 | Integrating e-learning in our school will improve staff performance |
| | 35 | I prefer using BL |

**Table A.2**

**Questionnaire for Faculty teachers and Managers (Reverse Scored Items indicated by R)**

| DIMENSION | ITEM | |
|---|---|---|
| FINANCIAL | 1 | It costs too much to implement BL in our school |
| | 2 | The school budget does not cover enough items |
| | 3R | I think that there are financial incentives for using BL |
| | 4 | With the current budget, it is difficult to implement BL |
| ADMINISTRATIVE | 5R | senior management pays attention to trends in pedagogical development |
| | 6 | Students, faculty members and management are not aware enough of BL |
| | 7 | Implementing BL before modules/departments are ready can cause problems |
| ACADEMIC | 8 | High student numbers impede the implementation of BL |
| | 9 | BL will add to students' workload |
| | 10 | BL requires great interaction between students and teachers |
| | 11 | My workload of traditional learning prevents me from adding BL to my |
| | 12 | teaching |
| | 13 | I need only face-to-face contact in my teaching |
| | 14 | Integrating e-learning in my school will allow students to get help from others |
| | | BL will weaken my control of students |
| CULTURE | 15 | Social custom in Kuwait will preclude male teachers from direct or indirect interaction with female students outside school |
| | 16 | My culture encourage me to use face to face interaction |
| | 17 | Because of the unethical content , I found the Internet is danger |
| TECHNICAL | 18R | Computer labs are easily available in the School |
| | 19R | The Internet is readily available at home |
| | 20R | I have good availability of the Internet at school |
| | 21 | I don't get help from the technical team when I call them |
| | 22 | The school needs to raise the number of technicians |
| SKILLS | 23 | It is hard to provide a training team in Kuwait which can properly train |
| | 24R | staff in BL |

| | | |
|---|---|---|
| | 25 | I have good skills in the use of multimedia |
| | 26 | My lack of experience in using BL would prevent me from using it |
| | 27 | It is difficult to train each teacher how to design courses electronically |
| | 28 | The reliance on English is a major obstacle to the use of BL |
| | 29 | The lack of training opportunities will not help me to become involved in |
| | 30R | BL |
| | | The lack of training programmes to will prevent BL from being implemented |
| | | I have good skills in the use of electronic teaching methods |
| ATTITUDES | 31 | I like using BL |
| | 32 | BL will meet students' needs |
| | 33 | BL will motivate students to lifelong learning |
| | 34 | BL will increase students' critical thinking |
| | 35 | BL will increase students' achievement |
| | 36R | BL is waste of time and money |
| | 37 | I need computers in my education |
| | 38 | Integrating e-learning in our school will improve staff performance |
| | 39 | I prefer using BL |

**Appendix 3: Interview questions**

Pre interview questions:

Gender, qualifications (Degrees, ICDL etc…), age, position, experience, GPA, availability of PC or laptop, Internet usage and experience in BL.

Interviews questions

❖ What do you know about the word Bl?

❖ How do you describe the current Budget?

❖ Can you describe me the school current strategy?

❖ How do you describe the Internet connectivity, Technical staff and computer labs in the School?

❖ What do you think is the relationship between the cultural and technology?

❖ How do you describe the school environment?

❖ What do you think about the professional development programmes in the school?

❖ Can you tell me about teachers, students and administrators technological skills?

❖ What are the causes that should be considered while implementing BL? Why? How?

❖ How do you describe the level of English for Teachers and Students?

❖ Why do you think we don't use BL in school?

❖ How do you think we can solve the problems we have?

❖ How do you feel about the current Management, Teachers and students?

❖ Do you think using BL at school will add workload on you or will help organise your time?

❖ What are the cautions that should be taking in consideration before implementing BL?

❖ What do you think can impede BL in our school? How? Why?

❖ What are the advantages of using technology in Education?

❖ Can you describe your enthusiasm towards implementing and using BL?

❖ Describe me your feelings while using technology?

# Appendix 4: Supervisor permission

*University of*
**HUDDERSFIELD**

25<sup>th</sup>. August 2011

To whom it may concern,

**Re: Ahmad Yousef**

I am Dr Graham Morley, senior lecturer at the University of Huddersfield the supervisor for Ahmad Yousef's PhD and I am giving him permission to return to Kuwait to collect data.

The starting date will be approximately the end of October 2011.

Thanking you in anticipation,

*G Morley*

Dr Graham Morley

Senior Lecturer
Course Leader MA Professional Development (International Education)
School of Education and Professional Development
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Lockside
Queensgate
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Vice-Chancellor: Professor Bob Cryan BSc MBA PhD DSc
An exempt charity and a centre of excellence for vocational education and research

INVESTOR IN PEOPLE

## Challenges facing the implementation of blended learning in the School of Basic Education

- ❖ I would like to invite you take part in this research. Details of this research are presented below, which will take you just few minutes to read. Reading these details will give you a better understanding of the aims of this research and might encourage you to participate in this research. In case you need any further explanations, please feel free to ask me at any point.

- ❖ This research aims to identify the challenges of the implementation of blended learning in our faculty as well as exploring attitudes towards it. This research contains two data collection stages, a questionnaire and interviews.

- ❖ Your participation in this survey is believed to enhance the research data.

- ❖ You have the right to decide whether you wish to participate in this research or not. Also, you have the right to withdraw from this research at any stage. This will not affect any benefits that you are entitled to in any way. You do not have to give a reason for your withdrawal.

- ❖ You might be asked to take part in this research for the two above mentioned stages. The interview is expected to last for an hour due to its open-ended questions, whereas, filling the questionnaire is expected to take 20 minutes due to its close-ended questions. I expect you to provide clear unbiased answers supported with evidence and related examples.

- ❖ The main reason for this research is the desire to develop the performance of our school; therefore, participants in this survey should not expect direct benefits for their participation.

- ❖ This research ensures that your real identity and anonymity are protected.

- ❖ Codes will be given to all of the participants in this research. It also ensures that all the provided information will be used only for the benefit of this research. Yet, it will be helpful to let you know that there is a possibility that your identity might be identified. Please bear that in mind while giving your accounts.

- ❖ You will be informed about the research results in the final stages of this research.

❖ The digital recordings of your activities made during this research will be used only for analysis and for illustration during conference presentations and lectures. No other use will be made of them without your written permission and no one outside the project will be allowed access to the original recordings.

❖ If you require any further information or explanation, please contact me via the following telephone number or email address:

❖ Tel: 66651185
❖ E-mail: ebn_3me@hotmail

**Appendix 6: Consent Form**

## Challenges facing the implementation of blended learning in the School of Basic Education

This is to confirm that I have read the Information Sheet of this research and all the details of this research are clear to me. I am satisfied with the answers given in response to my questions and that I have the right to further inquires at any point. I am aware that I have the right to withdraw form this research at any time, or refuse to give an answer to any question in this research. I approve giving information to the people working on this research within the conditions of confidentiality included in the information sheet. I understand that my responses might contain some criticism to the school of education and I agree to provide such answers. I agree to take part in this research under the conditions included in the Information Sheet. I agree on the use the information I provided in this survey to be used in further studies.

- ❖ Participant's Name:
- ❖ Participant's Signature :
- ❖ Date:
- ❖ Researcher's Name :
- ❖ Researcher's Signature :

**Appendix 7: Demographic characteristics**

The demographic characteristics of the sample of N = 293 final years students are presented in Table A.3. The proportions of male and female students were approximately equal. About two thirds of the students specialised in non-physical subjects and about one third in physical subjects. The GPA scores were distributed unevenly, with about two thirds of the scores between 2 and 3 and one third of the scores over 3. In order to ensure sufficient cases within each cell of the sample design matrix to conduct analysis of variance, the four GPA categories had to be collapsed into two (Table A.4).

**Table A.3: Demographic characteristics of final year students (N = 293)**

| Characteristic | Category | Frequency | Percent |
|---|---|---|---|
| Gender | Male | 146 | 49.8% |
| | Female | 147 | 50.2% |
| Specialisation | Non-physical | 186 | 63.5% |
| | Physical | 107 | 36.5% |
| GPA | 2-2.5 | 101 | 34.5% |
| | 2.5-3 | 90 | 30.7% |
| | 3-3.5 | 72 | 24.6% |
| | 3.5-4 | 30 | 10.2% |

**Table A.4: Sample design matrix for final year students (N = 293)**

| | | Gender | | |
|---|---|---|---|---|
| Specialisation | GPA | Male | Female | Total |
| Non-physical | 2-3 | 48 | 71 | 119 |
| | >3 | 32 | 35 | 67 |
| Physical | 2-3 | 44 | 28 | 72 |
| | >3 | 22 | 13 | 35 |

The demographic characteristics of the sample of N = 43 faculty teachers are presented in Table A.5. The majority (over 50%) of the teachers were male, specialised in non-physical

subjects and had more than 10 years' experience. About two thirds of the teachers were less than 50 years old and about one third were over 30 years old.

**Table A.5: Demographic characteristics of faculty staff (N = 43)**

| Characteristic | Category | Frequency | Percent |
|---|---|---|---|
| Gender | Male | 25 | 58.1% |
| | Female | 18 | 41.9% |
| Specialisation | Non-physical | 26 | 60.5% |
| | Physical | 17 | 39.5% |
| Experience (Years) | 0-5  (1) | 5 | 11.6% |
| | 5-10 (1) | 11 | 25.6% |
| | >10  (2) | 27 | 62.8% |
| Age (Years) | < 35 | 4 | 9.3% |
| | 35-50 (1) | 24 | 55.8% |
| | >50 (2) | 15 | 34.9% |

In order to ensure sufficient numbers of cases in each cell of the sample design matrix to conduct a valid analysis of variance, age was eliminated (due to zero cases in some of the cells) and experience was collapsed into two categories (Table A.6).

**Table A.6: Sample design matrix for faculty teachers**

| | | Gender | | |
|---|---|---|---|---|
| Experience | Specialisation | Male | Female | Total |
| Up to 10 Years | Non-physical | 5 | 4 | 9 |
| | Physical | 2 | 5 | 7 |
| | | 7 | 9 | 16 |
| Over 10 Years | Non-physical | 11 | 6 | 17 |
| | Physical | 7 | 3 | 10 |
| | | 18 | 9 | 27 |

The demographic characteristics of the sample of N = 8 senior management are presented in Table A.7. They were all male and specialised in non-physical subjects. The majority had over 10 years' experience and were over 50 years old.

**Table A.7: Demographic characteristics of senior management (N = 8)**

| Characteristic | Category | Frequency | Percent |
|---|---|---|---|
| Gender | Male | 8 | 100.0% |
| | Female | 0 | 0.0% |
| Specialisation | Non-physical | 8 | 100.0% |
| | Physical | 0 | 0.0% |
| Experience (Years) | 5-10 | 1 | 12.5% |
| | >10 | 7 | 87.5% |
| Age (Years) | 35-50 | 3 | 37.5% |
| | >50 | 5 | 62.5% |

**Appendix 8: Pre-Analysis (Reliability)**

To ensure that all the dimensions were reliably measured, reflected by Cronbach's *alpha* between 0.5 and 1, some of the unreliable items, which did not contribute towards the measurement of a unifying dimension, were deleted and two of the proposed dimensions had to be combined to ensure that they were reliable (Tables A.8 and A.9).

**Table A.8: Reliability Analysis on the Questionnaire Items for Students**

| DIMENSION | Items | Cronbach's *alpha* | Deleted items | Cronbach's *alpha* with Deleted Items |
|---|---|---|---|---|
| FINANCIAL & ADMINISTRATIVE | 1, 2,3, 4R, 5, 6, & 7 | .485 | 4R | .529 |
| ACADEMIC | 8, 9, 10, 11, 12, & 13 | .444 | 8 | .447 |
| CULTURE | 14, 15, & 16 | .488 | | |
| TECHNICAL | 17R, 18R, 19R, 20 & 21 | .275 | 18R & 19R | .587 |
| SKILLS | 22R, 23, 24, 25, 26, & 27R | .518 | 26 | .551 |
| ATTITUDES | 28, 29, 30, 31, 32, 33, 34, & 35 | .859 | | |

The deletion of inconsistent items and combination of certain dimensions to elevate reliability was an essential process because the statistical analysis could be meaningless if the dimensions were not reliably measured (Allen & Yen, 2002). In the questionnaire for students, the reliability of the three items in the proposed FINANCIAL dimension was minimal (Cronbach's alpha = -.018) indicating multidimensionality; consequently these three items were combined with the four items in the proposed ADMINISTRATIVE dimension. After deletion of Item 4R, the resulting FINANCIAL & ADMINISTRATIVE dimension exhibited adequate reliability (Cronbach's alpha = .529). Certain items were also deleted from the ACADEMIC, CULTURE, TECHNICAL and SKILLS dimensions in the

questionnaire for students, in order to elevate their reliabilities. The reliability of the ATTITUDES dimension was high (Cronbach's *alpha* = .859) without deletion of items.

