

ATHABASCA UNIVERSITY

THE EXPERIENCE OF GULF ARAB STUDENTS

NEW TO E-LEARNING

BY

MARTHA ROBINSON

A thesis submitted to the  
Athabasca University Governing Council in partial fulfillment  
of the requirements for the degree of  
MASTER OF DISTANCE EDUCATION

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## ATHABASCA UNIVERSITY

The undersigned certify that they have read and recommend to the Athabasca University Governing Council for acceptance of a thesis “THE EXPERIENCE OF GULF-ARAB STUDENTS NEW TO E-LEARNING” submitted by “MARTHA ROBINSON” in partial fulfillment of the requirements for the degree of MASTER OF DISTANCE EDUCATION.

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## DEDICATION

This work is dedicated to my parents, Ruth and Alex Holosh. You have supported me and encouraged me to stretch my boundaries and to continue to grow. Dad, you taught me to be practical and to finish what I start. Mom, you encouraged me to dream, to know that it's only through aspiring that we achieve. You both inspire me every day.

## ABSTRACT

Technology-based initiatives are being implemented around the world as a means of improving quality and expanding access to education. With this implementation, however, it has become apparent that, to be successful in a technologically mediated learning environment, students need to develop new skills and modify behaviours that were successful in a traditional face-to-face environment. On every continent one can find initiatives to develop appropriate delivery methods, curricula, resources, and support that utilize new technologies to improve education quality and effectiveness and to address the particular needs of local learners. Government and educators in the State of Qatar face a challenge in that little research has been done into the culturally-specific needs of Arab distance learners, particularly those in Qatar. In the absence of such research, policymakers must rely on studies from other states that do not share their cultural and historical heritage. This study utilized a qualitative approach to examine Qatari students' experiences in a pilot eSchoolbag project, which combines face-to-face instruction with e-learning resources and strategies. The experiences were reported by the students themselves, within the context of their cultural and educational environment. The study drew on Garrison, Anderson, and Archer's Community of Inquiry model and Hofstede's Dimensions of National Culture to structure and interpret the experiences of the participants. It utilized an open-ended pen-and-paper survey and semi-structured small-group interviews with 12 students who represented a range of experience and ability in the use of computers and the English language, though all used Arabic for communication at home. Participants' experiences reflected

elements of online communities of inquiry, with some variations due to this particular group's age and blended rather than wholly online learning context. Educational values, English-language ability, and experience with computers emerged as structural issues that affected students' e-learning experience. Three essential elements of the experience for this particular group of students were found to be motivation, belonging, and adjustment. The results of the study add to the body of knowledge about the experience and needs of school-aged Arab students in e-learning.

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## TABLE OF CONTENTS

CHAPTER I - INTRODUCTION .....	1
The problem.....	3
Purpose of the study .....	4
The research questions .....	5
Assumptions .....	5
Significance of the study .....	6
Sample population .....	6
Delimitations and limitations .....	7
Definition of terms.....	8
Culture .....	10
Organization of the thesis .....	11
CHAPTER II – RELATED LITERATURE .....	13
Validity of existing theory and research .....	19
Summary of the current literature .....	20
CHAPTER III – METHODOLOGY AND PROCEDURE .....	22
Characteristics of qualitative research .....	22
Qualitative research strategy .....	24
Role of the researcher .....	25
Instrumentation .....	28
Data collection procedures .....	28
Data analysis procedures .....	30
Strategies for validating findings .....	32

Narrative structure .....	34
Ethical issues .....	34
CHAPTER IV - RESULTS.....	36
In the students' voice .....	36
“In our school. . .”: The e-schoolbag experience in context .....	77
Essence of the experience .....	81
CHAPTER V – CONCLUSIONS AND RECOMMENDATIONS .....	85
REFERENCES .....	89
APPENDICES.....	94
APPENDIX A: LETTER OF INTRODUCTION--ADMINISTRATION.....	94
APPENDIX B: LETTER OF INTRODUCTION--PARENTS .....	97
APPENDIX C: LETTER OF INTRODUCTION--STUDENT .....	99
APPENDIX D: SURVEY INSTRUMENT .....	101
APPENDIX E: INTERVIEW PROTOCOL.....	107

## LIST OF TABLES

1. Experience of cognitive presence .....	38
2. Experience of social presence .....	56
3. Experience of teaching presence .....	62
4. Experience of role adjustment .....	73

# CHAPTER I

## INTRODUCTION

The advent of new technologies that facilitate communication and information-sharing worldwide have had a marked effect on distance education (DE).

Technology-based initiatives are being implemented around the world as a means of improving quality and expanding access to education for previously underserved sectors of the population. With this implementation, however, it has become apparent that, to be successful in a technologically mediated learning environment, students need to develop new skills and modify behaviours that were successful in a traditional face-to-face classroom (Cleveland-Innes, Garrison, & Kinsel, 2007). As research and experience expand, distance educators become more aware of the need to design programs that respond to the specific needs of learners of diverse regions and cultures. On every continent one can find initiatives to develop appropriate delivery methods, curricula, resources, and support that utilize new technologies to improve education quality and effectiveness and to address the particular needs of local learners (Hedberg & Ping, 2004; Kumar, 1999; Kanwar, 1999).

Spurred by oil and gas revenues, the countries of the Gulf Cooperation Council (GCC) have developed extensive plans for modernization in recent years.

Infrastructure, health care, and education have been targeted for expansion and improvement in order to prepare citizens for economic growth and development. In

the State of Qatar, the government has embarked on an ambitious plan for reform of the school system, including government funded Independent Schools to promote innovation, and assessment based on international standards (Supreme Education Council, 2006a). In higher education, initiatives include the restructuring of Qatar University, and the development of Education City, a 2,500-acre campus on the outskirts of Doha which hosts branch campuses of several North American universities as well as numerous other educational and research institutions (Zoepf, 2005).

Although distance education policy has been noticeably absent in Qatar, recent initiatives at the institutional and government levels, such as lectures via videoconferencing in some university courses and the development of blended learning programs and an e-learning portal for school-age learners, indicate a growing acceptance of the principles of distance education. At Weill Cornell Medical College in Education City, for example, students receive some of their lectures via videoconference from the main campus in New York, while the website of Carnegie Mellon University in Qatar offers access to the Blackboard Learning System, though to date there are no courses available through this medium. In the K-12 sector, grade 7 students at Al Wakrah Independent Girls' School received e-Schoolbags containing Tablet PCs as part of a pilot project intended to develop technical and intellectual knowledge and skills and to converge in-school and at-home learning activities (Supreme Education Council, 2006a). The e-Schoolbag program, along with the Knowledge Net (ictQatar, 2007) are initiatives of ictQatar, an organization

established by His Highness the Emir Sheikh Hamad Bin Khalifa Al-Thani, to accelerate the transformation of Qatar into an information-based society. In a nation that until recently offered only teacher-centred classrooms that emphasized rote learning, this illustrates a marked change in educational approach.

### THE PROBLEM

Government and educators in Qatar face a challenge in that very little research has been done into culturally-specific needs of Arab distance learners, and the author could find none that referred specifically to Qatar. Al-Harhi (2005) cites various authors in Moore and Anderson's Handbook of Distance Education who highlight the lack of research studies focusing on the cultural aspect of distance education to provide practical guidelines for global courses and greater understanding about cross-cultural differences that influence online learners. In the absence of such research, policymakers are forced to rely on research and information from other states that do not share their cultural and developmental heritage.

Worldwide, the bulk of research in online learning has been carried out on adults in professional and higher education contexts, who experience different opportunities and challenges from K-12 level learners. The requirement of younger students for structures and approaches that enhance motivation and development of metacognitive skills creates a need for research specific to this age group. If Qatar and other GCC nations are to formulate policy that will address the particular

characteristics and needs of such learners, they require a body of research that explores and explicates the experiences of these learners in their own context.