**Table A.9: Reliability Analysis on the Questionnaire Items for Faculty Teachers**

| DIMENSION | Items | Cronbach's *alpha* | Deleted Items | Cronbach's *alpha* with Deleted Items |
|---|---|---|---|---|
| FINANCIAL & ADMINISTRATIVE | 1,2,3R, 4, 5R, 6. & 7 | .047 | 1, 4, & 5R | .480 |
| ACADEMIC | 8, 9, 10, 11, 12, 13 & 14 | .468 | 10 | .595 |
| CULTURE | 15, 16, & 17 | .701 | | |
| TECHNICAL | Items 18R, 19R, 20R, 21, & 22 | .515 | | |
| SKILLS | 23, 24R, 25, 26, 27, 28, 29, & 30R | .556 | | |
| ATTITUDES | 31, 32, 33, 34, 35, 36R, 37, 38, & 39. | .895 | | |

In the questionnaire for faculty teachers, the reliability of the three items in the proposed FINANCIAL dimension was erroneous (Cronbach's alpha = -.413). These three items were therefore combined with the four items in the proposed ADMINISTRATIVE dimension. After deleting Items 1, 4 and 5R, the resulting FINANCIAL & ADMINISTRATIVE dimension exhibited adequate reliability (Cronbach's alpha = .480). Item 10 was deleted from the ACADEMIC dimension to elevate its reliability. The CULTURE, TECHNICAL,

SKILLS and ATTITUDES dimensions were reliably measured without deleting any items. It is notable that the responses of the faculty teachers were more reliable that those of the students, implying that the students created more errors than the teachers when completing the questionnaires.
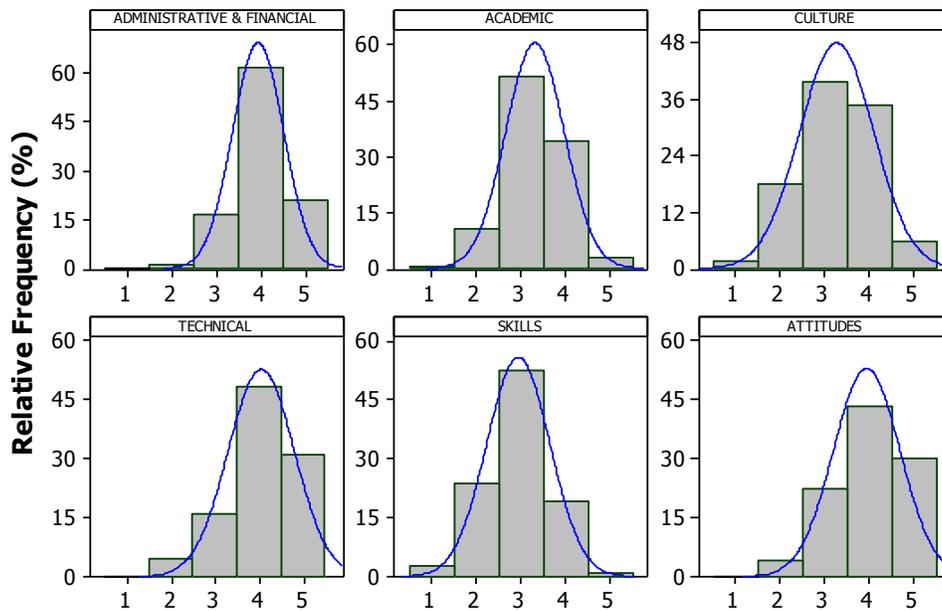
**Figure A.1  Frequency Distributions of the Dimensions for the Final Year Students**
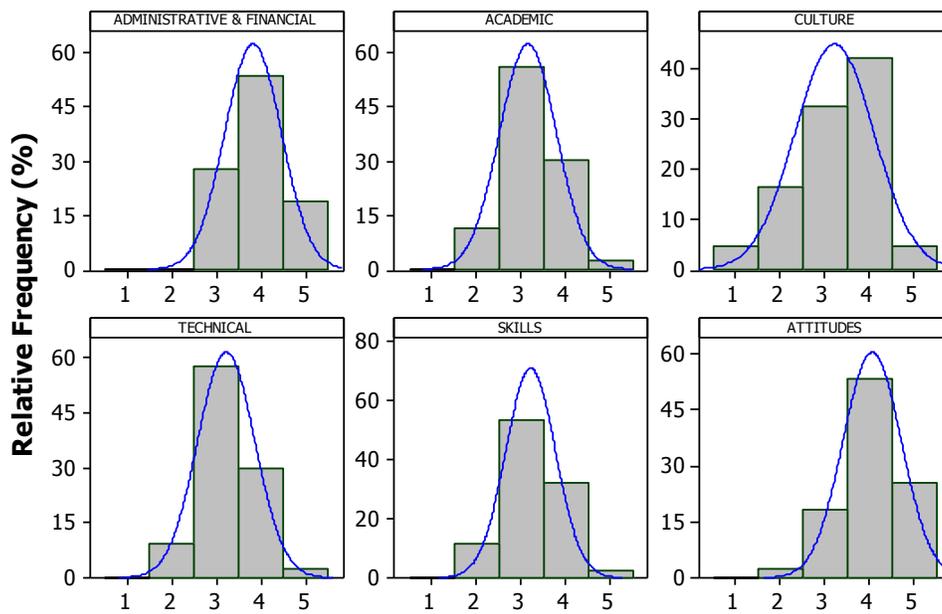


**Figure A.2  Frequency Distributions of the Dimensions for the Faculty Teachers**
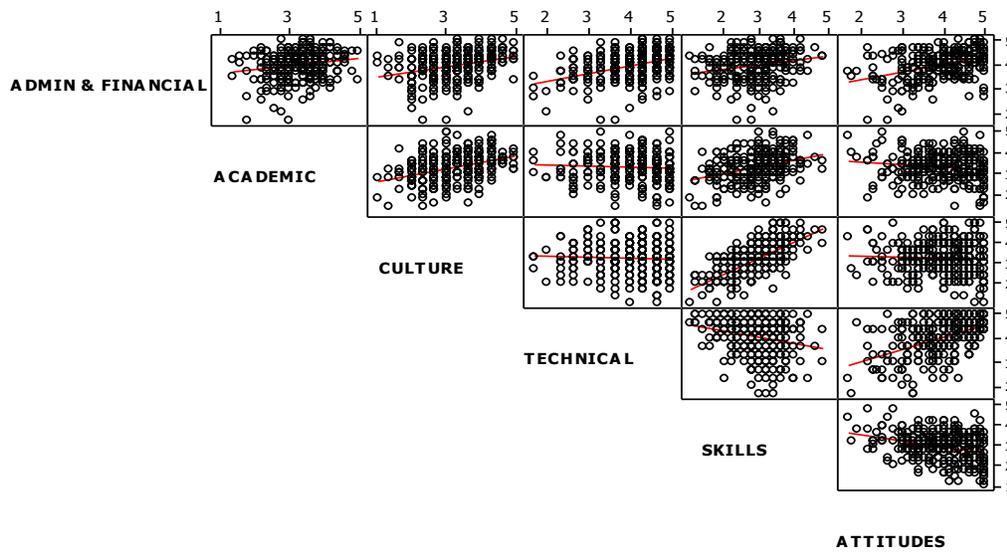
**Figure A.3 Matrix Plot of the Dimension Scores for the Students**
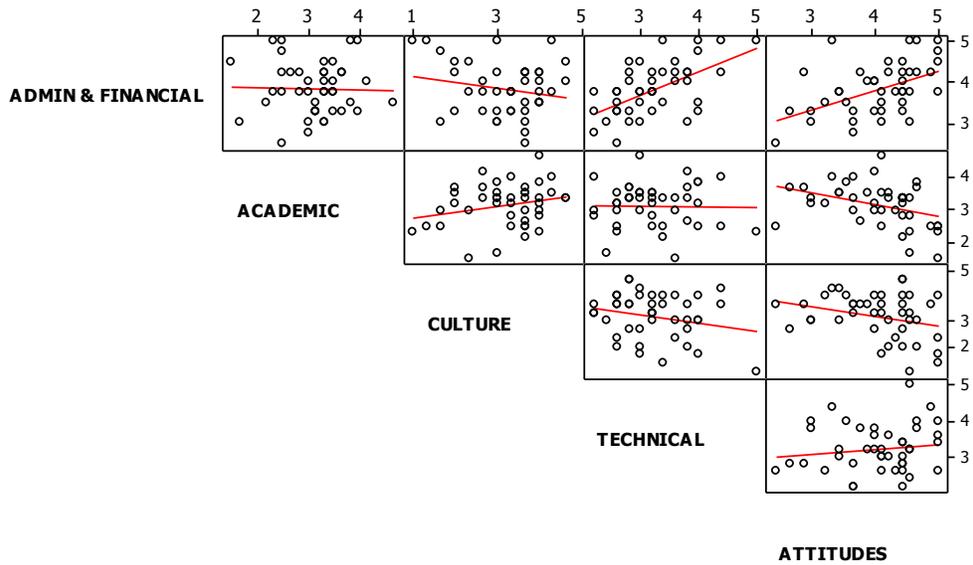


**Figure A.4 Matrix Plot of the Dimension Scores for the Faculty teachers**

252

**Appendix 9: Types of statistical analysis used in this study**

| RQ | Dependent variables | Independent variables | Statistical Analysis |
|---|---|---|---|
| 1 | Items 1 to 27 in the questionnaire for students and items 1 to 30 in the questionnaire for faculty teachers and senior management | Three groups: Final year students, faculty teachers and senior management. | Kruskal-Wallis test to compare the grouped median scores for the items in each dimension across the groups |
| 2 | Five linearly combined dimensions of perceived obstacles (FINANCIAL & ADMINISTRATIVE, ACADEMIC, CULTURE, TECHNICAL and SKILLS) | Three groups: Gender, Specialisation and GPA of the final year students | MANOVA to compare mean scores of the dependent variables across the groups |
| 3 | Five linearly combined dimensions of perceived obstacles (FINANCIAL & ADMINISTRATIVE, ACADEMIC, CULTURE, TECHNICAL and SKILLS) | Three groups: Gender, Specialisation And Experience of the faculty teachers | MANOVA to compare the mean scores of the dependent variables across the groups |
| 4 | Items 28 to 35 in the questionnaire for students and items 31 to 39 in the questionnaire for faculty teachers and senior management | Three groups: Final year students, faculty teachers and senior management | Kruskal-Wallis test to compare the grouped median scores for the items in each dimension across the groups |
| 5 | ATTITUDES | Three groups: Gender, Specialisation and GPA of the final year students | ANOVA to compare the mean scores of the dependent variable across the groups |
| 6 | ATTITUDES | Three groups: Gender, Specialisation and Experience of the faculty teachers | ANOVA to compare the mean scores of the dependent variable across the groups |

**Appendix 10: Distribution of ordinal responses to the questionnaires (Challenges)**

**Table A.10: Distribution of Ordinal Responses to the Questionnaire for Students Concerning Challenges (Reverse Scored Items Indicated By R)**

| Item | 1 | 2 | 3 | 4 | 5 | Mdn |
|---|---|---|---|---|---|---|
| FINANCIAL & ADMINISTRATIVE | | | | | | |
| 1 The lack of financial incentives will prevent teachers from using BL | 9 (3.1%) | 17 (5.8%) | 51 (17.4%) | 106 (36.2%) | 109 (37.2%) | 4 |
| 2 It cost too much to implement BL | 5 (1.7%) | 24 (8.2%) | 27 (9.2%) | 78 (26.6%) | 159 (54.3%) | 5 |
| 3 I think money is an obstacle that can prevent implementing BL | 15 (5.1%) | 48 (16.4%) | 37 (12.6%) | 100 (34.1%) | 93 (31.7%) | 4 |
| 4R Top management pays close attention to the new trends in pedagogical development | 9 (3.1%) | 40 (13.7%) | 46 (15.7%) | 130 (44.4%) | 68 (23.2%) | 4 |
| 5 Students, faculty members and management are not aware enough of BL | 7 (2.4%) | 21 (7.2%) | 37 (12.6%) | 96 (32.8%) | 131 (44.7%) | 4 |
| 6 Our school environment is not ready yet for BL to be implemented | 6 (2.0%) | 24 (8.2%) | 55 (18.8%) | 107 (36.5%) | 100 (34.1%) | 4 |
| 7 Implementing full BL before modules and departments are ready can cause problems | 7 (2.4%) | 27 (9.2%) | 77 (26.3%) | 117 (39.9%) | 65 (22.2%) | 4 |
| ACADEMIC | | | | | | |
| 8 High student numbers impede the implementation of BL | 23 (7.8%) | 42 (14.3%) | 111 (37.9%) | 82 (28.0%) | 35 (11.9%) | 3 |
| 9 BL will add to students' workload | 34 (11.6%) | 71 (24.2%) | 88 (30.0%) | 63 (21.5%) | 37 (12.6%) | 3 |
| 10 BL requires great interaction between students and teachers (by email, forums and chat rooms) | 19 (6.5%) | 37 (12.6%) | 45 (15.4%) | 109 (37.2%) | 83 (28.3%) | 4 |
| 11 I need only face-to-face contact in my learning | 8 (2.7%) | 45 (15.4%) | 40 (13.7%) | 124 | 76 (25.9%) | 4 |

254

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | | (42.3%) | | |
| 12 Integrating e-learning in my school will allow students to get help from others to do their homework | 37 (12.6%) | 62 (21.2%) | 98 (33.4%) | 44 (15.0%) | 52 (17.7%) | 3 |
| 13 BL will weaken teachers' control of students | 32 (10.9%) | 59 (20.1%) | 98 (33.4%) | 69 (23.5%) | 35 (11.9%) | 3 |
| CULTURE | | | | | | |
| 14 Social custom in Kuwait will preclude male teachers from direct or indirect interaction with female students outside school | 21 (7.2%) | 51 (17.4%) | 59 (20.1%) | 89 (30.4%) | 72 (24.6) | 4 |
| 15 My culture encourages me to use face-to-face interaction more than other methods | 21 (7.2%) | 56 (19.1%) | 55 (18.8%) | 91 (31.1%) | 70 (23.9%) | 4 |
| Item | 1 | 2 | 3 | 4 | 5 | Mdn |
| 16 Because of the unethical content, I found the Internet is danger | 47 (16.0%) | 78 (26.6%) | 76 (25.9%) | 59 (20.1%) | 33 (11.3%) | 3 |
| TECHNICAL | | | | | | |
| 17R Computer labs are easily available in the School | 8 (2.7%) | 26 (8.9%) | 92 (31.4%) | 98 (33.4%) | 69 (23.5%) | 4 |
| 18R The Internet is readily available at home | 161 (54.9%) | 93 (31.4%) | 19 (6.5%) | 14 (2.0%) | 6 (2.0%) | 1 |
| 19R I have good availability of the Internet at school | 28 (9.6%) | 48 (16.4%) | 49 (16.7%) | 102 (34.8%) | 66 (22.5%) | 4 |
| 20 I don't get help from the technical team when I call them | 5 (1.7%) | 24 (8.2%) | 27 (9.2%) | 78 (26.6%) | 159 (54.3%) | 5 |
| 21 The school needs to raise the number of technicians | 5 (1.7%) | 21 (7.2%) | 26 (8.9%) | 82 (28.0%) | 159 (54.3%) | 5 |
| SKILLS | | | | | | |
| 22R I have good skills in the use of multimedia | 75 (25.6%) | 117 (39.9%) | 47 (16.0%) | 39 (13.3%) | 15 (5.1$) | 2 |
| 23 My lack of experience in using BL would prevent me from using it | 47 (16.0%) | 78 (26.6%) | 76 (25.9%) | 59 (20.1%) | 33 (11.3%) | 3 |
| 24 The reliance on English in databases and the Internet form a major obstacle to the use of BL | 21 (7.2%) | 56 (19.1%) | 55 (18.8%) | 91 (31.1%) | 70 (23.9%) | 4 |

255

| | | | | | | |
|---|---|---|---|---|---|---|
| 25 The lack of training opportunities will not help me to become involved in BL | 15 (5.1%) | 48 (16.4%) | 37 (12.6%) | 100 (34.1%) | 93 (31.7%) | 4 |
| 26 The lack of organised programmes to train staff and students in preparation for BL will prevent it from being implemented | 6 (2.0%) | 24 (8.2%) | 55 (18.8%) | 107 (36.5%) | 100 (34.1%) | 4 |
| 27R I have good skills in the use of electronic teaching methods | 78 (26.6%) | 106 (36.2%) | 57 (19.5%) | 46 (15.7%) | 6 (2.0%) | 2 |