### PURPOSE OF THE STUDY

Traditional models of western-based adult distance education assume a mature, independent learner, exhibiting individualism and low uncertainty avoidance as described by Hofstede (2001). Cavanaugh, Gillan, Kromrey, Hess, and Blomeyer (2004) highlight autonomy and internal locus of control as two criteria of successful distance learners of any age and recommends carefully considered scaffolding approaches in order to support younger learners who have not yet developed these characteristics fully. Al Harthi (2005) found that graduate Gulf Arab students reported an aversion to the isolation and independence of North American distance education courses. She inferred that this may be due to social and cultural traits apparent in Gulf Arab society and reflected in traditional role expectations of learners. The present study considered the Community of Inquiry model (Garrison, Anderson, & Archer, 2000) as a framework to explore the experience of grade eight Qatari students participating in a pilot “eSchoolbag” project, which combines traditional face-to-face teaching with e-learning assignments, resources, and assessment. The purpose of the study was to describe the experience of students in the program and suggest approaches to enhance student motivation and achievement. The Community of Inquiry model was chosen for this study in that it has been used extensively in the study of online learning environments and thus offers a point of departure from which to begin exploration of the experience of this

particular sector of the population. The study also provided an opportunity to observe the applicability of the model in the context of K-12 blended learning, to which it has not yet been applied.

### THE RESEARCH QUESTIONS

- 1) How do students describe their experience in the eSchoolbag project?
- 2) In what ways does this experience exemplify a community of inquiry in terms of:
  - a) Cognitive presence in learning
  - b) Social presence in learning
  - c) Teaching presence in learning
- 3) What themes related to role adjustment arise from students' description of the transition from a traditional face-to-face classroom to the eSchoolbag project?

### ASSUMPTIONS

The major assumptions of this study were:

1. The student participants in this study are willing and able to recall and describe accurately the occurrences and emotions that they have experienced.
2. The rapport and trust needed to obtain complete and honest responses can be achieved via introductory and survey documents and face-to-face interviews.

3. Translation by a culturally and linguistically qualified person is an effective means to obtain responses from a participant who is not fluent in the English language.

### SIGNIFICANCE OF THE STUDY

As newer, smaller, more efficient means of global communication become available, DE is taking its place as a viable and convenient educational option. Institutions are reaching out to new students from non-traditional segments of the population within their own borders as well as overseas. By adding to the body of knowledge that examines culturally-determined learner experiences with DE methods and technology, this study can provide valuable information for those charged with developing e-learning and distance education courses and programs for global distribution and for Arab and adolescent segments of local populations.

### SAMPLE POPULATION

The population for this study consisted of grade eight female students of Al Wakrah Girls' Independent Preparatory School, of Gulf Arab descent, participating for the second year in the eSchoolbag project. The population included the universe of participants in the eSchoolbag project in Qatar, about 200 students, but the actual participant group consisted only of those who obtained parental permission and agreed to volunteer and actually completed the survey and interviews, a total of 12 students. This method of participant selection was self-limiting, in that the choice not to participate may be indicative of hidden issues pertaining to their e-learning

experience. It was a sample of convenience, given the time, economics, and level of influence and authority of the researcher in the education system of Qatar. It was not necessarily a representative group, but served to illuminate salient issues related to e-learning as experienced by the participants.

## DELIMITATIONS AND LIMITATIONS

LIMITATIONS. The following are limitations arising from the nature and methodology of the study:

1. The author is a native English-speaker, while participants are native Arabic speakers. Limitations arise in capturing exact meanings and connotations when working in a second language or through a translator.
2. The convenience sampling method decreases the transferability of the findings, especially due to the homogeneity of age and gender among the student participants.
3. Reliability of data is limited by participants' ability to recall and report on their own experiences.

DELIMITATIONS. This study confined itself to surveying and interviewing female students in grade eight, participating in the eSchoolbag project at Al Wakrah Girls' Independent Preparatory School in Qatar for the second year.

## DEFINITION OF TERMS

**Community of Inquiry:** Garrison (2006) discusses the construct of community to examine educational and transactional issues in the study of online learning. He describes community as essential to support collaboration and discourse associated with higher levels of learning. Based on his own previous collaboration (Garrison, Anderson, & Archer, 2000) he describes a framework which may be used as a research tool into online learning. This Community of Inquiry model identifies three forms of presence in the learning environment: cognitive, social, and teaching, and describes categories and indicators to define these.

**Independent School:** A school that is funded by the government of Qatar, but is granted autonomy to carry out its educational mission and objectives while being held accountable to terms agreed to in an operating contract with the Supreme Education Council, meeting established curriculum standards in Arabic, English, Mathematics and Science, as well as complying with periodic financial audits. Tuition is free for Qataris and others eligible for public education. Independent Schools were established as part of the “Education for a New Era” reform initiative in order to promote innovation and excellence in education in Qatar.

**eSchoolbag project:** An e-learning project intended to develop technical and intellectual knowledge and skills and to converge in-school and at-home learning activities (Supreme Education Council, 2006a). The eSchoolbag package provides each student with a Tablet PC that allows note taking, sharing and editing of

information electronically, and e-contents on Science, Math, and English. Teachers use pre-prepared course materials aligned with Qatari curriculum standards as well as their own customized materials to fit their students' needs. Teachers present material, supervise, and support students in a face-to-face classroom situation, while students use the electronic medium to complete assignments and tests, carry out further research, communicate with the teacher, and access resources on the Knowledge Net from home or school. Additional resources in the eSchoolbag package include:

- Virtual Classroom to assist teachers in classroom management,
- Mind Book--a digital based note-taking and mind mapping tool, set to enhance the learning process,
- Construction tool--digital web-board that enables the use of virtual geometrical tools such as a compass, protractors and curve rulers,
- D-Book--an interactive application which combines intuitive technology and innovative learning tools to allow students to study more independently and effectively,
- Britannica Online School Edition--to give instant access to four complete encyclopedias that ensure consistency with classroom topics and age-appropriate language.

The eSchoolbag is the first phase of a continuing process that will see the development of a nationwide Learning Management System and greater opportunity for individualized instruction (Supreme Education Council, 2006b). To date, the

program has been piloted by the grade 7 students at Al Wakrah Girls Independent Preparatory School, and has continued into its second academic year, including a second cohort of grade 7 students, and the original group, now in grade 8. The intent is to continue the project until all grade levels at the school are included.

**Knowledge Net (K-net):** A pilot project of the Supreme Education Council and ictQatar designed to provide a portal for sharing education applications and student data. It's goal is to promote three-way communication between students, teachers, and parents.

## CULTURE

Hofstede & Hofstede define culture as “a collective programming of the mind that distinguishes members of one human group from another” (2005, p 21). They identify various levels of culture: national, regional/ethnic/religious, gender, generation, social class, and organizational. They list symbols, heroes, rituals, practices, and values as components of culture, of which values are the most constant and slow to change. Thus, although older members of a society may differ from younger members in their symbols, heroes, fashion, and consumption patterns, Hofstede & Hofstede argue that there is no evidence that basic values vary greatly between generations within a culture, nor that the values of present generations from different cultures are indeed converging. Such conclusions highlight the need for an understanding of how people from diverse cultures actually differ in their “collective programming.” The sum of Hofstede’s research comprises the cultural

characteristics of 53 countries and three regions (ITIM International, n.d.). Unfortunately, his data for Arab-speaking nations combines values from the countries of Egypt, Iraq, Kuwait, Lebanon, Libya, Saudi Arabia, and the United Arab Emirates, which, though sharing a common language and the Muslim faith, differ in their history, geography and social structure. In particular, the culture of the Qatari people has been influenced by their relatively isolated location on a peninsula in the Arabian Gulf. The two original groups who inhabited the peninsula, nomadic Bedouin tribes and coastal pearl diving societies, have united to form the present Qatari people. As such, Hofstede's cultural dimension values cannot be seen to be an exact depiction of Qatari culture, but serve to provide a broad description of values identified in Arabic-speaking Islamic cultures, of which Qataris are a part.

## ORGANIZATION OF THE THESIS

This report contains five chapters followed by a reference list and appendices. Chapter One consists of an introduction, including a description of the problem, the purpose of the study, research questions, assumptions, significance, sample population, delimitations and limitations of the study and a definition of important terms used. Chapter Two presents a review of the relevant literature. Chapter Three details the methodology chosen and the procedures used to carry out the study. It includes descriptions of qualitative research and strategy, of the role of the researcher, and of procedures used for data collection, analysis, and validation. The chapter concludes with comments on the narrative structure selected and ethical issues addressed during the study. Chapter Four describes the results of the

research, first in the students' own voices, utilizing quotes from surveys and interviews to illustrate salient concepts and themes, then in a narrative describing the structural context of the students' experience. This is followed by a synthesis describing the essence of the e-learning experience for the participants. Chapter Five contains conclusions and recommendations. This final chapter is followed by a list of references and appendices that contain all documents and research tools used.

The following chapter will review the relevant literature as it pertains to this study.

As such, it will discuss:

- Cultural differences
- Distance education in developing nations
- Education in the Gulf states
- Arab learners
- The Community of Inquiry model
- Role adjustment for online learners

## CHAPTER II

### RELATED LITERATURE

The theoretical framework for this study is eclectic, drawing on literature about cultural differences, education for development, education among Gulf Arabs, and online learning. Due to the exploratory nature of the research with this particular cultural group, the researcher focused on current literature that addresses these issues to provide a background to the questions under study. Literature specific to learner experiences in online environments and distance education also informed the study.

CULTURAL DIFFERENCES. Hofstede (2001) identified four dimensions that differentiate members of cultural groups throughout the world and thus influence what constitute effective and acceptable actions and interactions. He labeled these dimensions as:

1. Power Distance illustrates social equality and class differences;
2. Individualism/Collectivism reflects the ties between individuals and the strength and role of groups within the society;
3. Uncertainty Avoidance indicates the extent to which people feel threatened by and avoid ambiguous circumstances;
4. Masculinity/Femininity contrasts dominant values of material success and self-centredness against interdependence and service.

He later identified a fifth dimension, Long-Term Orientation, which has not yet been scientifically applied to Arab-speaking cultures, thus will not be considered in this study.

Woodrow (2001) argues that the underlying value systems embedded in ways in which societies view the nature of learning makes international exchange and social equity in education problematic. He indicates that different valuations of cultural capital create differential power in education, and that culturally-based assumptions about autonomy and authority dominate decision-making on school curricula around the world.

DISTANCE EDUCATION IN DEVELOPING NATIONS. Some failures of distance education in developing countries are a result of differences in learner characteristics, study habits, attitudes, and academic self-concept between the cultures of course developers and those of learners (Kumar, 1999). A number of studies have documented the effects of cultural factors on motivation, presence, and communication in online courses (Gunawardena, Wilson, & Nolla, 2003; Inglehart & Baker, 2000; Woodrow, 2001). Much of this research has been limited to overseas students being taught in an unfamiliar culture or online by teachers with unfamiliar pedagogical strategies, but it highlights the need to understand how students adapt to distance and online delivery methods in order to make courses both culturally and pedagogically relevant (Selinger 2004). Baggaley and Hoon (2005) describe the innovative use of learning technologies not currently considered in North America

and Europe as a means of addressing the learning and infrastructure needs of learners in various Asian countries, thus illustrating that the direction of input and innovation need not always be from developed nations towards developing ones. Gulati (2008) provides a comprehensive review of successes and challenges of technologically enhanced learning in developing nations, in Africa, Latin America, and Asia.

In discussing problems and solutions for DE in developing countries in Asia, Ramanujam (2001) cautions that DE development depends on appropriate responses to specific needs of learners, not mere imitation of Western models. He recommends evaluation of existing teaching and support practices and the potential of ICTs along with institutional review in the development of appropriate policies for DE. Hedberg and Ping (2004) describe approaches adopted by Asian schools to address this issue and suggest a more integrated view of e-learning for administrators, that focuses on design that elicits engagement, including authenticity, on-demand learning, and assessment approaches, and on support and resources, such as knowledge management, digital libraries, learning objects, communities of practice, and emerging technologies.

EDUCATION IN THE GULF STATES. The GCC contains some of the fastest growing populations and economies in the world. However, currently, expatriate workers make up 70% of the labour force. If these nations are to achieve their economic and social goals, there is a need to produce a modern, highly trained and motivated industrial workforce while maintaining traditional Muslim values (Kapiszewski,

2000). Bahgat (1999) argues that the quality of education currently does not correspond to the needs of Gulf societies. He indicates that, whereas most developing nations struggle to find the financial means to achieve their education and development goals, Gulf countries boast a surplus of capital, yet deficiencies in their education systems remain due to

- a mismatch between a traditional education system, which emphasizes religious, language, and history studies and produces educated but unemployed workers who then depend on the welfare state to create a position for them in the government bureaucracy, and the needs of a modern, secularized, technological and scientific society;
- an imbalance between the indigenous and the expatriate labour force, replacement of which must be a very slow process, as the local labour force lacks technological and management skills to lead development;
- a gap between the roles of men and women, wherein women's principal role as wives and mothers and cultural norms that dictate physical separation from men preclude them from taking an active role in the workforce.

Research from diverse areas throughout the Gulf illustrates efforts to address these deficiencies, especially in the realm of gender issues (Beatty, 1996; Al Rawaf & Simmons, 1992; Al Kharafi, 2003), with varying degrees of success.

ARAB LEARNERS. Research specific to the experiences of Gulf Arab learners in distance education is almost non-existent in the literature. Shaker (2000) surveyed universities offering courses and programs at a distance in Bahrain and studied reasons Bahraini students gave for their choice to study at a distance.

Beyond demographic and socio-economic data that might hint at student needs, no specific mention is made of the experiences of students as they transition into distance learning.

Al Rawaf and Simmons (1992) investigated the prospect of increasing access to distance education for women in Saudi Arabia through the development of an open university, but their results highlight attitudes, administrative concerns, programs and locations for study, and feasibility. The authors do not proceed further to discuss the needs of learners in such an institution.

Al-Harhi (2005) studied the experiences of Arab graduate students who were required to pursue a portion of their degree programs in the United States via online courses. She cites Hofstede's international cultural dimensions and Hall's high and low-context culture as frameworks to explain

- lower social pressure of electronic communication, which was liberating for some learners, but resulted in procrastination and even non-participation by others;
- contrast between the high context messages used by collective cultures such as the Arab students, and the low-context communication of individualistic cultures, which characterizes electronic communication;
- lower levels of participation in online communication among the Arab students, who focus more on the product of learning rather than the process;
- avoidance of confrontation with instructors when problems arose.

She reflects that results might differ if this study was repeated with Arab students studying at a distance in their home countries where they are immersed in a culturally relevant environment.

Although these studies hint at experiences specific to Arab students and the support mechanisms that might address these, to date there has been no published scholarly research which describes the experience of school-age learners with e-learning and suggests suitable support initiatives to facilitate their transition.

COMMUNITY OF INQUIRY. This model, originally proposed by Garrison, Anderson, and Archer (2000), provides a framework for the study of online learning. It emphasizes the importance of community in learning and identifies cognitive, social, and teaching presences as elements in the learning experience. Though focused on higher education and online communities of adult learners, the framework is helpful in conceptualizing the learning experience of students involved in other forms of distance-based learning as well. The experience of the participants in this study differs from that of the Community of Inquiry Model in that the eSchoolbag project provides a blended learning format in which adolescent students receive face-to-face instruction, support, and supervision from teachers in the classroom, but complete assignments and exams electronically, and have the option of using the Internet to facilitate communication and submission of assignments from outside of school. Despite this more traditional approach, cognitive, social, and

teaching presences of the model may be observed in such a learning environment as well.