**Table A.11: Distribution of Ordinal Responses to the Questionnaire for Teachers Concerning Challenges (Reverse Scored Items Indicated by R)**

| Item | 1 | 2 | 3 | 4 | 5 | Mdn |
|---|---|---|---|---|---|---|
| FINANCIAL & ADMINISTRATIVE | | | | | | |
| 1 It costs too much to implement BL in our school | 3 (7.0%) | 4 (9.3%) | 13 (30.2%) | 16(37.2%) | 7 (16.3%) | 4 |
| 2 The school budget does not cover enough items | | 1 (2.3%) | 20 (46.5%) | 11(25.6%) | 11 (25.6%) | 4 |
| 3R I think that there are financial incentives for using BL or electronically designed courses | 4 (9.3%) | 7 (16.3%) | 10 (23.3%) | 12(27.9%) | 10 (23.3%) | 4 |
| 4 With the current budget, it is difficult to implement BL | 3 (7.0%) | 10 (23.3%) | 15 (34.9%) | 6 (14.0%) | 9 (20.9%) | 3 |
| 5R Top management pays close attention to new trends in pedagogical development | 2 (4.7%) | 10 (23.3%) | 8 (18.6%) | 16(37.2%) | 7 (16.3%) | 4 |
| 6 Students, faculty members and management are not aware enough of BL | 2 (4.7%) | 1 (2.3%) | 4 (9.3%) | 19(44.2%) | 17 (39.5%) | 4 |
| 7 Implementing full BL before modules and departments are ready can cause problems | 1 (2.3%) | 2 (4.7%) | 6 (14.0%) | 18(41.9%) | 16 (37.2%) | 4 |
| ACADEMIC | | | | | | |
| 8 High student numbers impede the implementation of BL | 3 (7.0%) | 8 (18.6%) | 3 (7.0%) | 14(32.6%) | 15 (34.9%) | 4 |
| 9 BL will add to students' workload | 8 (18.6%) | 11 (25.6%) | 14 (32.6%) | 10(23.3%) | - | 3 |
| 10 BL requires great interaction between students and teachers (through email, forums and chat rooms) | | 6 (14.0%) | 7 (16.3%) | 15(34.9%) | 15 (34.9%) | 4 |
| 11 My workload of traditional learning prevents me from adding BL to my teaching | 7 (16.3%) | 16 (37.2%) | 7 (16.3%) | 10(23.3%) | 3 (7.0%) | 2 |
| 12 I need only face-to-face contact in my teaching | 1 (2.3%) | 3 (7.0%) | 4 (9.3%) | 22(51.2%) | 13 (30.2%) | 4 |
| 13 Integrating e-learning in my school will allow students to get help from others to do their homework | 5 (11.6%) | 7 (16.3%) | 18 (41.9%) | 10(23.3%) | 3 (7.0%) | 3 |
| 14 BL will weaken my control of students | 3 (7.0%) | 13 (30.2%) | 15 (34.9%) | 9 (20.9%) | 3 (7.0%) | 3 |
| CULTURE | | | | | | |

257

| 15 Social custom in Kuwait will preclude male teachers from direct or indirect interaction with female students outside school | 2 (4.7%) | 8 (18.6%) | 8 (18.6%) | 16(37.2%) | 9 (20.9%) | 4 |

| Item | 1 | 2 | 3 | 4 | 5 | Mdn |
|---|---|---|---|---|---|---|
| 16 My culture encourages me to use face-to-face interaction more than other methods | 2 (4.7%) | 8 (18.6%) | 8 (18.6%) | 16(37.2%) | 9 (20.9%) | 4 |
| 17 Because of the unethical content, I found the Internet is danger | 8 (18.6%) | 11 (25.6%) | 14 (32.6%) | 10(23.3%) | | 3 |
| TECHNICAL | | | | | | |
| 18R Computer labs are easily available in the School | 2 (4.7%) | 5 (11.6%) | 14 (32.6%) | 12(27.9%) | 10 (23.3%) | 4 |
| 19R The Internet is readily available at home | 19 (44.2%) | 15 (34.9%) | 5 (11.6%) | 2 (4.7%) | 2 (4.7%) | 2 |
| 20R I have good availability of the Internet at school | 10 (23.3%) | 15 (34.9%) | 6 (14.0%) | 7 (16.3%) | 5 (11.6%) | 2 |
| 21 I don't get help from the technical team when I call them | 2 (4.7%) | 1 (2.3%) | 4 (9.3%) | 19(44.2%) | 17 (39.5%) | 4 |
| 22 The school needs to raise the number of technicians | 1 (2.3%) | 3 (7.0%) | 4 (9.3%) | 22(51.2%) | 13 (30.2%) | 4 |
| SKILLS | | | | | | |
| 23 It is hard to provide a training team in Kuwait which can properly train staff in using BL | 7 (16.3%) | 13 (30.2%) | 6 (14.0%) | 15(34.9%) | 2 (4.7%) | 3 |
| 24R I have good skills in the use of multimedia | 9 (20.9%) | 16 (37.2%) | 7 (16.3%) | 5 (11.6%) | 6 (14.0%) | 2 |
| 25 My lack of experience in using BL would prevent me from using it | 10 (23.3%) | 16 (37.2%) | 2 (4.7%) | 14(32.6%) | 1 (2.3%) | 2 |
| 26 It is difficult to train each teacher how to design courses electronically | 2 (4.7%) | 2 (4.7%) | 5 (11.6%) | 18(41.9%) | 16 (37.2%) | 4 |
| 27 The reliance on English in databases and the Internet form a major obstacle to the use of BL | 1 (2.3%) | 9 (20.9%) | 3 (7.0%) | 21(48.8%) | 9 (20.9%) | 4 |
| 28 The lack of training opportunities will not help me to become involved in BL | | 9 (20.9%) | 7 (16.3%) | 21(48.8%) | 6 (14.0%) | 4 |

258

| | | | | | | |
|---|---|---|---|---|---|---|
| 29 The lack of organised programmes to train staff and students in preparation for BL will prevent it from being implemented | 1 (2.3%) | 1 (2.3%) | 7 (16.3%) | 20(46.5%) | 14 (32.6%) | 4 |
| 30 I have good skills in the use of electronic teaching methods | 6 (14.0%) | 24 (55.8%) | 5 (11.6%) | 6 (14.0%) | 2 (4.7%) | 2 |

**Table A.12: Distribution of Ordinal Responses to The Questionnaire For Management Concerning Challenges (Reverse Scored Items Indicated By R)**

| Item | 1 | 2 | 3 | 4 | 5 | Mdn |
|---|---|---|---|---|---|---|
| FINANCIAL & ADMINISTRATIVE | | | | | | |
| 1 It costs too much to implement BL in our school | | | 1 (12.5%) | 4 (50.0%) | 3(37.5%) | 4 |
| 2 The school budget does not cover enough items | | 1 (12.5%) | 2 (25.0%) | 3 (37.5%) | 2(25.0%) | 4 |
| 3R I think that there are financial incentives for using BL or electronically designed courses | 1 (12.5%) | 4 (50.0%) | | 2 (25.0%) | 1 (12.5% | 2 |
| 4 With the current budget, it is difficult to implement BL | | 1 (12.5%) | 2 (25.0%) | 3 (37.5%) | 2(25.0%) | 4 |
| 5R Top management pays close attention to new trends in pedagogical development | 1 (12.5%) | 3 (37.5%) | 2 (25.0%) | 1 (12.5%) | | 2 |
| 6 Students, faculty members and management are not aware enough of BL | | | 1 (12.5%) | 3 (37.5%) | 4(50.0%) | 5 |
| 7 Implementing full BL before modules and departments are ready can cause problems | | 1 (12.5%) | | 3 (37.5%) | 4(50.0%) | 5 |
| ACADEMIC | | | | | | |
| 8 High student numbers impede the implementation of BL | 1 (12.5%) | 1 (12.5%) | 1 (12.5%) | 3 (37.5%) | 2(25.0) | 4 |
| 9 BL will add to students' workload | 1 (12.5%) | 2 (25.0%) | 1 (12.5%) | 4 (50.0%) | | 4 |
| 10 BL requires great interaction between students and teachers (through email, forums and chat rooms) | | 1 (12.5%) | 3 (37.5%) | 1 (12.5%) | 3(37.5) | 4 |
| 11 My workload of traditional learning prevents me from adding BL to my teaching | 1 (12.5%) | 1 (12.5%) | 1 (12.5%) | 5 (62.5%) | | 4 |
| 12 I need only face-to-face contact in my teaching | | 2 (25.0%) | | 5 (62.5%) | 1(12.5) | 4 |
| 13 Integrating e-learning in my school will allow students to get help from others to do their homework | 2 (25.0%) | 4 (50.0%) | | 2 (25.0%) | | 2 |
| 14 BL will weaken my control of students | 1 (12.5%) | 4 (50.0%) | 3 (37.5%) | | | 2 |
| CULTURE | | | | | | |
| 15 Social custom in Kuwait will preclude male teachers from direct or indirect interaction with female students outside school | 1 (12.5%) | 1 (12.5%) | 2 (25.0%) | 2 (25.0%) | 2(25.0%) | 4 |

| Item | 1 | 2 | 3 | 4 | 5 | Mdn |
|---|---|---|---|---|---|---|
| 16 My culture encourages me to use face-to-face interaction more than other methods | 1 (12.5%) | 1 (12.5%) | 2 (25.0%) | 2 (25.0%) | 2(25.0%) | 4 |
| 17 Because of the unethical content, I found the Internet is danger | 1 (12.5%) | 2 (25.0%) | 1 (12.5%) | 4 (50.0%) | | 4 |
| TECHNICAL | | | | | | |
| 18R Computer labs are easily available in the School | 1 (12.5%) | 1 (12.5% | | 3 (37.5%) | 3(37.5) | 3 |
| 19R The Internet is readily available at home | 6 (75.0%) | 2 (25.0%) | | | | 1 |
| 20R I have good availability of the Internet at school | 3 (37.5%) | 3 (37.5%) | 1 (12.5%) | 1 (12.5%) | | 2 |
| 21 I don't get help from the technical team when I call them | | | 1 (12.5%) | 3 (37.5%) | 4(50.0) | 5 |
| 22 The school needs to raise the number of technicians | | 2 (25.0%) | | 5 (62.5%) | 1(12.5) | 4 |
| SKILLS | | | | | | |
| 23 It is hard to provide a training team in Kuwait which can properly train staff in using BL | 1 (12.5%) | 1 (12.5%) | 2 (25.0%) | 2 (25.0%) | 2(25.0%) | 4 |
| 24R I have good skills in the use of multimedia | 2 (25.0%) | 4 (50.0%) | 2 (25.0%) | | | 2 |
| 25 My lack of experience in using BL would prevent me from using it | 1 (12.5%) | 2 (25.0%) | 1 (12.5%) | 3 (37.5%) | 1(12.5) | 4 |
| 26 It is difficult to train each teacher how to design courses electronically | | 2 (25.0%) | 1 (12.5%) | 1 (12.5%) | 4(50.0%) | 5 |
| 27 The reliance on English in databases and the Internet form a major obstacle to the use of BL | | 1 (12.5%) | 1 (12.5%) | 5 (62.5%) | 1(12.5%) | 4 |
| 28 The lack of training opportunities will not help me to become involved in BL | | 1 (12.5%) | 1 (12.5%) | 5 (62.5%) | 1(12.5%) | 4 |
| 29 The lack of organised programmes to train staff and students in preparation for BL will prevent it from being implemented | | | 1 (12.5%) | 3 (37.5%) | 4(50.0) | 5 |
| 30R I have good skills in the use of electronic teaching methods | 2 (25.0%) | 5 (62.5%) | | 1 (12.5%) | 2(25.0%) | 2 |

**Appendix 11: Mean scores confidence intervals (Challenges)**
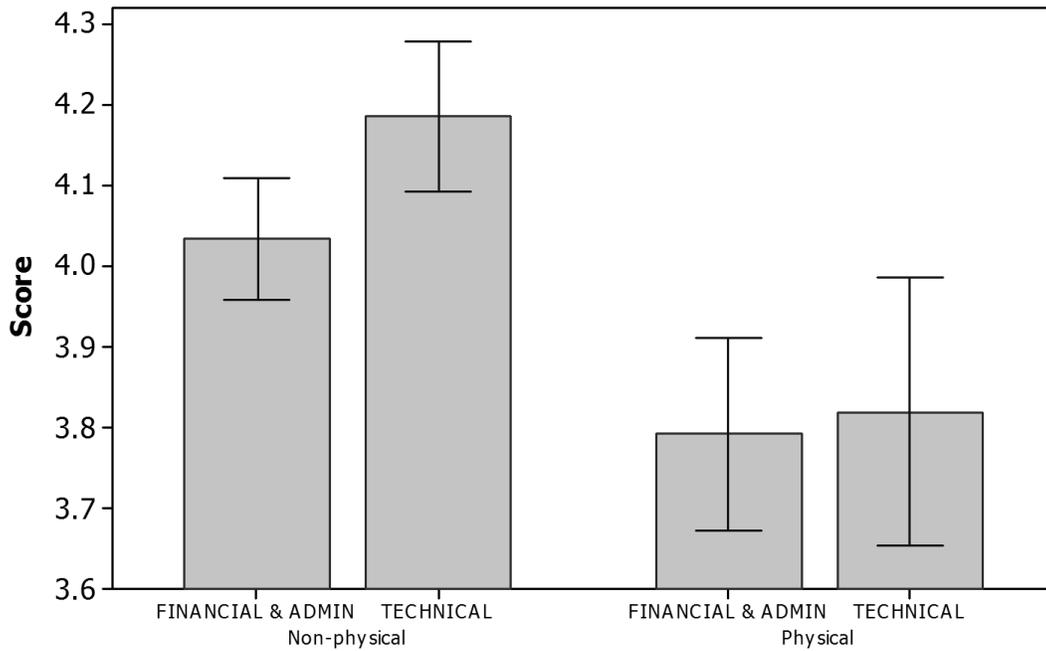


**Figure A.5 Mean scores ± 95% confidence intervals for FINANCIAL & ADMINISTRATIVE and TECHNICAL dimensions with respect to the specialisation of the students**
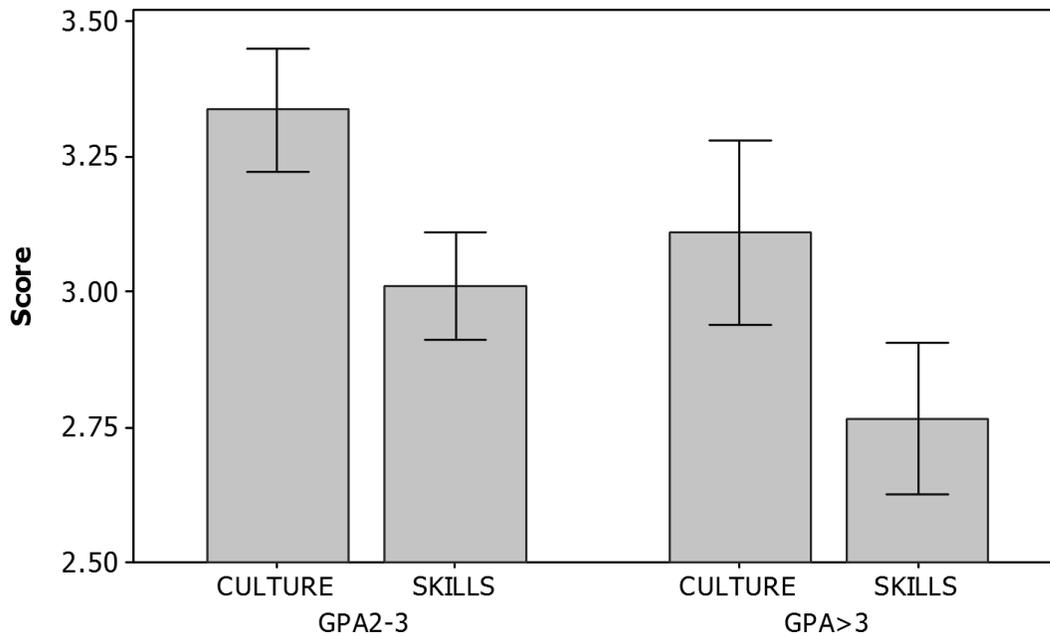