ROLE ADJUSTMENT FOR ONLINE LEARNERS. Cleveland-Innes, Garrison and Kinsel (2007) describe the process of role adjustment experienced by learners new to online study. They identify interaction, instructor role, self-identity, course design, and technology as themes that arose in relation to cognitive, social, and teaching presence in a study framed by Garrison, Anderson and Archer's (2000) Community of Inquiry model. Although such research exists on students in a North American context, the author could find none to date on the experience of role adjustment of e-learners and distance learners in developing nations, including Arab nations.

#### VALIDITY OF EXISTING THEORY AND RESEARCH

Though peer reviewed reports of high quality studies are available on communities of inquiry and learner role adjustment to online education, there is a paucity of such literature on Arab students in distance education. This is due in part to the relatively recent entry of the Gulf States into modern education initiatives. For this study, it will be necessary to utilize other types of literature to supplement the research reports available, such as articles from non-peer reviewed journals and conference reports. Such sources, if regarded cautiously to consider their validity and reliability, can help to elucidate the issues related to the problem being explored.

## SUMMARY OF THE CURRENT LITERATURE

There exists in the literature a body of knowledge related to cultural differences that manifest themselves in differing attitudes and behaviours between groups, albeit one developed mainly from a Western perspective. Some research has been done into the manifestations of these differences among DE students, mostly related to learners from other cultures taking courses and programs offered from developed countries. Because the expansion of telecommunications and the growth of global e-learning is a relatively recent phenomenon, the research is not comprehensive. Studies on the experiences of e-learning students in developing countries is scarce.

With respect to the nations of the Arabian Gulf, available research on education tends to be dated and not reflect recent and current changes to education and society in those countries. Much of the research on distance education and student support in the Middle East pertains to institutions in countries like Turkey and Jordan which, although considered Arab, differ significantly in their history, economy, and social structure from the countries of the Arabian Gulf. Very little addresses the current needs and realities of Gulf Arabs who, at this point in their development, with the economic means and the political will to adopt innovative policies and practices, would greatly benefit from research that addresses issues pertinent to their populations. In turn, the global community would benefit from further study of this little-studied sector of the world's population, which, though small in terms of population, plays an increasing role in the social, political, and economic state of the world.

The following chapter will describe the methodology and procedure used in this study, including the Characteristics of qualitative research, Qualitative research strategy used, Role of the researcher, Data collection procedures, Data analysis, Strategies for validating the findings, and the Narrative structure of the report. In addition, it will discuss ethical issues that were considered in the design and realization of the study.

## **CHAPTER III**

### **METHODOLOGY AND PROCEDURE**

#### CHARACTERISTICS OF QUALITATIVE RESEARCH

This study utilized a qualitative approach as described by Creswell (2003). He recommends that data collection take place in the participants' natural setting, thus enabling the researcher to develop a sense of the place and experiences of the participants. The tools used for data collection require active participation on the part of the participants and sensitivity to participant needs on the part of the researcher. This type of study is emergent in that data collection instruments are constructed in response to the needs and experiences of participants, and that subsequent collection tools and activities may be modified based on statements and experiences of participants during previous contact. An iterative process of collection, analysis, and write up of data allows for reformulation in response to new insight and learning. The researcher recognizes that her sociopolitical and historical lens can potentially colour the description, analysis, and conclusions of the study, requiring that she reflect on and acknowledge biases, values, and interests that might shape the research. The resulting report provides a holistic view of students' experience as compared to a detailed view of a specific aspect of the e-learning experience.

The researcher in this study examined students' emotional and intellectual experiences, as reported by the students themselves, in the context of their cultural

and educational environment. She analyzed these from the perspective of current theory related to communities on inquiry and culture, in order to create an empathetic understanding of the students' experience of e-learning (Neuman 2003). In a constructivist paradigm, this interpretive approach recognizes that personal meaning is constructed by the individual, based on historical and social perspectives, and that meaning arises out of the interaction among participants and researcher.

The intent of this approach is to describe the experience of a particular segment of the population in light of current theory, in order to broaden the general understanding of that experience for the group in question. It does not seek to explain or predict. The development or revision of theory is not a goal, due to the limited generalizability of the results.

With regard to cross-cultural research, Ardichvili and Kuchinke (2002) argue that traditional postpositivist and constructivist approaches fail to generate insider accounts or universally usable models. They further state that such methods cannot capture and describe objective cultural reality, because this reality exists only in the researcher's and participants' fluid perceptions and interpretations. They go on to highlight the lack of conceptual equivalence of phenomena between cultures, as well as weakness of translation, sampling, measurement, and data collection as problems in cross-cultural research. In order to accurately present the perspectives

of participants and stakeholders in such research, they recommend that a methodology include:

- Cultural deconstruction, which involves self-assessment on the part of the researcher in terms of underlying concepts and theories, and attitudes towards the research,
- Appreciative inquiry, which enables understanding of other points of view without criticism of conflicting knowledge claims, and
- Insider/outsider perspectives, which require participants and researchers to approach each other with a sense of non-judgmental openness (Tenkasi & Mohrman, 1999) and thus acknowledge the different perspectives that arise from the inclusion of multiple voices.

### QUALITATIVE RESEARCH STRATEGY

This study was carried out in six phases to encompass the preparation of materials and instruments; administration of an open-ended pen-and-paper survey, analysis of survey responses, follow-up semi-structured interviews and analysis in an iterative fashion, a second round of interviews for validation of the findings, and the development of the final report.

Participants were not given a definition of their role as learner. Instead, the researcher sought to elicit their experiences, both positive and negative, in relation to the cognitive, social, and teaching presence in their learning environment and

their adaptation to it, with no theoretical or pedagogical suggestions as to the role of e-learner. The intent was to use this reductive approach to uncover the intuited experiences formulated by the participants (Giorgi, 1997). This approach was deemed useful due to the exploratory nature of the study into a little-studied population.

### ROLE OF THE RESEARCHER

The researcher considered herself an instrument for data collection and analysis, with the potential to impact the final results. Giorgi (1997) highlights the need to maintain an open attitude in qualitative research in order to discover meanings in the data, allowing for the emergence of unexpected meanings. He recommends the intuition of relevant meanings through professional sensitivity and spontaneity, but also the bracketing of past knowledge about the object under study in order to allow the fullness of the situation to become apparent. Further, Neuman advises that, “a researcher is in the field to learn, not to be an expert” (2003, p 379). The researcher in this study had no previous experience with the eSchoolbag project, and is not currently involved in any aspect of education in Qatar. Although she has several years of experience as a teacher at the grade level being studied and as a student in distance learning, she strived to adopt a point of view of “strangeness.” In this case, the researcher played down any experience and expertise in teaching and learning, face-to-face or at a distance, and attempted to draw out the participants’ own knowledge and experience, by identifying herself as a student rather than a teacher

and by continually asking questions and seeking clarification rather than providing opinions, comments, or examples.

The cross-cultural nature of this study required particular sensitivity on the part of the researcher. One enabling factor was the fact that, as a female, the researcher had access to students and teachers at the girls' school. Traditions and mores of Islamic society would preclude the possibility of a male researcher completing this study. Despite such cultural segregation, it had been the researcher's personal experience that once inside such all-female institutions, one generally finds the members very forthcoming and honest about their experiences and opinions. Even so, as an expatriate, the researcher needed to remain aware of self-presentation during all phases of the study, to a greater degree than would be true in the West, as, to some extent, the researcher herself was being "researched" by the participants who have not necessarily had ample contact with Western women and were themselves very curious. The researcher dressed and comported herself in a manner accepted and expected in Qatari institutions in order to play down cultural differences and focus on the objectives of the study.