**Figure A.6 Mean scores ± 95% confidence intervals for the CULTURE and SKILLS dimensions with respect to the GPA of the students**
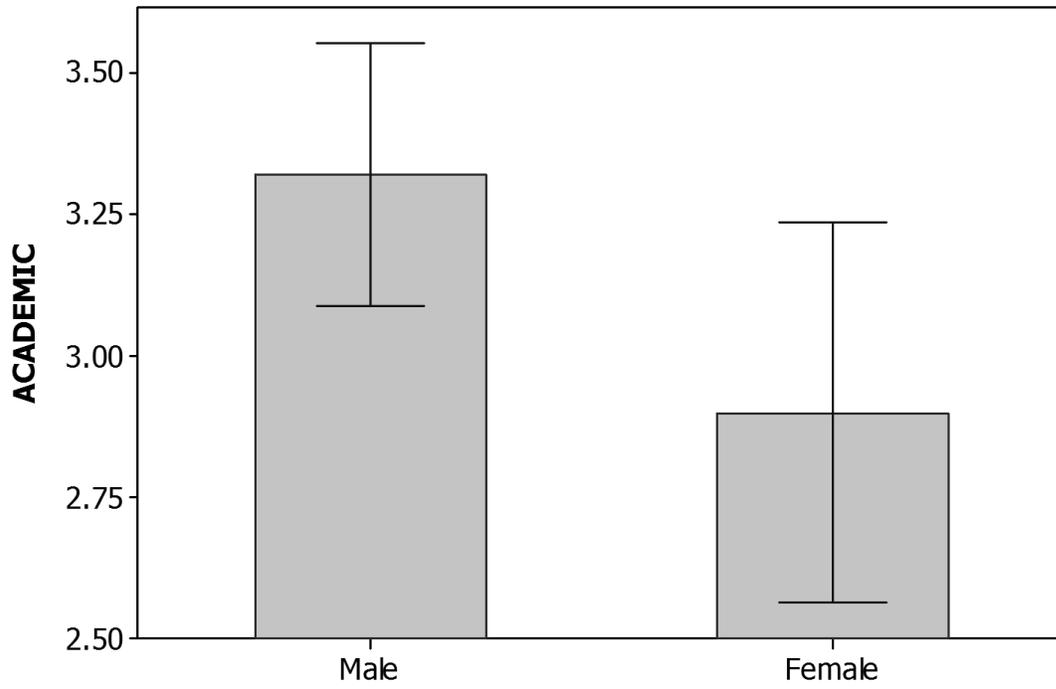
**Figure A.7 Mean scores ± 95% confidence intervals for the ACADEMIC dimension with respect to the gender of the teachers**

**Appendix 12: Distribution of ordinal responses to the questionnaires (Attitudes)**

**Table A.13: Distribution of Ordinal Responses to The Questionnaire Concerning Attitudes towards BL (Reverse Scored Items Indicated By R)**

| Item | 1 | 2 | 3 | 4 | 5 | Mdn |
|---|---|---|---|---|---|---|
| FINAL YEAR STUDENTS | | | | | | |
| 28 I like using BL | 9 (3.1%) | 27 (9.2%) | 42 (14.3%) | 103 (35.2%) | 112 (38.2%) | 4 |
| 29 BL will meet students' needs | 10 (3.4%) | 27 (9.2%) | 54 (18.4%) | 106 (36.2%) | 96 (32.8%) | 4 |
| 30 BL will motivate students to lifelong learning | 6 (2.0%) | 32 (10.9%) | 53 (18.1%) | 96 (32.8%) | 106 (36.2%) | 4 |
| 31 BL will increase students' critical thinking | 5 (1.7%) | 23 (7.8%) | 73 (24.9%) | 120 (41.0%) | 72 (24.6%) | 4 |
| 32 BL will increase students' achievement | 9 (3.1%) | 19 (6.5%) | 65 (22.2%) | 123 (42.0%) | 77 (26.3%) | 4 |
| 33 I need computers in my education | 5 (1.7%) | 24 (8.2%) | 27 (9.2%) | 78 (26.6%) | 159 (54.3%) | 5 |
| 34 Integrating e-learning in our school will improve staff performance | 4 (1.4%) | 22 (7.5%) | 56 (19.1%) | 93 (31.7%) | 117 (39.9%) | 4 |
| 35 I prefer using BL | 15 (5.1%) | 33 (11.3%) | 40 (13.7%) | 86 (29.4%) | 119 (40.6%) | 4 |
| FACULTY TEACHERS | | | | | | |
| 31 I like using BL | | 7 (16.3%) | 3 (7.0%) | 18 (41.9%) | 15 (34.9%) | 4 |
| 32 BL will meet students' needs | 1 (2.3%) | 1 (2.3%) | 6 (14.0%) | 26 (60.5%) | 9 (20.9%) | 4 |
| 33 BL will motivate students to lifelong learning | | 3 (7.0%) | 7 (16.3%) | 22 (51.2%) | 11 (25.6%) | 4 |
| 34 BL will increase students' critical thinking | | 3 (7.0%) | 10 (23.3%) | 20 (46.5%) | 10 (23.3%) | 4 |
| 35 BL will increase students' achievement | | 3 (7.0%) | 8 (18.6%) | 21 (48.8%) | 11 (25.6%) | 4 |
| 36R BL is a waste of time and money | 2 (4.7%) | 2 (4.7%) | 7 (16.3%) | 19 (44.2%) | 13 (30.2%) | 4 |
| 37 I need computers in my education | | 4 (9.3%) | 4 (9.3%) | 14 (32.6%) | 21 (48.8%) | 4 |
| 38 Integrating e-learning in our school will improve staff performance | | 1 (2.3%) | 3 (7.0%) | 15 (34.9%) | 24 (55.8%) | 5 |

| Statement | 1 | 2 | 3 | 4 | 5 | Mode |
|---|---|---|---|---|---|---|
| 39 I prefer using BL | 1 (2.3%) | 6 (14.0%) | 15 (34.9%) | 21 (48.8%) | | 4 |

SENIOR MANAGEMENT

| Statement | 1 | 2 | 3 | 4 | 5 | Mode |
|---|---|---|---|---|---|---|
| 31 I like using BL | | | 1 (12.5%) | 2 (25.0%) | 5 (62.5%) | 5 |
| 32 BL will meet students' needs | | | 1 (12.5%) | 4 (50.0%) | 3 (37.5%) | 4 |
| 33 BL will motivate students to lifelong learning | | 1 (12.5%) | 2 (25.0%) | 1 (12.5%) | 4 (50.0%) | 5 |
| 34 BL will increase students' critical thinking | | | 1 (12.5%) | 3 (37.5%) | 4 (50.0%) | 5 |
| 35 BL will increase students' achievement | | | 1 (12.5%) | 4 (50.0%) | 3 (37.5%) | 4 |
| 36R BL is a waste of time and money | 1 (12.5%) | 1 (12.5%) | | 3 (37.5%) | | 4 |
| 37 I need computers in my education | | | | 2 (25.0%) | 6 (75.0%) | 5 |
| 38 Integrating e-learning in our school will improve staff performance | | | | 3 (37.5%) | 5 (62.5%) | 5 |
| 39 I prefer using BL | | | | 3 (37.5%) | 5 (62.5%) | 5 |

**Appendix 13: Mean scores confidence intervals (Attitudes)**
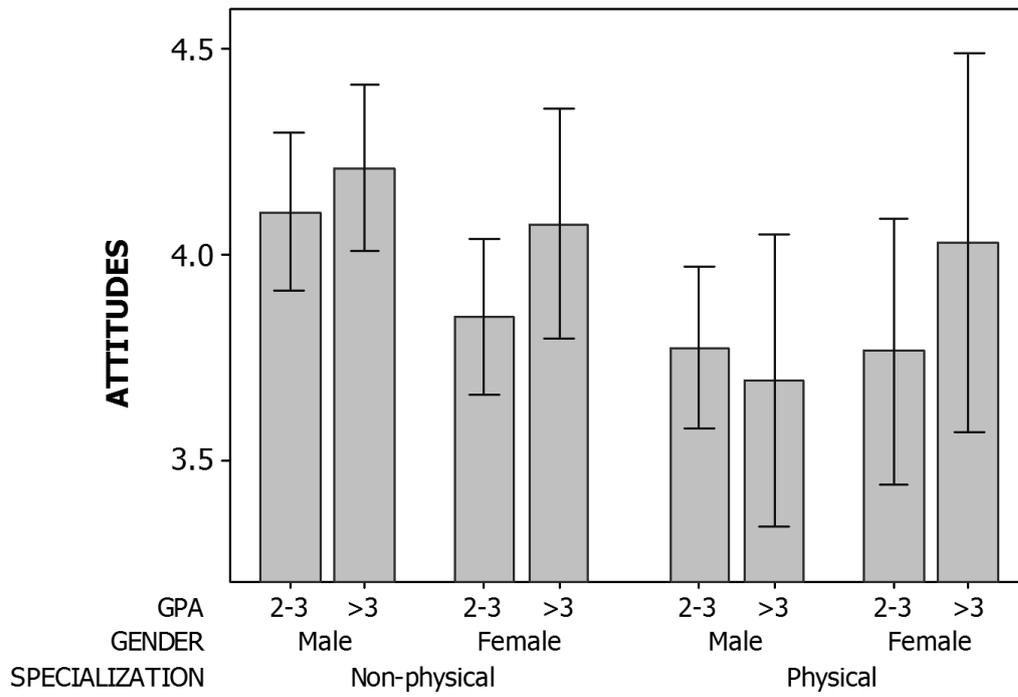


**Figure A.8 Mean scores ± 95% confidence intervals for ATTITUDES of final year students**
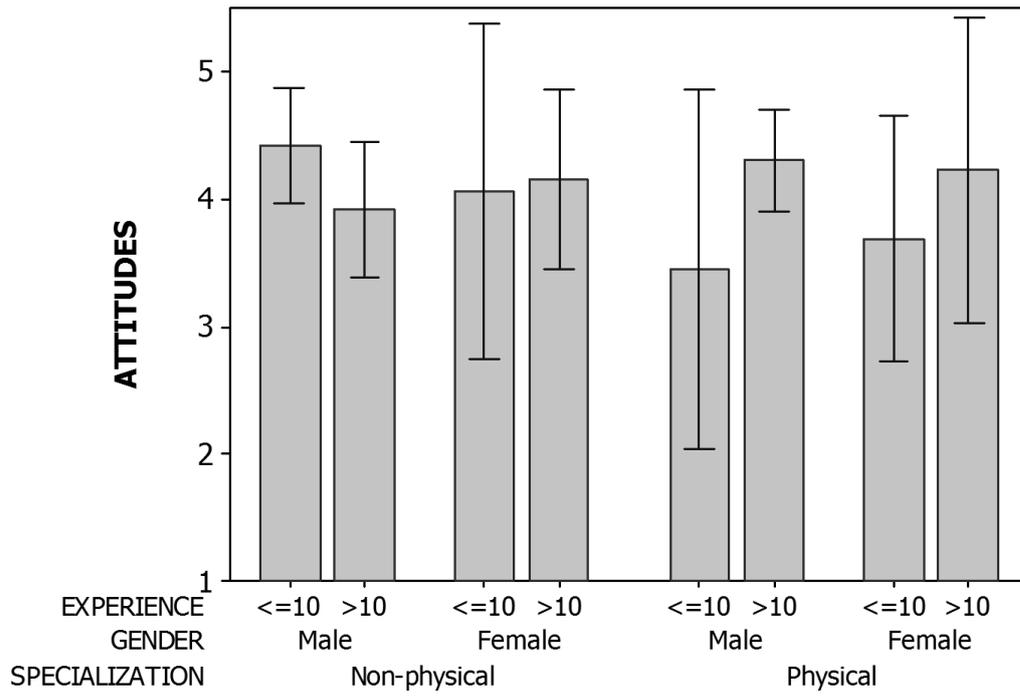
**Figure A.9 Mean scores ± 95% confidence intervals for ATTITUDES of faculty teachers**

# Appendix 14: Recent conferences presented and courses attended

28 August 2013

Mr Ahmad Yousef
3 Whitehall Quays
Leeds
LS1 4BW
ebn_3me@hotmail.com

**To whom it may concern**

Dear Sir/Madam

**RE: Mr Ahmad Yousef – delivery of presentation at altc2013, 10-12 September 2013**

This letter is to confirm that Mr Ahmad Yousef has had a paper accepted as part of the conference programme for the Association for Learning Technology's annual conference, altc2013, taking place on 10-12 September 2013. Mr Yousef's presentation takes place on Tuesday 10 September and he has booked and paid to attend the conference.

If you have further questions regarding this letter or the ALT Conference, please do not hesitate to contact ALT's Events Manager Caroline Greves, at email address caroline.greves@alt.ac.uk or telephone number 0044 (0) 1865484125.