In order to fulfill her role, the researcher was required to accomplish several tasks.

1. Prior to commencing the research:
  - a. Perform a self-assessment of underlying concepts, theories, and attitudes about the topic, the participants, and the study as a whole, in order to bracket these and assume an uncritical approach that would

enable data collection with no judgment, interpretation, or conflict of knowledge claims.

- b. Secure the assistance of an objective, culturally and linguistically qualified person to advise on cultural issues and to translate.
- c. Review local norms of behaviour in personal and professional interaction, such as appropriate manner of address, common Arabic greetings and expressions, and behaviours related to hospitality, in order to enhance connections with participants.

2. During the research:

- a. Dress, speak, and behave in a manner that reflects respect for the local norms and puts participants at ease.
- b. Communicate respect and recognition for the particular needs of the participants, as it is not uncommon for Qatari people to view Western “experts” as forcing their own solutions on local problems.
- c. Observe and listen objectively to the views presented, commenting and questioning only to encourage and to seek clarification.

3. During data analysis:

- a. Identify all concepts and themes that arose from participants’ statements and report these non-judgmentally.
- b. Identify structural elements that pertained to the students’ experience.
- c. When interpreting findings, “unbracket” previous knowledge and intuition in order to draw on all possible data and experience.

- d. In interpreting the themes that arose, consider the role of her own words, attitude, and behaviours and those of the translator on the data collected.

## INSTRUMENTATION

The survey instrument (See Appendix D) drew elements and categories from the Community of Inquiry model and items from the role adjustment in online communities of inquiry instrument developed by Garrison, Cleveland-Innes & Fung (2004). Items were arranged and worded to suit the age and learning context of the participants. Questions were worded in an open-ended fashion to elicit a variety of responses that reflected the range of student experiences. A teacher/administrator with experience with Qatari students provided input into the structure and wording of items, and translated the survey. The instrument was piloted with three students, and revisions made as a result of their feedback.

## DATA COLLECTION PROCEDURES

High quality data in qualitative research is the result of subjective interpretation of experiences by participants within a social context, capturing interactions and interpretations that provide an understanding of the participants' viewpoints (Neuman, 2003). In order to obtain such data, this study consisted of six phases. The first two phases dealt with initial data collection using the survey instrument. The remaining four phases were less defined as the collection and analysis of data

became iterative in the interview phase. These are described in the sections that follow.

Phase One: This entailed the preparation of materials and instruments required in consideration of the participants and context. Instruments included:

- A letter introducing the study and seeking permission from the head administrator at the school in order to access the students and carry out the research (See Appendix A);
- A pen and paper survey package distributed to students in the second year of the e-schoolbag program. This package contained information and permission letters to parents (See Appendix B) and students (See Appendix C) and a survey consisting of two parts: a section to collect pertinent demographic information, and a section of open-ended questions that address the research questions of the study (See Appendix D). This survey was informed by that developed and validated by Garrison, Cleveland-Innes, and Fung (2004) but tailored to address the age, culture, educational-level and setting of the population. It was piloted by a group of students of similar age to the survey population, and translated by a native Arabic-speaking teacher.
- A semi-structured interview plan that enabled the researcher to clarify and build on the themes that arose from survey responses (See Appendix E).

Phase Two: Permission was obtained from the head administrator to access the students, on condition that the parent and student permission forms and the surveys be completed at home to minimize class time required, as the research was being carried out near the end of the school term and, being a pilot program, there had been previous disruption of the students' class time during the term for follow-up and evaluation studies. The researcher introduced herself to the teachers responsible for the participant group. She outlined the purpose of the study and its methods, and answered any questions that arose. The teachers distributed the surveys to eligible students, providing background information and answering student questions in English or Arabic as required. Students were encouraged to complete the surveys in English or Arabic to allow greatest comfort and convenience of expression on their part. The teachers collected completed surveys in the week that followed, and returned these to the researcher.

### DATA ANALYSIS PROCEDURES

Phase Three: Survey responses were translated into English as required. All responses were then analyzed according to the psychological approach espoused by Moustakas (1994). They were read in their entirety to identify general themes that arose, then reread more thoroughly and coded according to themes and sub-themes or concepts that arose. Student responses were compared within the context of responses within each survey, as well as across all the surveys in relation to the components of the Community of Inquiry model (Garrison, 2006). Themes and sub-themes were re-ordered and grouped according to patterns that emerged.

In recording codes, the participants' original voices were maintained through the use of direct quotations from the surveys. As recommended by Barrit, et al (1983), disagreements were not ignored, but rather noted as part of the procedure, reminding us of the diversity of experiences between individuals. Once all survey data had been analyzed, interview questions were revised and augmented to clarify or expand on themes that had been identified.

Phase Four: Interviews of one half hour to forty minutes were conducted at the school, which is neutral and familiar ground for the participants, with nine of the original twelve students, who had agreed to be interviewed. Three students attended each interview in order to make the experience more comfortable for the girls. The researcher introduced herself and her assistant and explained the nature and purpose of the interview, emphasizing the fact that this was not an evaluation of the students or the program and that they should feel comfortable answering honestly, as no one but the researchers would have access to their comments. Permission was obtained to audio record the interviews to facilitate a more natural flow of conversation and to maintain the participants' authentic voices, expression, and terminology. Interview questions were broad and open-ended to allow for individual expression as well as discussion among participants to clarify and expound on each other's ideas. Participants were encouraged to give concrete, detailed descriptions and examples from their own experience. New themes that arose from each interview were noted and considered alongside survey themes in subsequent interviews to further develop the thematic structure.

Once all interviews had been completed, they were transcribed and all data was reread and compiled according to themes identified from the surveys, with modifications as necessitated by new themes that arose from the interviews, in a spiral manner of analysis.

Phase Five: A preliminary report was drafted by rearranging diverse responses and deleting the researcher's voice in order to create a narrative from the point of view of the participants . This report was structured according to the overarching themes and supporting concepts that had arisen from the data.

### STRATEGIES FOR VALIDATING FINDINGS

Phase Six: A second round of interviews was conducted to share the preliminary report and seek validation from the participants on the findings. In qualitative research, replicability is not a criterion for validity, as it is very difficult to replicate conditions exactly. Rather, it is credibility, that participants recognize and understand the researcher's description as accurately reflecting their experiences, that indicates a sound qualitative study. Discrepancies that arose due to different participant perspectives in this study were addressed by seeking validation from the range of participants, including those who responded to the surveys and interviews in English or Arabic, and those who reported different degrees of family use of computers in the home, and triangulating the responses. The results of these interviews were integrated with the substance of the preliminary report to ensure that

reported findings accurately describe the experiences of the participants rather than the interpretations of the researcher. According to Neuman, reliability in qualitative research results from internal consistency, that is, whether data is plausible given all that is known about an event, whether pieces fit together into a coherent picture. The second round of interviews served to ensure that this was so in this study.

A final issue with regard to data quality and reliability of results was the credibility of the members. Neuman (2003) advises considering whether participants have reason to or are motivated to misrepresent or alter their experiences in their reports, and Grover (2004) cautions about power issues involved in research with children. These issues were addressed in this study by maintaining neutral, open-ended questions, word choice, and physical expression on the part of the researcher to avoid leading participants in their responses. Participants were reminded before each interview that the purpose of the study was not to evaluate them, their school, or the e-learning program, but rather to understand what it was like to be a student in e-learning in Qatar. There was no judgment or evaluation of participant responses during interviews, and the separation of students, parents, and staff, as well as the assurance of confidentiality, aided in encouraging complete and honest responses. Students were also free to discuss questions among themselves during the interviews and responded jointly to some questions, but voiced disagreement on other aspects of the e-learning experience.