Yours sincerely

*Maren Deepwell*

**Maren Deepwell**
**Chief Executive**
**Association for Learning Technology**

**Appendix 15: Sample of my Coding scheme**

| Budget | In one of the richest countries of the world it seems that the budget is not open. | Yes | For example, when we ask for printers as faculty members as a right, they tell us "there is no budget"'. | Lack of equipment | BU1 | L1 | |
|--------|-----|-----|-----|-----|-----|-----|-----|
| Budget | Absolutely no, I don't think our budget is big enough. | Yes | First I think the real needs must be determined and I think those real needs are not studied. To give you one example, my course in is kinetic education and sport training and there ought to be a laboratory, which would cost 200.000 KD. Do you know that I don't have a single piece of equipment to train my students on?' | Lack of equipment | BU1 | M2 | |
| Budget | 'As far I know….. no. with regard to the school, I think the budget doesn't fit the abilities and the development we would wish, even on the section level nor the general level, its current status is not suitable'. The budget is not enough at present for the school's requirements and I think it will not be. | Yes | I have spent 14 years in the college and every time we ask for equipment for our section, they say there is no finding for it. | Lack of equipment | BU1 | L4 | |
| Budget | Of course the budget is related to the school size. It is one of the biggest colleges in the | Yes | At the same time, it has to bear the huge burden of the high number of students, more than 100,000 | Increasing student numbers | BU2 | L5 | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | authority and therefore the budget is big. | | male and female students and this number may increase dramatically. | | | |
| Budget | I don't have any connection with the financial issues as I am still new in this job but I notice that many of the facilities and items of equipment that we ask for are not supplied in time. | Yes | I think if there is a budget it is spent on other things, unimportant things, which are not a priority for me as a teacher or for my students. Yes, there is a budget for official missions or faculty conferences or other scientific tasks that in fact don't play any vital scientific role. I think  the money goes on tourism and trivial things – it should  be spent on useful things for the college. | Expenditure on unimportant things | BU3 | M4 |
| Budget | The budget is open for any development for any person or any college needing to be developed. | No | I don't see any obstacles unless it failed to satisfy the top management in the authority. I don't think there are any financial obstacles in the college to things related to the development of education or to integrating technology.''I don't see any problems in the budget as I was on the budget committee and another committee related to development. All you need is to list this in the budget from the beginning of the year with an application from the department or the college.' | No financial obstacles | BU4 | L7 |

| Budget | The authority controls a large budget. | No | There is no complete financial independence in the college, although I can't think of any financial problem that might hinder the design of any project in the school. | No financial obstacles | BU4 | M7 | |
|--------|----------------------------------------|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|------|------|---|

**Appendix 16: Road map to strategy**

It was evident from the research findings that the college management had not prepared a strategic plan, since no such plan or any executive plan exists. The task of developing the school is difficult, even impossible, without any practical vision or clear mission to achieve – although there are hints here and there of a vision.

I should like to see my institution move forward to fulfil its vital role in preparing future teachers, as the UOF and other institutions have done. It is worth mentioning that the integration of technology hand in hand with traditional methods has already proved its validity – as noted above. E-learning is one of the missing features of this college; hence, led by the results of the present research, I am proposing a simple plan for the introduction of BL which the SBEK faculty could take up. This simple plan should be followed by a comprehensive strategy designed by all the parties in the college who are involved, in order to achieve the required development. Through my visits to the universities in the Gulf area during my data collection period, the transition towards BL seems to do best when one pattern consisting of five stages is adopted, starting from an individual initiative that already exists at a low level in the organisation. Then this initiative, through encouragement and competitiveness among the teachers, moves to group work; from there, those who were curious about it take it to a new stage by using the new pattern themselves. Finally the use of BL reaches the official planning stage, when it attains some stability. This heritage of previous experiments in many universities leads me to think that the SBEK is approaching the stage when others become curious and take too much time to move to the level of planning.

It is very important to move from traditional methods to BL within a considered plan, since the education processes generally should depend on planning and not on luck (Alkandari, 2011). To ensure the success of this process, I followed Khan's model (Khan, 2005).

Khan model (2005)

This model is based on the idea that e-learning is an organised process consisting of a number of steps, namely, planning, designing, pre-implementation, implementation and evaluation. Khan thinks that the success of e-learning or BL is related to the learner as the centre of the learning process and provides a learning environment that seeks and achieves satisfaction for all parties. The Khan model (2005) has 8 chief domains, which constitute its dimensions:

**Figure A.10: Khan Model (2005)**



1.  **Institutional dimension**

The institutional dimension includes three sub-dimensions: academic affairs, administrative affairs and e-learning services for students. The last is self-explanatory. Academic affairs includes the policy and instruction, faculty and support staff, class sizes and accreditation. Administrative affairs refer to financial aid and payments, admissions and registrations, IT services and grading and graduations.

2.  **Management dimension**

The management dimension relates to the management of the learning environment and specifically its on-going maintenance. This process of continual upkeep can be used to analyse

the performance of the e-learning environment and to identify whether the actions taken meet the organisation's requirements and intentions for this environment. This area of management also covers financial and staff resources, security, scheduling and quality control.

### 3. Pedagogical dimension

The pedagogical dimension addresses the analysis of content, audience and goals and also covers course design and the teaching and learning strategies and methodologies. It identifies learners' needs, sets out the way in which learning objectives will be attained and addresses the design of the course content.

### 4. Ethical dimension

The ethical dimension looks at ethical concerns, including issues around social and political influence, bias, diversity, the accessibility of information, the digital divide and etiquette. It also covers legal issues such as copyright and licensing, privacy and plagiarism.

### 5. Interface dimension

The interface dimension covers five main sub-dimensions that relate to the design and overall look and usability of an e-learning course or program. These sub-dimensions are: web-design, content design, navigation design, accessibility and usability testing. The user interface provides online learners with their first impressions of a course and the success of this impression of the course often stems from the appearance and usability of the e-course site.

### 6. Resource support dimension

The resource support dimension addresses the support from the technical and human resources needed to build an effective and successful e-learning environment. Support services include technical support via online services or telephone helplines, online tutorials and digital libraries and various kinds of published support including journals, newsletters and podcasts.

### 7. Technological dimension

The technological dimension considers the effectivity of the application of infrastructure

planning and the hardware and software being implemented. It considers the factors which influence the choice of the most appropriate learning management system (LMS) and of the communication tools (audio and video conferencing platforms) that will best support learners as they aim for the objectives and goals of the institution. It also reviews the technical requirements including bandwidth, server capacities, back-ups and web security.

## 8. Evaluation dimension

The evaluation dimension looks at the tasks of assessing learners, the performance of the learning environment, the content development processes and of those who contribute to the design process, including the following teams: planning, design, production and evaluation. It also reviews such instructional design processes as planning, design, development and evaluation and evaluates e-learning at both program and institutional levels.

The Practical side of the Strategic Plan – Example for developing a strategy

Before starting with the steps and components of the plan, I should mention that the Khan model (2005) represents the guidelines and also acts as a road map that could be followed when preparing the strategic plan. Before discussing the practical side of the proposed e-learning strategic plan in the SBEK, it might be useful to say something about strategic planning.

Puanmau (2006) describes the concept of strategic planning as deriving from business practices, whereby a variety of series of actions can be applied to achieve revenue or other organizational aims. He similarly describes it as the building of long-term plans by organizations, to support the achievement of their future aims and show how either the internal or external environment may influence these. Puanmau (2006) goes on to say that the concept includes consideration of the most appropriate strategies that can be applied to meet the aims of the organization.

The proposed plan to apply BL in the SBEK has five stages, namely:

1. Planning for planning

2. SWOT analysis

3. Strategic and implementation plans.

4. Implementation.

5. Evaluation.

- **Planning for planning**

This is the first stage of planning, where all the teams and responsibilities are arranged. Moreover, this stage designates the duration as well as the time of meetings for the requisite number of teams. In line with my research findings and my relationships with the staff and students, I would suggest that the SBEK should produce two major teams, called "Steering Group 1" (1STG) and "Steering Group 2" (2STG).

1STG is formed with the strongest elements in the organizations, who can make decisions or affect the decisions of others. The Dean of the School can lead the team with financial, academic and administrative deans as assistants; these may include departmental managers who are motivated to join such projects and perhaps also those who resist the present project, in order to prevent their resistance at any of its levels. The reason for selecting the Dean and his assistants is their power and influence; they can ask for whatever budgets they think necessary. The reason behind selecting managers is their influence on the teachers in the School. 2STG should consist of a selected group from 1STG, the teachers and the initiating members who are familiar with this type of learning and can share their previous experiences. Two teachers who represent the unenthusiastic can be selected too, as well as technicians and experts from outside the School. I suggest engaging a representative who has worked on such a project before from the UOF and one from the MOE, in order to enrich the planning.

I also suggest forming information groups, which might help the main groups to gather and analyse the information. All the groups should be in continuous communication with 1STG for

co-ordination and feedback. This communication will give 1STG a better chance of having accurate evaluations of developments as they occur, which should help it to take the right decisions. Forming the implementation group should follow this step.

Selecting the model for building the strategic plan

The two groups (1 and 2 STG) should be responsible for selecting the model of the strategic plan. Through a review of more than 15 strategic plans, it became clear that a SWOT analysis might be the most popular method in use. The initials stand for Strengths, Weaknesses, Opportunities and Threats. Michael Porter, Professor of Planning at Harvard University, developed this model. A SWOT analysis is based on the alignment between the internal and external environment of the organization and determines the goals according to its mission and values.

- **SWOT Components**

 **Strengths**

An internal aspect that considers the human and financial abilities of the organization that may benefit those aspects. The role of planners is to maximize such points.

**Weaknesses**

An internal aspect that contains the problems preventing the organization from developing effectively. The role of planners is to support those points.

**Threats**

The external changes happening to the organization and affecting it negatively. The effects of any threats must be minimized

**Opportunities**

The external changes happening to the organization and affecting it positively. Should these arise, the effects must be invested in. (Alsoghier, 2013).

In the course of collecting data in SBEK I met a group of top managers and faculty teachers.

Discussions with them led to the simple SWOT analysis shown below.

**STRENGTH S TO MAXIMISE**

The faculty and students' acceptance of blending e-learning with traditional learning.

The positive attitudes to blended learning among top management, teachers and students.

The wide academic experience of faculty members.

The presence of a learning technology division in the college.

The fact that 85% of the faculty members had graduated in the USA or Europe, where they had gained experience of blended learning.

The ownership of smart phones and personal computers by 95% of the faculty and students.

The government funding for the School.

The influx of new members of the top management team.

**WEAKNESSES TO SUPPORT**

The limitations of skills among some of the faculty and students.

The students' weakness in English language.

The inadequate support from the private sector and the numerous regulations.

Administrative bureaucracy.

The absence of financial independence for the college.

The shortage of wired and wireless networks.

The weakness of the infrastructure and scarcity of computer lab places.

The fact that the scientific content of the courses is not consistent with e-learning.

## SWOT ANALYSIS FOR SBEK

**OPPORTUNITIES TO INVEST IN**

From the high price of oil and from government support.

The benefits from the current support from the private sector (Kuwait University)

The increased awareness of using technology in the Arabian Gulf.

The frequent application of blended learning in public education.

The adoption of the second strategic plan for blended learning in public schools.

The benefits from the experiment in applying blended learning by the UOF.

**THREATS TO MINIMISE**

The possibility of a decline in oil prices which might lead to reduced government support.

A decline in private sector support.

The establishing of more private universities and colleges.

After this SWOT review and analysis, the teams should start writing the plan and determining its components.

- **Writing the Strategic Plan**

This stage starts with designating the vision, values and missions of the organization in order to determine the strategic and detailed goals and the path of the project (Alsoghair, 2013).

**Values**

These comprise all the ideals governing the behaviour of individuals in the organization and what they believe in that will help them to share the vision and carry out the plan (Almansouri, 2013). The values of this plan range from 5-7 points (Alsoghier, 2013). (It is preferable for employees to participate in expressing their values through direct questions). The STG teams should filter and study those values.

The interviews with the participants yielded the following values as typical of the SBEK: Creativity, Quality, Competition, Observing Islamic values and Student-centred learning.

**The vision**

There is no single definition for the term 'vision' (Alsoughier, 2013). However, it represents the main goal to be achieved by the employees and is the main core for the organization's strategic goals. It seeks to describe the essence of the organization's view of itself and what it can achieve in future years (Seiver, 2000). The employees must be committed to achieving the vision of the organization (Puanmau, 2006).

The vision must be short and clear in order to be memorized and put into practice. It can be the same for three years or more (Almansouri, 2013). My personal perception of the vision of the SBEK is that it should offer competitive and distinguished e-learning locally and regionally.

**The mission**

An organization's mission is a statement or statements clarifying why the organization was established in the first place. It may include certain values, the nature of the targeted population and the characteristics of the organization (Seiver, 2000). The message is the basis of the strategic plan and the subsequent steps. The message must be straightforward and motivating (Almansouri, 2013).

Alsougiar (2013) contributes some points that may help in building the strategic plan: It should ask the following questions:

1. *What* work does the organization want to do?

2. *Whom* does it target?

3. *How* can the work be carried out?

4. *Why* should it do this work? This refers to the main goal of the organization.

5. *What* difference does the organization offer from other organizations?

The goal of SBEK, its message as I perceive it, is as follows:

*"Building the knowledge community in Kuwait through the skilled preparation of student/teachers according to modern scientific standards and Shari'a law."*

OR

*"Providing modern teaching methods which contribute to building a knowledge community in Kuwait according to Shari'a law and scientific standards."*

It is highly recommended that all parts of the organisation should be involved in the strategic plan, for this is likely to make it successful (Puanmaue, 2006). The strategic plan for BL should be aligned with the main strategic plan of the organization (Alsoghier, 2013), though unfortunately the SBEK has yet to produce its plan. The next stage after approving the values, vision, messages and the SWOT analysis is to build the strategic goals in alignment with Khan's dimensions (see above). The strategic goals should range from 4-8 goals, describing the desired

future domain (Alsoghier, 2013). These goals must be general and later described in detail in the implementation goals. According to many plans in the literature, the achievement of the goals has no fixed term. However, plans can be divided into those short term and those for long terms goals. Some writers describe three stages in the plan. I suggest the following timetable:

**Figure A.11: Proposed Plan timetable**

| Strategic goals 1 | The goals of the implementation (the executive goals) | Time |
|---|---|---|
| In alignment with the institutional dimension in Khan's model, enhancing effective communication between the teacher and the student through modern e-learning means. | Providing an e-mail account for each student. | Within the first month |
| | Establishing an educational platform. | Within Six months |

| Strategic goals 2 | The goals of the implementation (the executive goals) | Time |
|---|---|---|
| Developing the skills of faculty members and students (this is aligned with the institutional dimension in Khan's model). | Requiring electronic competence for new teachers as a pre-requisite. Training 50% of the faculty teachers according to international scientific standards. | Within Six months |
| | Training 50% of the present students and 100% of expected new students. | Within Six months |

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**Strategic goals 3**

Developing the technical team in the college (this is aligned with the resource support dimension in Khan's model).

</td>
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**The goals of the implementation (the executive goals)**

Appointing 15 new qualified technicians. Contracting a private company in the field of e-learning services to provide technical services.

</td>
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**Time**

First three months

Within Six months

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**Strategic goals 3**

Changing the traditional curriculum into an electronic one (this is aligned with the pedagogical dimension in Khan's model).

</td>
<td>

**The goals of the implementation (the executive goals)**

Contracting a private company in the field of e-learning services to change 10 traditional books into digital ones within one semester.
Applying quality standards in designing e-courses within the second semester.
Seconding 10 pioneer teachers elsewhere to learn instructional design according to modern learning theories.

</td>
<td>

**Time**

Within one semester

Second semester

Within 9 months

</td>
</tr>
</table>

- **Implementation stage**

I recommend the implementation stage to be gradual, because most of the participants in this research recommended it (this is aligned with the studies by (Alsharhan, 2011; MOE, 2012; Alkandari, 2011). It can start with departments or even single courses. This gradual implementation may help to avoid the problems that might occur with full-scale implementation and help in research on the readiness and attitudes of students and teachers, the quality of the

training policy and the general evaluation of developments. However, some projects can be implemented in full at the beginning of the transition, for example, setting up email accounts for both students and faculty members, setting up user names and passwords for the platform and training those who use it.