## NARRATIVE STRUCTURE

Due to the nature of the research approach chosen, the results of the study will be presented in three parts:

1. A textual description of the experience and its meaning, which is the result of phenomenological reduction of the data collected, using the participants' or the translator's own words,
2. A structural description of the context that influences the students' experience,
3. A description of the essence of the e-learning experience for this group of students, accompanied by reflections on how these experiences relate to Garrison, Anderson, & Archer's (2000) Community of Inquiry model and Hofstede and Hofstede's (2005) Dimensions of National Culture.

## ETHICAL ISSUES

As the research involved human participants, ethical issues were given close consideration. The relationship between the researcher and participants involved issues of power and trust, especially since the participants in this case were of a young age and in the school environment. It was the researcher's responsibility and priority to protect their interests. Before commencing the study, the researcher obtained written permission from the

- school administration,
- parents, and
- students themselves

in order to:

- access to the school property and the students,
- administer the written survey,
- conduct audio-recorded interviews, and
- conduct validation interviews.

Every effort was made to ensure participant comfort and confidence and to avoid psychological stress and anxiety. Students were reminded at each point of contact that participation was voluntary, and that they were free to opt out of the study at any point. They were reassured that their responses would be kept confidential and would be destroyed once the final report is approved.

The following section details the results of the research. It consists of a textual description of the students' experience with e-learning, a structural description of the context of that experience, and a synthesis of these, which yields the essence of the e-learning experience for the participants in this study. This is followed by the researcher's reflections on the results in relation to the Community of Inquiry Model and Cultural Dimensions indices.

## CHAPTER IV

### RESULTS

#### IN THE STUDENTS' VOICE

A total of 12 students agreed to participate in the study. They represented a range of experience and ability in the use of computers and the English language, though all used the Arabic language for communication at home. Computer use outside of academic purposes consisted mainly of chatting on MSN or listening to music, with email being a distant third use of technology. Of the seven students who chose to respond to the survey in Arabic,

- three reported that their parents do not use computers at home. These students recalled using the computer at home for one half, one, and two hours per day respectively when they had the eSchoolbag laptops, and none used computers at home outside of the project. All three agreed to participate in the interviews and did so mainly with the help of the translator.
- three reported that their parents use computers at home for work or personal communication. Of these students, one reported using a computer at home from one to two hours per day whether or not she had the school laptop, while two reported using their laptops for one to two hours when they had the school laptops, but not at all when they did not. All three of these students agreed to be interviewed.
- one, who declined to be interviewed, reported that her parents also use computers at home and that she herself used a computer for two hours per

day in grade 7 and three to five hours per day in grade 8, whether or not she was in the eSchoolbag project.

Five students chose to respond to the survey in English. All of these reported that their parents use computers at home and all report using computers themselves, both for the eSchoolbag project and for personal enjoyment and communication. All reported using computers for three to five hours per day, except one who chose not to be interviewed, who reported using it for seven to eight hours per day.

As the survey and the interview results represent different “layers” of participant responses to open-ended questions related to aspects of the Community of Inquiry model and role adjustment, the data from both instruments was compiled during analysis into one comprehensive description.

Participants’ experiences reflected themes identified for online communities of inquiry, with a few variations due to this particular group’s age and blended rather than wholly online learning context. The following description utilizes the students’ own words and the words of the translator to illustrate their experiences with the cognitive, social, and teaching presences in e-learning and of the role adjustment they had undergone, and were still in the process of undergoing, as they moved from the role of traditional face-to-face learner to the more self-directed, independent, technology-based role of e-learner. It is important in such research to maintain the participants’ original voices where possible as these present the most accurate description of their conscious experience and diminish the role of the

researcher’s interpretation of the data, especially in a study such as this, where the students’ age and cultural background were significantly different from those of the researcher. Grover (2004), for example, cautions that children are especially vulnerable to the representations that others impose on them. Textual description serves to communicate occurrences as closely as possible to how the students actually experienced them.

COGNITIVE PRESENCE. This element recognizes triggering, exploration, integration, and resolution themes in the learning process.

**Table 1. Experience of cognitive presence**

<p>Triggering</p>	<p><i>Understanding expectations of coursework:</i></p> <ul style="list-style-type: none"> <li>• I didn’t understand.</li> <li>• I understood expertly and increased my achievement.</li> <li>• I understand well because it’s easy to do.</li> </ul> <p><i>Interest and motivation to begin:</i></p> <ul style="list-style-type: none"> <li>• (translation) [T]hey have fun programs, [and if] the teacher did not say it she could go back home and review it by herself.</li> <li>• In the school we love something to play and sometimes to study. Not all the time study, study, study.</li> <li>• My class don’t like games because it’s of subjects, for</li> </ul>
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	<p>Science, or for English, it's not funny.</p> <p><i>Taking responsibility for learning:</i></p> <ul style="list-style-type: none"> <li>• If she gives it today, sometimes there are some questions I can't understand, I want to ask her tomorrow.... we can ask her and she explain.</li> <li>• The laptop puts wrong. And I told the teacher, I put that answer, not this one, because they are the same.</li> <li>• When I send the homework for the teacher, I can in the second day see my mark in the laptop. I open it and if she check it, I can see my mark.</li> <li>• (translation) The laptops [keyboards] are all English so they memorized the places of the Arabic letters so when the Arabic teachers ask them for Arabic homework they know how to write it for them.</li> </ul>
Exploration	<p><i>Language of instruction:</i></p> <ul style="list-style-type: none"> <li>• I don't like the laptop in Science, because she gives us sometimes website, we open, I don't understand anything. It's very hard the English and Science when you open the Internet it's very difficult.... I understand the Science, but the English is very hard.</li> <li>• I don't like it. It is hard so much, website and programs to</li> </ul>

use, difficult.

- (translation) When they open the site it's like big terms, it's not simple like the teacher gives them.
- (translation) It's about the terms and language. Before the previous teacher was translating some words, but now no.
- And I find Science in English is easier than Arabic. I can't understand Science in Arabic because most of the words in Arabic it is the same in English, but we write them with Arabic letters. The same thing. I think it's not an Arabic word, it's an English word, but with English it's better.
- It's not our level, the English.... It's lower. I think we should take something stronger.

*Resources and tools:*

- In Science I like the laptop because we have experiments. We have everything we can do in the laptop and we will get the results. We don't need to go with the teacher and have materials and do all these things.
- There is some [materials] we cannot find them at home or any place. There is something dangerous, something corrosive and we cannot use them, but in the laptop it's

safe and at home I can see, at school, everywhere.

- (translation) If the content is based on memorizing or having to practice, it's ok with the laptop, but if they're having experiments, it's better to go to the lab and try it by themselves.

*Technology vs. pen and paper:*

- I don't love Science with the laptop. I think Science with papers is better, because if we take a lot about it, we have the papers to learn, we take it with us. With paper we can [take notes].
- We have some programs, have the tools of math, geometry, trigonometry, and we can solve without, we can't hold anything from home.
- (translation) It was fun, the tools were easy to use. The homework was easy to design, it was ok.
- (translation) She is concerned that when she goes on to secondary school and no longer uses the laptop, she will not have access to the tools to make everything, but when you have it in your hand. . .you learn, and you make everything.
- [In English] The teacher can give us the lesson like a computer because she can do everything on the smart

board. And, it is easier because we have programs and things. We use it for doing homework and the worksheets at the class and working as a group, it was nice, and we had programs, new programs.

- *(translation)* It was easier with the laptop because they were more concentrating with [the teacher], everything was on the laptop, she just goes step by step.
- When I send the homework, I like this. When we do it at home and send it to the teacher, I like this, but when we have exams and study from the laptop, I don't like. I can't study on the laptop. I want to write and read quickly. I can't ... *(translation)* She can't concentrate when she's on the laptop.
- When we had the homework, it is good, but we can't study for a long time on the laptop because of our eyes.
- But most of the girls their marks go down from the laptop in Science only, because in Science they,... each day they review the lesson and in the laptop they don't open it. Like that and in the quizzes they, ... *(translation)* don't do as well.
- If we have, for example, exam tomorrow, we study from the laptop [not] the paper. They don't like this. And when they go to home they print it and they study from

the paper.