- **Evaluation stage**

Afterward comes the stage of evaluation. 'Evaluation' includes recording positive and negative points and identifying the actions which should be taken in response to faults, or to supporting a course of action which aims to achieve the desired goals.

A variety of indicators can be applied to evaluate the progress of a project towards the achievement of its aims and targets and also to check whether the implementation is maintaining consistency with the action plan. The data collected is documented and analysed. The results of this analysis are then presented in the form of a progress report or review. It can typically be used to support communications, which aim to make the best actions and decisions. It should be mentioned that evaluation as a concept should be applied throughout all stages. It is hoped that this road map strategy can be applied to other institutions of which SBEK is one, a process not unique to SBEK as I meant to make it transferable to other institutions.

# References

Abdelraheem, A. (2006) 'The implementation of e-learning in the Arab universities: challenges and opportunities. Paper presented at *Distance learning and the Internet conference*. The University of Tokyo, 8-10 November.

Abdulhadi, A. (2005) *New Trends*. Alfayoum: Eman Dar.

Abdulhakeem, A. (2010) *E-learning in higher education*. 2nd ed. Jordan: Dar al Alfakr.

Abdulhamid, I. (2011). 'University students' attitudes towards Internet: gender comparative study'. *Egyptian Journal of Education*. 1 (1), pp.22-67.

Abdullah, A., Alrashidi, S. and Younes, A. (2006) *Doing your research project: step by step*. Kuwait: Alnasher.

Abdullah, A. (2013) 'E-learning and critical thinking'. Paper presented at *The International E-learning and Distance Learning Conference*. Riad, 8 February.

Abdusallam, A. (2011) *Education and wars*. Cairo: Dar.

Abounajj, M., Nachouki, M. and Ajman, A. (2012) 'Evaluating student satisfaction with blended learning in a gender-segregated environment'. *Journal of Information Technology Education: Research.* 11 (2), pp.185-200.

Abraham, A. (2007) 'Adopting a student-centred pedagogy in the teaching of accounting to engineering students: comparing a blended learning approach with a traditional approach'. *In: ICT: providing choices for learning proceedings ascilite.* Singapore. Available at: http://www.ascilite.org.au/coferences/singapore07/procs/abraham.pdf [Accessed 15 May 2011].

Abu Qudais, M., Al-Adhaileh, M. and Al-omari, A. (2010) 'Senior faculty members' attitudes in Jordanian universities towards using information and communication technology'. *International Arab Journal of e-Technology.* 1 (4), pp.135-141.

Abuallam, (2011) *Research methods in social science*. 6th ed. Cairo: Dar al Nasher.

Aburya, M. (2010) 'Uses of the Internet of the faculty teachers in Israa University'. *Arab Union Journal*. 45, pp.145-177.

Adas, D. and Abu Shmais, W. (2011) 'Students' perceptions towards blended learning environment using the OCC. *An - Najah Univ. J. Res. (Humanities)*. 25 (6), pp.1682-1709.

Alabdulghfoor, F. (1983) *The development of education in Kuwait.* Kuwait: Al-Falah Library.

Alahmad, A. (2000) *An evaluation of the primary school teacher preparation in the college of education at Kuwait University*. Unpublished Doctoral Dissertation. University of Sussex.

Alaidarous, M. (2002) *Modern history of the state of Kuwait*. United Arab Emirates. Dar Alkeattab Alhadeeth.

Alarini, S. (2005) *Distance Learning*. Riad: Reda Publications.

Alderwaza News (2013) *Laptop project cancellation in the Ministry of Education*. [online] Available at: http://www.aldarwaza.net/page.asp?id=10503 [Accessed 4 Apr 2013].

Alebaikan, R. and Troudi, S. (2009) 'Blended learning in Saudi universities: challenges and perspectives'. *ALT-J, Research in Learning Technology*. 18 (1), pp.49-59.

Alenaizi, H. (2010) *The impact of an electronic enrichment program on developing basic education college students' leadership skills and attitudes toward leadership in the state of Kuwait*. Master's Thesis. Arabian Gulf University.

Alenezi, M. (2002) *A study of the relationship between school building conditions and academic achievement of twelfth grade students in Kuwaiti public high schools*. Unpublished Doctoral Dissertation. Virginia Polytechnic Institute and State University, Blacksburg, Virginia.

Alexander, S. (2001) 'E-learning developments and experiences'. *Education Training*. 43 (4/5), pp.240-248.

Alfadhli, S., and Khalfan, A. (2009) 'Developing critical thinking in e-learning environment: Kuwait University as a case study'. *Assessment & Evaluation in Higher Education*. 34 (5), pp. 529-536.

Alghzo, I. (2006) 'Student attitudes toward web-enhanced instruction in an educational technology course'. *College Student Journal*, 40 (3), pp.620-630.

Algonaim, Y. (1999) *Kuwait History Features*. Kuwait: Almastafa.

Algorab, E. (2003) *Traditional training in e-learning*. Cairo: Arab Professional Development Organisation.

Alharthi, A. (2005) 'Distance higher education experiences of Arab Gulf students in the United States: a cultural perspective'. *The International Review of Research in Open and Distance Learning*. 6 (3).

Alhazani, N. (2013) 'Information technology challenges faces higher education institutions from the point of view of academic and administrative leadership at King Saud University'. Paper presented at *The International E-learning and Distance Learning Conference*. Riad, 8 February.

Alhogali, M. (2006) *The effectiveness of using the internet in the teaching of geometry and conversion courses on students "achievement at teachers" college in Madinah*. Unpublished Ph.D. Umm Al-Qura University, Saudi Arabia.

Alilian, K. (2009) *The effect of using simulation according to Gagne's theory on students' achievement and attitude toward blended learning: a study on Arabian Gulf University anatomy*

*curriculum*. Master's Thesis. Arabian Gulf University.

Aljarf, R. (2004) 'Use of online instruction by faculty members at Saudi universities: current status and future perspectives'. Paper Presented to *The Conference of Faculty Member Professional Development*. King Saud University, Saudi Arabia. April, 2004.

Aljarf, R. (2005). 'The effects of online grammar instruction on low proficiency EFL college students' achievement'. *Asian EFL Journal*, 7 (4).

Aljarf, R. (2008) 'Issues in KSU faculty publication archiving and access'. Paper presented at *Lex Et Scientia Conference*. Nicolae Titulescu University: Romania. 27 (10), pp.89-112.

Alkailani, T. (2004) *Distance E-learning*. Beirut: Lebanon Bookstore.

Alkandari, A. (2011) *Blended learning in the University of Kuwait*. Kuwait: University of Kuwait.

Alkandari, B. (2008) *The effect of using e-activities in blended learning on academic achievement and students' satisfaction with the environmental education course in Kuwait University*. Master's Thesis. University of Kuwait.

Alkayat, K. (2010) *The effect of an electronic program for training on the holy Quran's Tajweed rules and their application on some training outcomes: a study on the Quran memorizing and Tajweed Center's students in the Kingdom of Bahrain*. Master's Thesis. Arabian Gulf University.

Alkhader, F. (2008) *The influence of using interactive multimedia-sported activities in distance learning on academic achievement, keeping information, satisfaction degree on sample of university students*. Master's Thesis. University of Kuwait.

Alkhalifa, H. (2009) 'The state of distance education in Saudi Arabia'. *eLearn* 9 (10).

Alkhashab, H. (2007) Attitudes towards e-learning. Thesis. The Maastricht School of Management.

Allawi, M. (1992) *Psychological Science.* Cairo: Almaaref Publications.

Allen, M. and Yen, W. (2002) *Introduction to measurement theory.* Long Grove, IL: Waveland Press.

Ally, M. (2003) 'Foundations of educational theory for online learning'. *In:* Anderson, T. and Elloumi, F. (eds.) *Theory and practice of online learning*. Canada: Athabasca University.

Almakzoumi, A. (1995) 'The role of the attitudes in people and groups behaviour'. *Resalat alkhalaij alarabi.* (35), pp.17-46.

Almansouri, A. (2013) 'Strategic planning'. Paper presented at *The Regional E-learning conference*. Kuwait, 25 March.

Almasaad, A. (2008) *A blended learning model at King Saud University, College of Education*. Unpublished Doctoral Thesis. Riyadh, KSU.

Almeea, F., Alazmi, B. and Alfailkawy, F. (2005) 'Teachers views regarding the new educational ranking in light of feminizing staff in Kuwaiti primary schools'. *The Journal of Gulf and Arabian Peninsula Studies.* 31, pp.91-113.

Almosa, A. (2007) 'E-learning, concept, advantages and challenges in Saudi Arabia'. Paper presented to the Future School Conference. Ministry of Education. Kuwait.

Almulla, F. (2007) 'The attitudes of PE students at the University of Bahrain towards their field of specialization'. *The Educational Journal.* 84 (14), pp.52-90.

Almusa, A. (2002) *E-learning*. A paper presented to Future School. [online] Available at: www. ksu.edu.sa/seminars/future-school/index2.htm. [Accessed 3 July 2010].

Almusa, A. (2005) *E-learning foundations and applications*. Riad: Shabakat albayanat.

Almusa, A.B. (2003) *E-learning, concept, advantages and challenges*. A paper presented to the *Future School Conference*. King Saud University.

Almutairi, A. (2011) *The effect of using asynchronous communication tools in the blended learning on the development of critical thinking and achievement: a case study of the educational supervision course at Kuwait University*. Master's Thesis. University of Kuwait.

Anderson, L. W. (1981) *Assessing affective characteristics in the school*. Boston: Allyn and Bacon.

Alqallaf, M. (2012) *Smart schools in Kuwait*. Kuwait: Ministry of Education.

Alqahtani, A. (2012) *Issues regarding Arabian Gulf education*. Kuwait: Arabian Gulf Research Institute (GRC).

Alrai News. (2013) *The University of Jaber*. [online] Available at: http://www.alraimedia.com/Article.aspx?id=443047 [Accessed 15 June 2013].

Alramzi, F. (2009) *Public education in Kuwait: problems and ways of solution*. Kuwait: Kuwait National Assembly.

Alrasheed. A. (1995) *Kuwait History*. Kuwait: Dar alqertas.

Alrashidi, S., Sallama, A., Alenaizi, Y. and Salah, S. (2007) *Research methods.* Kuwait: Alfalah Publications.

Alsaleh, B. (2005) 'Instructional design in e-learning'. *National Secretary of Higher Education in Gulf Countries*. Kuwait, pp.74-117.

Alsalem, D. (2009) *The impact of activating communication between students in the VLE on their achievement and motivation towards learning: an experimental study on Islamic culture course in the College of Medicine at Arabian Gulf University*. Master's Thesis. Arabian Gulf University.

Alsawi, F. (2011) *E-learning, its importance, benefits and constraints of its application.* Unpublished Master's Thesis. Canterbury University.

Alshammari, M. (2007) *The effect of blended learning in teaching geography on students achievements in Hafr Albaten.* Unpublished Doctoral Thesis. Jordan Thesis Store.

Alshammari, M. (2009) *Effect of blended learning based on activities and discussion on achievement and critical thinking in a Kuwait University C++ course.* Master's Thesis. Arabian Gulf University.

Alsharah, H. (2011) *E-learning projects in public schools.* Kuwait: The Ministry of Education.

Alsharhan, S. (2011) *E-learning implementation strategies at the Ministry of Education in the state of Kuwait.* Paper presented at the *Kuwait E-government conference.* Ministry of Education, Kuwait.

Alsharhan, S. (2012) *E-learning strategy in Ministry of Education in the state of Kuwait.* Kuwait: Ministry of Education.

Alshinaq, Q. and Bani Doomi, H. (2010) 'Teachers and students' attitudes towards blended learning in Jordanian high schools'. *Damascus University Educational Journal.* 26 (1), pp.235-271.

Alsoghier, A. (2013) 'E-learning strategic planning'. Paper presented at *The International E-learning and Distance Learning Conference.* Riad, 6-7 February.

Altabtabaae, A. (1994) *Kuwait Constitutional Law.* 2nd ed. Kuwait: University of Kuwait.

Altahih, S. (2007) *The concept of distance learning and e-learning.* Kuwait: Kitab Company

Alwahaibi, K., Alwabil, A., Alshawi, A. and Alshankity, Z. (2008) 'Barriers to Internet adoption among faculty in Saudi Arabian universities. *In: Proceedings of the world conference on educational multimedia, hypermedia, and telecommunications.* Chesapeake, VA: AACE.

Alwatan (2012) 'Young people and technology'. *Alwatan Newspaper*, 3 April, p.21.

Alwatan News (2013) *Education in Kuwait investment plan.* [online] Available at: http://alwatan.kuwait.tt/articledetails.aspx?Id=247060 [Accessed 13 Jan 2013].

Alzaabi, A. and Doomi, H. (2012) 'The effect of blended learning on the achievement of the fourth graders and their motivation towards learning mathematics in Jordanian schools'. *Damascus University Educational Journal.* 28 (1), pp.485-518.

Amer, T. (2007) *Open and distance learning.* Amman: Alyazori Dar.

Arabian Gulf Research Center (AGRC) (2012) *One Gulf One Nation.* Arabian Gulf Institution for Research, Kuwait.

Armbruster, P., Patel, M., Johnson, E. and Weiss, M. (2009) 'Active learning and

student-cantered pedagogy improve student attitudes and performance in introductory biology'. *CBE—Life Sciences Education*. 8, pp.203-213.

Arome, A. (2001) *Distance education: a case study of availability of learning resources to students at the Zimbabwe Open University.* PhD Dissertation. Florida Barry University School of Education.

Atia, G., Qaraennn, K. and Alqoda, K. (2008) 'The attitudes of the Hashemitec University students towards implementing e-learning in university teaching'. *Educational Journal. (*4), pp.161-194.

Bander, A (2011) 'The use of technology in Kuwait society'. Paper presented in Education Institutes Conference. School of Basic Education. Kuwait.

Baron-Epel, O., Kaplan, G., Weinstein, R. and Green, M.S. (2010). 'Extreme and acquiescence bias in a bi-ethnic population'. *European Journal of Public Health.* 20, pp.543-554.

Bates, A. (2005) Technology, e-learning and distance education. 2$^{nd}$ ed. Routledge Falmer Studies.

Beatty, B. (2007) *Hybrid classes with flexible participation options: if you build it, how will they come?* Paper presented at the Annual Convention of the AECT. Available at: http://www.aect.org/pdf/proceedings07/2007/07_3.pdf [Accessed 14 July 2008].

Bell, J. (2005) *Doing your research project: a guide for first-time researchers in education and social science.* Berkshire: Open University Press.

Bennett, S., Maton, K., and Kervin, L. (2008) 'The 'digital natives' debate: A critical review of the evidence'. *British journal of educational technology*. *39* (5), pp.775-786.

Binbaz, A. (2012) *Women are the half of men*. [online] Available at: http://www.binbaz.org.sa/mat/3427 [Accessed 17 Dec 2012].

Blair, T. (2012) 'Kuwait in 2030: Vision of the education system'. *Al-Qabas Newspaper* [online] Available at: http://www.alqabas.com.kw/node/63728 [Accessed 13 June 2013].

Blignaut, A. and Trollip, S. (2003) 'Measuring faculty participation in asynchronous discussion forums'. *Journal of Education for Business*. 78 (6), pp.347-353.

Bonk, C. and Graham, C. (2006) *The handbook of blended Learning: global perspectives. local design.* 1$^{st}$ ed. San Francisco: Pfeiffer.

Bonwell, C. (1996). 'Enhancing the lecture revitalizing a traditional format'. *In:* Sutherland, T. and Bonwell, C. (eds.) 'Using active learning in college classes: a range of options for faculty'. *New Directions for Teaching and Learning.* no. 67.

Brooks, L. (2008) *Analysis of factors that affect faculty attitudes toward a blended learning environment*. PhD Dissertation. California State University.

Bryman. (2004). *Quantity and quality in social research*. 2<sup>nd</sup> ed. London: Routledge.

Burrell, G., and Morgan, G. (1979) *Sociological paradigms and organisational analysis*. London: Heinemann Educational Books.

Buzzeto-More, N. (2007) *Advanced methods in organisational research: A practical guide*. London: Sage Publications.

Cliff, N. (1996) 'Answering ordinal questions with ordinal data using ordinal statistics'. *Multivariate Behavioural Research*. 31, pp.331-350.

Cohen, J. (1992) 'A power primer'. *Psychological Bulletin*. 11. pp.155-159.

Cohen, L., Manion, L. and Morrison, K. (2007) *Research methods in education*. 6<sup>th</sup> ed. London: Routledge.

Cole, M. (2009) 'Using Wiki technology to support student engagement: Lessons from the trenches.' *Computers & Education*. 52(1), pp. 141-146.

Collis, B. and Moonen, J. (2001) *Flexible learning in a digital world: experiences and expectations.* London: Kogan Page.

Conrad, K. (2000) *Instructional design for web-based training*. Amherst, Massachusetts: HRD Press.

Cook, D. (1962) 'The Hawthorne effect in educational research'. *The Phi Delta Kappan*. 44 (3), pp.116-122.

Creswell, J. (2009) *Research design: qualitative, quantitative, and mixed methods*. 3<sup>rd</sup> ed. Thousand Oaks, CA: Sage.

Cronbach, L. and Shavelson, R. (2004) 'My current thoughts on coefficient alpha and successor procedures'. *Educational and Psychological Measurement*. 64, pp.391-418.

Cuban, L., Kirkpatrick, H. and Peck, C. (2001) 'High access and low use of technologies in high school classrooms: explaining an apparent paradox'. *American Educational Research Journal*. 38 (4), pp.813-834.

Cuellar, N. (2002) 'The transition from classroom to online teaching'. *Nursing Forum*. 37 (3), pp. 5-13.

Darlington, Y. and Scott, D. (2005) *Qualitative research in practice stories from the field*. Buckingham: Open University Press.

Denscombe, M. (2010) *The good research guide: for small-scale social research projects*. 4<sup>th</sup> ed. Maidenhead: Open University Press.

Denzin, N. and Lincoln, Y. (2005) *The sage handbook of qualitative research.* London: Sage Publications, Inc.

Denzin, N. (2006) *Sociological methods: a sourcebook.* New Brunswick, NJ: Aldine Transaction.

Dey, S. and Sobhan, M. (2008) 'E-learning platform for software engineering education'. Paper presented to the *International Conference on Technology Communication and Education*. Gulf University for Science & Technology. Mishref Kuwait.

Driscoll, M. (2002) 'Blended learning: Let's go beyond the hype'. *E-Learning*. 3 (3), p.54.

Dzakiria, H., Mustafa, C. and Abu Bakar, H. (2006) 'Moving forward with blended learning (BL) as a pedagogical alternative to traditional classroom learning'. *164 Mojit*. 3 (1), pp.11-18.

Dziuban, C., Hartman, J. and Moskal, P (2004) 'Blended learning'. *Educause Center for Applied Research.* Vol. 2004, issue 7 [online] Available at:
http://net.educause.edu/ir/library/pdf/ERB0407.pdf   [Accessed 09 JAN 2014].

EHEA (2014) *Student Centred Learning*. [online] Available at: http://www.international.ac.uk/policy/ehea-bologna-process/objectives-and-action-lines/student-centred-learning.aspx [Accessed 09 JAN 2014].

Elhersh, A., Muflih, M. and Aldhoon, M. (2010) 'Obstacles of the application of e-learning systems as viewed by secondary school teachers at Al-Kurah District'. *Jordanian Journal of Educational Sciences*. 6 (1), pp.27-40.

ESCWA, United Nations (2003) *Profile of the information society in the state of Kuwait.* Kuwait.

ESCWA, United Nations (2005) *Profile of the information society in the state of Kuwait*. Kuwait.

Fallon, C. and Brown, S. (2003) *E-learning standards: a guide to purchasing, developing, and deploying standards-conformant e-learning*. CRC Press.

Felder, R.M. and Brent, R. (1996) 'Navigating the bumpy road to student-cantered instruction. *College Teaching*. 44, pp.43-47.

Field, A. (2009) *Discovering statistics using SPSS*. 3rd ed. London: Sage.

Fishbein, M. and Ajzen, I. (1975) *Belief, attitude, intention, and behaviour: an introduction to theory and research*. Reading, MA: Addison-Wesley.

Fraenkel, J., and Wallen, N.  (2010). *How to design and evaluate research in education.* 7th ed. New York: McGraw-Hill.

Fredericks, J., Blumenfeld, P., and Paris, A.  (2004) 'School engagement: Potential of the concept, state of the evidence.' *Review of Educational Research*. 74(1), pp. 59-109.

Fox, R. and Henri, J. (2005) 'Understanding teacher mindsets: IT and change in Hong Kong schools'. *Educational Technology & Society*. 8 (2), pp.161-169.

Futch, L.S. (2005) *A study of blended learning at a metropolitan research university*. Unpublished Doctoral Dissertation. University of Central Florida. Florida.

Garrison, D. and <u>Anderson, T</u>. (2003) *E–learning in the 21ˢᵗ century: a framework for research and practice*. London: Routledge/Falmer.

Garrison, D. and Kanuka, H. (2004) 'Blended learning uncovering its transformative potential in higher education'. *The Internet and Higher Education.* 7 (2), pp.95-105.

Garrison, D. (2005) *Transformative leadership and blended learning in higher education*. CHERD Notes.

Garrison, D. and Vaughan, N. (2008) *Blended learning in higher education: framework, principles and guidelines.* San Francisco, CA: John Wiley & Sons.

Gillespie, H., Boultn, H., Hramiak, A. and Williamson, R. (2007) *Learning and teaching with virtual learning environment*. UK: Learning Matters.

Garnham, C. and Kaleta, R. (2002) 'Introduction to hybrid courses'. *Teaching with Technology Today.* 8 (6), [online] Available at:
http://www.uwsa.edu/ttt/articles/grantham2.htm [Accessed 25 April 2010].

Graham, C., Allen, S. and Ure, D. (2003) *Blended learning environments: a review of the research literature*. Unpublished manuscript. Provo, UT.

Graham, C. (2006) 'Blended learning systems: definition, current trends, and future directions'. *In:* Bonk, C. and Graham, C. (eds.) *Handbook of blended learning: global perspectives, local designs.* San Francisco, CA: Pfeiffer Publishing, pp.3-21.

Grix, J. (2010) *The foundations of research*. Palgrave: Macmillan.

Hair, J., Anderson, R., Babin, B., Tatman, R. and Black, W. (2010) *Multivariate data analysis*. Upper Saddle River, NJ: Prentice Hall.

Halfawi, W. (2006) *New educational technologies*. Amman: Dar Alfekr.

Halloran, J. (1967) *Attitude formation and change*. Leicester, England: Leicester University Press.

Hamdan, M. (2007) 'Arab and international experiments in e-learning'. *Arab Palestine Magazine of Distance Learning*. 1 (1), pp.298-322.

Hammond, M. (2005) 'A review of recent papers on online discussion in teaching and learning in higher education'. *Journal of Asynchronous Learning Networks.* 9 (3), pp.9-23.

Harzing, A. (2006). 'Response styles in cross-national survey research: a 26 country study'. *International Journal of Cross-Cultural Management,* 6. [online] Available at: http://www.harzing.com/download/respstyles.pdf.

Hennessy, S., Ruthven, K. and Brindley, S. (2005) 'Teacher perspectives on integrating ICT into

subject teaching: commitment, constraints, caution, and change'. *Journal of Curriculum Studies*. 37 (2), pp.155-192.

Hew, K. and Brush, T. (2007) 'Integrating technology into K‑12 teaching and learning: current knowledge gaps and recommendations for future research'. *Educational Technology Research and Development*. 55 (3), pp.223‑252.

Hofstede, G., Hofstede, J. and Minkov, M. (2010) *Cultures and organizations: software of the mind.* 3rd ed. USA: McGraw-Hill.

Hogan, T.J., Benjamin, A. and Brezinski, K.L. (2000) 'Reliability methods: a note on the frequency of use of various types'. *Educational and Psychological Measurement*, 60, pp.523-531.

Holland, R. (1999) Reflexivity. *Human Relations.* 52, pp.463-483.

Hosammo, S. (2011) 'Status of e-learning in Tshreen University as perceived by faculty members and students'. *Damascus University Educational Journal*. 27 (1), pp.243-278.

House, R., Hanges, P., Javidan, M., Dorfman, P. and Gupta, V. (2004) *Culture, leadership, and organizations: the GLOBE study of 62 societies.* Thousand Oaks, CA: Sage Publications.

Huang, R and Zhou, Y. (2006) 'Designing blended learning focused on knowledge category and learning activities'. *In:* Bonk, C.J. and Graham, C.R. (eds.) *Handbook of blended learning: global perspectives, local designs*. San Francisco, CA: Pfeiffer Publishing, pp.269-310.

Hughes, J. (2005) 'The role of teacher knowledge and learning experiences in forming technology-integrated pedagogy'. *Journal of Technology and Teacher Education.* 13 (2), pp.277-302.

Ibrahim, A. (2011) 'Do we use e-learning in our school'. *Alraialaam Newspaper,* 12 January, p.25.

International Business Publications (IBP) (2011) 'Kuwait telecoms laws and regulations'. *International Business Publications*. 1.

Ismael, F. (2003) 'The infrastructure of using technology in distance learning'. A paper presented to the *Telecommunication Technology Conference* [online] Available at:http://ituarabic.org/e-education [Accessed 23 April 2010].

Ismael, F. (2009) *E-learning and education*. Cairo: Alqertas.

Jane, S., Pagan, J., Turkheimer, E., Fiedler, E., and Oltmanns, T. (2006) 'The interrater reliability of the structured interview for DSM-IV personality.' *Comprehensive Psychiatry*. 47, pp. 368- 375 [online] Available at: http://people.virginia.edu/~ent3c/papers2/Articles%20for%20Online%20CV/(15)%20Jane%20et%20al%20(2006).pdf [Accessed 28 August 2013].

Johnson, B. and Onwuegbuzie, A. (2004) 'Mixed methods research: a research paradigm whose time has come. *Educational Researcher*. 33 (7), pp.14-26.

Johnson, P. and Duberley, J. (2003) 'Reflexivity in management research'. *Journal of Management Studies*. 40, pp.1279-1303.

Jones, N. (2006) 'E-College Wales, a case study of blended learning.' *In*: Bonk, C. J. and Graham, C. R. (eds.) *Handbook of blended learning: global perspectives, local designs*. San Francisco, CA: Pfeiffer Publishing.

Jordan, A., Carlile, O., and Stack, A. (2008) *Approaches to learning: A guide for teachers*. England: McGraw-Hill, Open University Press UK.

Kahler, E., Rogausch, A., Brunner, E. and Himmel, W. (2008) 'A parametric analysis of ordinal data can lead to erroneous results'. *Journal of Clinical Epidemiology*. 61, pp.475-480.

Khan, B. (2005) *Managing e-learning strategies*. Information Science Publishing. Hershey, PA.

Kheder, M. (2008) 'Responsibilities of distance learning'. *Ahwal Almearefa Magazin*e. 1 (47), pp.22-25.

Khsawna, A. (2009) 'Blended learning model in Jordan'. *GCEE Journal*. 3 (53), pp.43-50.

Kim, K. and Bonk, C. (2006) 'The future of online teaching and learning in higher education: the survey says…'. *Educause Quarterly*. 22 (4).

Kline, R.B. (2004) *Beyond significance testing: reforming data analysis methods in behavioural research*. Washington DC: American Psychological Association.

Knapp, T. (1990) 'Treating ordinal scales as interval scales: an attempt to resolve the controversy'. *Nursing Research*. 39, pp.122-123.

Krippendorff, K. (2004) *Content analysis: an introduction to its methodology*. 2nd ed. Thousand Oaks, CA: Sage.

Kumar, S. (2007) *Integrating asynchronous online discussions into the classroom in web-enhanced courses*. Unpublished Doctoral Dissertation. Boston University, USA.

Kuwait National Assembly (2013) *Kuwait constitution*. [online] Available at: http://kna.kw/clt/run.asp?id=6 [Accessed 15 Jan 2013].

Kuwaiti Research and Studying Centre. (2002) *History of education in Kuwait*. Kuwait: Government of Kuwait Press.

Kwan, C., Chun, K.. and Chesla, C. (2011) 'Cultural norms shaping research group interviews with Chinese American immigrants.' *Asian American Journal of Psychology*, 2(2), p. 115.

Laurillard, D. (2000) 'New technologies, students and the curriculum: the impact of communications and information technology on higher education', *In:* Scott, P. (ed.) *Higher education re-formed*. London: Palmer, pp.133-153.

Laurillard, D. (2002) *Rethinking university teaching.* 2nd ed. London: Routledge/Falmer.

Laws, S., Harper, C., Jones, N., and Marcus, R. (2003) *Research for development: A practical guide*. London: Sage Publications.

Lawson, T. and Comber, C. (1999) 'Superhighways technology: personnel factors leading to successful integration of information and communications technology in schools and colleges'. *Journal of Information Technology for Teacher Education.* 8 (1), pp.41-53.

Lim, C.P. and Khine, M.S. (2006) 'Managing teachers' barriers to ICT integration in Singapore schools'. *Journal of Technology and Teacher Education.* 14 (1), pp.97-125.

Littlejhon, A. and Pegler, C. (2007) *Preparing for blended e-learning*. London: Routledge.

Long, J., Feng, D. and Cliff, N. (2003) 'Ordinal analysis of behavioural data'. *In:* J.A. Shinka and W.F. Velicer (eds.). *Handbook of Psychology, Volume 2: Research Methods in Psychology.* Hoboken NJ: Wiley. pp. 635-664.