- (translation) She likes the laptop more because it has the program and all the information. So she can do it using this program and it's all complete. Homework is better with laptop: if she forgets her books or her notebooks the laptop is easier just to do everything on.
- It reduced carrying books, although I have to carry 2 bags: one for laptop and another for books.
- They give us the website, and without the laptop we can search at home.

*Challenges of technology:*

- But sometimes some students open and they search for it, "I don't have this programs," and have some problems. Our friends are start but I don't have the programs and they start the second lesson and until now I don't have it.... I had to complete it at home.
- I can't understand anything. I was later in the design. I have some problems in the Publisher and our friends are start and finish and until now I don't start.
- We don't have connection with teacher. And some problems we don't have, some have it; we want to continue the lesson to try and finish and we don't have

the lesson.

- (translation) The network, the connection between the students and the teacher is the problem. It's not about the subject itself. It's the technology use. The access and stuff. Not all the students were connected to the teacher.
- (translation) Using the laptop sometimes it just stop because they don't know how to use it. It just making it a bit difficult.... it takes time because they make faster with the papers. With the laptop they have been frustrated-- they repeat and repeat.
- With the pencil in the laptop, something... not like with writing.
- My class don't like the pen because it's broken always. It's very... [fragile].
- And sometimes it's broken, this is a problem. All of my friends are writing and I can't write. I use the mouse, some problems. The teachers are angry for me, I can't write and [the Program Director] say I must bring some money because it's broken. I like the laptop without the pen.

*Technology support:*

- I did not ask [for help] because I'm advance level in using technology. Every thing is easy.
- If the problem is with my computer, I ask [the Program Director].
- [The Program Director] take my laptop and solved the problem after an hour or two.
- If there is a problem in the laptop I ask my uncle or my aunt. If the problem are with me, I don't understand the question, I call my friend.

*Confidence in achieving course objectives:*

- I do my assignments by myself. They give us a lot of projects... but I did it all perfectly.
- Not confident, but worried.
- All my class like the notebook. They don't like the laptop and they say our levels go down when we take the laptops.  
--Your marks, did they go down when you got the laptop?  
--No. Still same, don't go up, don't go down.  
--How about you, are your marks different with laptop?  
--No, no. The are the same.

--Is it the same in your class?

--Yeah

--Are your marks the same?

--(translation) It's a bit lower with the laptop.

*Sources of help:*

- (translation) They can do it by themselves. [The school] gave them the basics to use the laptop and they can do it by themselves.
- If the girls need help, the teacher helps them.
- If the teacher puts the same meaning but different word, I say for her and she check and change my mark. If it is 9 from 10, she will 10 from 10 because same meaning, it's not calculated that it's wrong.
- We work in groups. We help each other.
- If there is something difficult I try to see the dictionary and the Internet. If I can't solve my problem, I ask my mother
- Without laptop, [my family] help me, but with laptop I do all things, because...my mother don't love do on the laptop. I try, but she told me, "If you will not give me paper I will not help you. Do it yourself." Because that, I do it and I only say for her answer yes or no, only that.  
That way, when I don't have the laptop, we do it together,

	we write.
Integration	<p><i>Transferability of skills and knowledge:</i></p> <ul style="list-style-type: none"> <li>• Of course it will help us because if we learn on the laptop you can learn the computer, what you can do for the problem, and sometimes in my house there is some problems happen in the computer and if last time happened in the laptop I saw how they fixed it and I fix it on my computer. I don't get someone to do it. I think when I have a laptop I'll be better. The ICT is ok. It helps us very much. And when I go to, <i>inshallah</i>, the college I will tell them I am in the high school in the program they give us laptops and I can do a lot of things.</li> <li>• Yes, yes. We improve in English and the thing is that the program in the laptop, it is high and we will learn more words.</li> <li>• (translation) In the laptop they don't only have the content of the courses. They have other activities and resources also, so it's more than just the books that they have. It's like a package of knowledge and information. They are going to give them more practice, so using it now is going to give them more advantage in the future, in computers and in the subject areas.</li> </ul>

Resolution	<p><i>Application of e-learning skills:</i></p> <ul style="list-style-type: none"> <li>• Nobody open the worksheets. Some girls, they open and we put to charge, sometimes it close when we realize the charge is finished. Some girls they say, oh no, the paper is easy for them because in the laptop they open, and [the laptop] shut down, and stuff, like this they don't want. They want only a paper and read it.</li> <li>• If we have, for example, exam tomorrow, we study from the laptop, not the paper. They don't like this. And when they go to home they print it and they study from the paper. All my class like the notebook.</li> <li>• I want to tell you something: Some girls told to the Science teacher, "We want a paper." It's the same thing. We open the laptop we can take it from the laptop and if we want paper we can put the laptop in the printer and print it. I think, no problem with the laptop. Same thing, <i>yanni</i>, paper or in the laptop.</li> <li>• Most of the girls they want papers. I don't prefer anything, only I want study.</li> </ul>

Triggering. Students showed diversity in their descriptions of how well they understood what was expected of them in their coursework. This diversity was

recognized by one of the students when describing her experience with the e-schoolbag program: “Some people likes laptop, some people hate the laptop. Not all the class. They are different.”

Due to the age of the students, enjoyment and interest were important factors in their willingness to use the technology for learning. Two qualities that students appreciated in the course material was “fun” and comprehensiveness. The nature of “fun” was not agreed upon by all the students, as, while one student enjoyed the games in her courses, another found content-related games uninteresting.

When asked who was responsible for their learning, students responses were again diverse, referring to teachers, parents, the program website, and themselves.

Students recalled approaching teachers with their questions and concerns. Some expressed appreciation for the power to track their own progress by accessing their marks promptly after they had submitted assignments. When faced with challenges presented by the technology, students showed initiative. One recalled proudly that she put stickers on her keyboard to help her remember the placement of the Arabic characters. At times, however, they felt uncomfortable with such challenges, as evidenced by one student who described a particular situation in which she had felt frustrated when she did not find the required software for a lesson.

Exploration. To date, only English, Math, and Science have been presented via e-learning at the school. For Social Studies, Arabic, and Islam, students use the

laptops only to write up assignments. They described various experiences with course material that reflected the nature of each core subject and the structure of the e-learning program used. Language of instruction was a relevant issue as none of the students at the school have English as their first language but all course material done on the laptops is in English, as this is a requirement for core subjects of Independent Schools in Qatar. This presented a problem for some in Science, where they found it challenging to learn English terms. Not all students had difficulty with this, however. Throughout the surveys and interviews, it was apparent that those students who displayed greater ability and confidence with the English language were more positive and self-directed about e-learning.

A feature of the Science program that students chose to discuss was the presentation of experiments via e-learning as compared to face-to-face. While some students enjoyed the convenience of having designs, videos, and results in their laptops, others preferred going to the lab and conducting hands-on experiments. When it was time to review, students preferred pen and paper over the screen.

In Math, the students generally expressed satisfaction with their experience with the eSchoolbag. When asked if it was easier or more difficult to learn Math with the laptops, responses varied between easier and the same. They stated that design tools on the laptop made some aspects of Math easier. All indicated that their marks were higher in Math when working with the laptops. The only concern expressed about using the electronic tools for Math related to the long-term

applicability of the learning, when students are faced with doing Math without the tools. One student argued that instead of having tools to make the tasks easier, the students should “focus and make it better and have an improvement” because the tools transfer control of the task away from the student.

In English class, students described a practically designed course that combined teacher presentations on a “smart board” with student worksheets and homework on their laptops. Most were positive about this mixed approach, as it created a comprehensive unit on their laptops from which they could work. Despite such positive experiences, however, there were challenges with language level and inconveniences with software.