Lowther, L., Ross, M. and Morrison, G. (2003) 'When each one has one: the influences on teaching strategies and student achievement of using laptops in the classroom'. *Educational Technology Research and Development.* 51 (3), pp.23-44.

Loveless, A. (2006) 'Where do you stand to get a good view of pedagogy?' *Journal of Technology and Teacher Education*, 8(4), pp. 337-349.

Luo, L. (2010) Web 2.0 'Integration on information literacy instruction: an overview'. *The Journal of Academic Librarianship.* 36 (1), pp. 32-40.

Magalhaes, R. and Ali, G. (2008) 'Barriers to implementing e-learning: a Kuwaiti case study'. *Issue International Journal of Training and Development.* 12 (1).

Mager, R. (1984) Developing attitude toward learning. 2nd ed. Belmont, CA: Lake.

Mansour, A. (2001) *Learning theories*. Damascus: University of Lathiqia Press.

Mayes, J. and Fowler, C. (1999) 'Learning technology and usability: a framework for understanding courseware'. *Interacting with Computers.* 11, pp.485-497.

Mayes, T. and de Freitas, S. (2007) 'Learning and e-learning: the role of theory'. *In:* Beetham, H. and & Sharpe R. (eds.) *Rethinking pedagogy in the digital age*. London: Routledge.

McFarlin, B.K. (2008) 'Hybrid lecture online format increases student grads in an undergraduate exercise physiology course at a large urban university'. *Advances in Physiology Education.* 32, pp.86-91.

McQueen, R. and Knussen, C. (1999) *Research methods in psychology: a practical introduction.* Prentice Hall Europe.

Mesbah, R. (2009) *Women's education in Saudi Arabia: The way forward*. [online] Available at: http://www.ameinfo.com/199773.html [Accessed 13 January 2012].

Mhehe, G. (2002) *Women's enrolment and participation issues at the Open University of Tanzania*. PhD dissertation. University of Alberta.

Minkov, M. (2010) 'Nations with more dialectical selves exhibit lower polarization in life judgments and social opinions'. *Cross-Cultural Research.* 43, pp.230-250.

Mogey, N. (1999) *So you want to use a Likert scale?* Learning Technology Dissemination Initiative. Heriot-Watt University. [online] Available at: http://www.icbl.hw.ac.uk/ltdi/cookbook/info_likert_scale/

Ministry of Planning (MOP) (2011) *Statistics*. Kuwait: Ministry of Planning.

Mosley, B. (2005) *Development of a technology mentoring program using Rogers' diffusion of innovations*. Unpublished Doctoral Dissertation, Virginia Polytechnic Institute and State University.

Nachmias, C. and Nachmias, D. (1996) *Research methods in the social science.* 5$^{\text{th}}$ ed. London: Arnold, A Member of the Hodder Headline Group.

Neuendorff, K. (2002) *The content analysis guidebook.* Thousand Oaks, CA: Sage.

Nordsletten, A., Cruz, L., Pertusa, A. Reichenberga, A., Hatcha, S.., and Mataix-Cols, D. (2013) 'The structured interview for hoarding disorder (SIHD): Development, usage and further validation.' *Obsessive-Compulsive and Related Disorders*. 2, pp. 346-350 [online] Available at: http://www.kcl.ac.uk/innovation/groups/selcoh/publications/hoardingpdf.pdf [Accessed 28 August 2013].

Nyirongo, N. (2009) *Technology adoption and integration: a descriptive study of a higher education institution in a developing nation*. Unpublished Doctoral Dissertation. Virginia Polytechnic Institute and State University.

Ocak, M. (2010) 'Blend or not to blend: a study investigating faculty members' perceptions of blended teaching'. *World Journal on Educational Technology*. 2 (3), pp.196-210.

Oncu, S. (2007) *The relationship between instructor practices and student engagement: What engages students in blended learning environments?* Unpublished Doctor of Philosophy Research. Indiana University.

Oppenheim, A. (2000) *Questionnaire design, interviewing and attitude measurement*. Continuum.

Owston, R., Garrison, D. and Cook, K. (2006) 'Blended learning at Canadian universities'. *In:* Bonk, C. and Graham, C. (eds.) *Handbook of blended learning: global perspectives, local designs*. San Francisco, CA: Pfeiffer Publishing, pp.338-350.

Panga, G. (2010) *A study of adult students' perceptions of the traditional distance education programs and the option of a blended learning model in sub-Saharan Africa*. Unpublished PhD Dissertation. Capella University, USA.

Paulhus, D. (1991) 'Measurement and control of response bias'. *In:* Robinson, J.P., Shaver, P.R. and Wrightsman, L.S. (eds.) *Measures of personality and social psychological attitudes*. San Diego, CA: Academic Press, pp. 17-60.

Phelan, C., and Wren, J. (n. d.) *Exploring reliability in academic assessment.* Unpublished: University of Northern Iowa [online] Available at: http://www.uni.edu/chfasoa/reliabilityandvalidity.htm [Accessed 28 August 2013].

Pereria, J., Pleguezuelos, W., Meri, A., Molina-Rose, A. and Masdeu, C. (2007) 'Effectiveness of using blended learning strategies for teaching and learning human anatomy'. *Black Synergy Journal for Learning, Research and Professional Practice*. 41 (2), pp.189-195.

Prensky, M. (2001) 'Digital natives, digital immigrants'. *On the horizon*. 9 (5), pp.1-6.

Puanmau, P. (2006) 'Educational planning in the Pacific: Principles and guidelines.' *Journal of Educational Studies*. 28(1&2), pp. 20-38.

Race, P. (2005) *500 Tips for open and online learning*. London: Routledge.

Ragan, L. *Best practices in online teaching—pulling it all together—teaching blended learning courses* [online] Available at: http://cnx.org/content/m15048/1atest/. [Accessed 20 December 2010].

Rajecki, D. (1996) *Attitudes.* Massachusetts: Signor Associates, Inc.

Rogers, P. (2000) 'Barriers to adopting emerging technologies in education'. *Journal of Educational Computing Research*. 22 (4), pp.455-472.

Ross, B. and Gage, K. (2006) 'Global perspectives on blended learning: insight from webCT and our customers in higher education'. *In:* Bonk, C.J. and Graham, C.R. (eds.) *Handbook of blended learning: global perspectives, local designs*. San Francisco, CA: Pfeiffer Publishing, pp.155-168.

Rowntree, D. (1997) *Making materials-based learning work*. London: Kogan Page.

Rubin, H.J. and Rubin, I.S. (1995) *Qualitative interviewing: the art of hearing data*. Thousand Oaks, CA: Sage.

Sait, S., Al-Tawil, K., Ali, S. and Khan, S. (2003) 'The use and effect of Internet on teachers and students in Saudi Arabia'. Paper presented at the *Hawaii International Conference on Education*. Honolulu, Hawaii, USA.

Salama, A. (2005) *Blended learning: South Wadi University* [online] Available at: www.elearning.edu.sa/forum/attachment.php?attachmentid=450&d=1175732484. [Accessed 15 May 2010].

Salmon, G. (2002) *E-tivities: the key to active online learning.* London: Kogan Page.

Saunders, M., Lewis, P. and Thornhill, A. (2007) *Research methods for business students.* London, Pitman.

School of Basic Education (SBEK) (2009) *Information guidance of SBEK*. Kuwait: The Public Authority for Applied Education and Training.

Sevier, R. (2000) 'Strategic planning in higher education: Theory and practice.' USA: Case Books.

Sharpe, R., Enfield, G., Roberts, G. and Francis, R. (2006) 'The undergraduate experience of blended e-learning: a review of UK literature and practice'. *The Higher Education Academy*. [online] Available at: http://www.heacademy.ac.uk/research/sharpe_benfiled_roberts_francis.pdf

Sheskin, D.J. (2007) *Handbook of parametric and nonparametric statistical procedures*. Boca Raton FL: Chapman & Hall/CRC.

Shiekh, A., Mohammad, J. and Ateyah, A. (2005) 'The obstacles of using e-learning from the Hashemite University students' perspectives'. *Educational & Psychological Sciences Journal*. 7 (4), pp.184-206.

Singh, H. (2003) 'Building effective blended learning programs'. *Educational Technology*. 43 (6), pp.51-54.

Skibba, K. (2007) 'How faculty roles transform in hybrid course'. Paper presented at the *23$^{rd}$ Annual Conference on Distance Teaching & Learning*. [online] Available at: http://www.uwex.edu/disted_/conference/resource_library/proceedings/07_5124.pdf. [Accessed 14 July 2008].

Smith, J., Harre, R. and Van Langenhove, L. (1999) *Rethinking methods in psychology*. London: Sage Publications.

Smith, P. (2004) Acquiescent response bias as an aspect of cultural communication style. *Journal of Cross-Cultural Psychology*. 35, pp.50-61.

Spiceland, J. (2002) 'An assessment of the effectiveness of e-learning in corporate training programs'. *In International Review of Research in Open and Distance Learning*. 3 (1). Seavers, V. (2002) Going back to the classroom: can I practice what I preach? (Feature No. 0731- 4388).

Sultan, A. (2005) *Learning and training technology*. Kuwait: Alfalah Store.

Tabor, S. (2007) 'Narrowing the distance: implementing a hybrid learning model for information security education'. *Quarterly Review of Distance Education*. 8 (1), pp.47-57.

Tang, M. and Byrne, R. (2007) 'Regular versus online versus blended: a qualitative description of the advantages of the electronic modes and a quantitative evaluation'. *International Journal on E-Learning*. 6 (2), p.257.

The Ministry of Education (MOE) (1985) *The annual national report: development of*

*education in the state of Kuwait (1985).* Kuwait: Alwatan Press.

The Ministry of Education (MOE) (2002) *Development of education in the state of Kuwait.* Kuwait: the Ministry of Education.

The Ministry of Education (MOE) (2005a) *The annual national report: development of education in the state of Kuwait (2005).* Kuwait: the Ministry of Education.

The Ministry of Education (MOE) (2005b) *Educational planning and learning economics: definitions and concepts.* Kuwait: The Department of Planning: The Ministry of Education.

The Ministry of Education (MOE) (2008) *The national report: development of education in the state of Kuwait (2004-2008).* Kuwait: the Ministry of Education.

The Ministry of Education (MOE) (2011) *E-learning strategy in Kuwait.* Kuwait: the Ministry of Education.

The Ministry of Education (MOE) (2011a) *The annual national report: development of education in the state of Kuwait.* Kuwait: The Ministry of Education.

The Ministry of Education (MOE) (2012) *The annual national report: development of education in the state of Kuwait.* Kuwait: the Ministry of Education.

The Public Authority for Applied Education and Training (PAAET). (2011) *Statistics report. Kuwait:* The Public Authority for Applied Education and Training.

The Public Authority for Applied Education and Training (PAAET) (2012) *Education in PAAET.* Kuwait: The Public Authority For Applied Education and Training.

The Quality Assurance Agency for Higher Education (QAA). (2009a). *Directors' report and financial statements.*[online] Available at: http://www.qaa.ac.uk/Publications/InformationAndGuidance/Documents/DirectorsReport2008-09.pdf.

The Quality Assurance Agency for Higher Education (QAA). (2009b). [online] Available at: http://www.qaa.ac.uk/Publications/InformationAndGuidance/Documents/PDPguide.pdf.

Thomas, G. (2009) *How to do your research project: a guide for students in education and applied social science.* London: SAGE Publications, Ltd.

Tubishat, A., Bhatti, A. and El-Qawasemah, E. (2006) 'ICT experiences in two different Middle Eastern universities. *Issues in Informing Science and Information Technology.* pp.3667-3678.

UCISA. (2012) 2012 *Survey of Technology Enhanced Learning in UK Higher Education.* Oxford: UCISA [online] Available at: http://www.ucisa.ac.uk/~/media/groups/ssg/surveys/TEL_survey_2012_with%20Apps_final [Accessed 9 August 2013].

University of Kuwait (UOF) (2011) *About us.* [online] Available at: http://www.kuniv.edu/ku/ar/ABOUTKU/ABOUTKU/index.htm [Accessed 21 May 2011].

University of Kuwait (UOF) (2012) [online] Available at: http://www.kuniv.edu/ku/ar/Centers/DistantLearning/index.htm [Accessed 3 March 2012].

University of Kuwait Distance Learning Centre (2012) *E-learning in the University of Kuwait.* [online] Available at: http://dlc.kuniv.edu/index.html [Accessed: 23 July 2012].

Vaughan, N. (2007) 'Perspectives on blended learning in higher education'. *International Journal on E-learning*. 6 (1), pp.81-95.

Wang, S., Cowie, B. and Jones, A. (2010) 'Challenges of e-learning for university instructors in Taiwan'. Paper presented to the *Computer and Network Center*. National Cheng-Kung University, Taiwan.

Warwick, D. and Lininger, C. (1975) *The sample survey: theory and practice.* USA: McGraw-Hill, Inc.

Wee, M. and Abu Bakar, Z. (2006) 'Obstacles towards the ICT tools in teaching and learning of information systems in Malaysian universities'. *The International Arab Journal of Information Technology*, 3 (3).

Welker, J. and Bernardino, L. (2006) 'Blended learning understanding the middle ground between traditional classroom and fully online instruction'. *Journal Educational Technology System*. 34 (1), pp.33-55.

Wellington, J. (2000) *Educational research contemporary issues and practical approaches.* London: Continuum.

Wrigley, T. (2006) *Another school is possible*. London: Trentham Books.

Woo, Y. and Reeves, T. (2007) 'Meaningful interaction in web-based learning: A social constructivist interpretation.' *Elsevier: The Internet and Higher Education*, 10(1), pp. 5-25.

Yelon, S. (2006) Face-to-face or online? Choosing the medium in blended training'. *Performance Improvement*. 45 (3), p.22.

Yoon, S. and Lim, D.H. (2007) 'Strategic blending: a conceptual framework to improve learning and performance'. *International Journal on E-Learning*. 6 (3), p.475.

Young, J.R. (2002) ''Hybrid' teaching seeks to end the divide between traditional and online instructions'. *The Chronicle of Higher Education*. 48 (28), p.33.

Yudko, E., Hirokawa, R. and Chi, R. (2008) Attitudes, beliefs, and attendance in a hybrid course. *Computers & Education*. 50 (4), pp.1217-1227.

Yashau, B. (2006). 'The effects of blended e-learning on mathematics and computer attitudes in pre-calculus algebra'. *The Montana Mathematics Enthusiast*. 3 (2), pp.176-183.

Zaiton, K. (2005) *Educational information in telecommunication time*. Cairo: Allam Almerefa.

Zagoul, E. (2003) *Theories and learning*. Amman: Dar Alshoroug.

Zhao, Y., Pugh, K., Sheldon, S. and Byers, J. (2002) 'Conditions for classroom technology innovations'. *Teachers' College Record*. 104 (3), pp.482-515.

Zhao, Y. and Frank, K. (2003) 'Factors affecting technology uses in schools: an ecological perspective'. *American Educational Research Journal*. 40 (4), pp.807-840.