When asked about History, Geography, Arabic and Islam, which in the future will also be offered via e-learning, the students were neutral to optimistic: “Nothing will change. That is something that is very easy with the laptop or without the laptop,” and “It will be more interesting and have lots of information.”

Student’s survey responses and their comments and physical expressions during the interviews indicated a high level of self-assurance in their ability to achieve the objectives of the courses and assignments, especially among those girls who chose to respond to the survey and interview in English and those whose families use computers at home. Anxiety was expressed by one student who responded to the survey in Arabic and did not agree to participate in the interviews. Students

explained that for the girls whose level of English was weaker, the content on the laptops could be very difficult.

Experience at home mirrored many of the issues faced in school. Students agreed that homework is not normally difficult, but indicated that homework difficulty varies according to the academic level of the students. They expressed different preferences for working on paper or the laptops depending on whether the homework consisted of the completion of assignments or studying for quizzes and exams. Benefits of using the laptops and Internet resources were recognized, especially the access to required resources in a manageable package on the laptop. Students identified family members and classmates as sources of homework assistance when required. Those whose families use computers for their own purposes in the home requested technical help from knowledgeable family members. For those students who did not have Internet access at home, however, these benefits did not enhance motivation. Rather, their workload was increased at school, as they had to complete requirements during their breaks.

Students described examples whereby the technology presented the greatest challenge to their ability to complete assignments, recalling the absence of necessary software or assignments on their laptops, and problems with connections within the classroom. Technology support was an important component of the program, as there was a wide discrepancy in computer skill experience among the students and their families. Interview respondents described feeling knowledgeable

about using the technology, indicating that it was “easy” and that they “didn’t have any difficulty with it.” They related that they had received initial training from people outside the school, and later felt welcome to ask for help from the Program Director or her assistant as required. Problems that required such assistance normally related to missing programs or files on the laptop or challenges with hardware, and were dealt with promptly.

An aspect of technology that seemed to cause concern was the connection between the teacher and students, who recall instances where “some girls didn’t, ... receive the lesson. Didn’t take it. And some girls don’t have it.” One student laughed nervously as she described her own experience with a missing assignment.

Another added that “it wastes many times to connect and if the teacher wants to send us work....” She suggested lengthening the class period to allow time to transfer and complete the assignments, because sometimes, “The thing come,... not come....”

When asked about the most frustrating aspect of e-learning, one interview group chorused, “The exams!” and went on to describe animatedly occasions where students attempted to send time-sensitive exams, and sometimes homework, to the teacher only to have it deleted or undelivered. Interestingly, while one group of interviewees were eager to discuss this problem, another group, when asked about problems with connecting to the teacher, responded that there were no problems. It might be of note that the two groups were from different classes. When questioned

about this discrepancy, they indicated that the wireless connection in the school was not equally effective throughout the building, with some classrooms experiencing weak connections. They indicated that this problem was being addressed and each classroom would be provided with its own wireless router.

All interview groups agreed that an undesirable aspect of working on the laptops was the virtual pencil that is included. The students expressed preference for work without the pencil, except for drawing, as this allowed them to sit farther from the computer, which is easier on their eyes, and to complete work on their computers at home if necessary.

A further challenge was that of the keyboard on the laptops. Normally, keyboards in Arabic countries have both Arabic and Western characters on them. The laptops used in the school have only the western characters, although the software allows Arabic characters. In order to complete assignments in Arabic, the students had to memorize the location of the Arabic letters. Interestingly, although this problem was mentioned more than once, none of the students viewed this as a major obstacle to their adjustment.

Of apparent concern to the participants, as it was an issue that arose in response to several questions in the survey and interviews, was the perception of whether marks go up or down when they are in e-learning as opposed to a traditional classroom. Some students' confidence was tempered by a concern that marks drop when

students work via e-learning, although this impression is not corroborated by the respondents' own results.

When asked whether and from whom they access help when they require it, students showed confidence in their ability to solve their own problems. They also recalled working alone as well as getting support from teachers, parents, siblings, and other students, and combinations of all of these. They recalled consulting the self-correcting e-learning programs and website and their teachers in order to check their understanding of new material. Some described examples of their own initiatives to change evaluation results they felt were inappropriate. Group work also provided feedback for individuals, and all the participants indicated that they worked in groups on diverse activities both in school and at home. Regarding help from family members in e-learning as compared to traditional homework, the consensus was that there was no difference, although one student indicated that she received less help with her coursework for e-learning.

Integration. Some students valued the transferability of skills acquired through e-learning. One student recalled (translation) "maintaining, how she fixed the computer problems, how to make it easier. She saw how to do it and she can do it herself." When asked if she enjoys fixing her computer, her reply was an enthusiastic affirmative. (translation) "She would like to be an engineer for ICT and computers." Several agreed that, besides developing computer skills, e-learning made them better students in Math, Science, and/or English.

Resolution. In the Community of Inquiry model, the category of resolution is used to describe mastery of course content. Among the participants in this study, however, the knowledge, skills, and attitudes required to use the technology properly and responsibly were perceived as a crucial part of their learning and achievement. As such, the description of their skill development in this area has been included in this category. An issue often raised in the interviews was the relative benefit of working with the laptop versus paper. This was a salient issue with this group as, in many cases, they had the option to print assignments, complete them on paper, and submit them personally rather than complete them on the laptop and send them electronically to the teacher. While participants described “programs to play” in English, Science, and Math that were “fun, no worksheet,” several complained that “[writing on] worksheet [is] easy and the laptop ...problem.” Therefore, given a choice, many opted to complete their assignments and review for exams on paper. Others were less particular and appreciated the choice offered by the access to both media.

SOCIAL PRESENCE. This element describes the relationships within the group. It includes affective expression, open communication, and group cohesion.

Table 2. Experience of social presence

Affective expression	<p><i>Social communication:</i></p> <ul style="list-style-type: none"> <li>• If we can open the [MSN] Messenger they will not feel</li> </ul>
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	<p>boring about laptop, they want it, but if we, only for study.... I think they can make it two things, for playing and for studying.</p> <ul style="list-style-type: none"> <li>• (translation) She's suggesting to have another program. She's not talking about the Messenger; just to have a program to connect with other students in the same school. Maybe the MSN messenger could take them away from studying but she just wants to connect with other students. Maybe one student is going to be upset so she can [talk to her] while she's at home.</li> <li>• Some girls, they don't want to study. They don't want to improve. They want only come to school to play and to meet their friends and they don't want to improve and to learn with their laptops and have stronger level than this.</li> </ul>
<p>Open communication</p>	<p><i>Technology for expression:</i></p> <ul style="list-style-type: none"> <li>• (translation) They are talking about the program, the K-Net, that they can use, but no one goes....</li> <li>• No one uses [K-Net] because, you know, the school and the teachers can see everything that they are chatting. If we want to talk together, we have Messenger [at home]. [If] we go to the K-Net, all things about the study, but nobody likes to go to K-Net and talk about...[personal</li> </ul>

	<p>things]</p> <ul style="list-style-type: none"> <li>• If the problem with the homework, I call [my friend on the telephone]. The Messenger only for the social.</li> </ul> <p><i>Risk-free expression:</i></p> <ul style="list-style-type: none"> <li>• Sometimes I forget the assignment, I can say for the teacher send it again and give me a long time, give me a week, four or five days and I can solve it. If the teacher gives us short time, we say for her, give me a long time. Sometimes she gives us only one day or two days.</li> </ul>
<p>Group cohesion</p>	<p><i>Belonging:</i></p> <ul style="list-style-type: none"> <li>• All the time I'm the leader in Grade 7 and 8.</li> <li>• I was the most one who was working. If I work the project is done, but if I am not included the project is not done well.</li> <li>• The teachers need me in some things.</li> </ul> <p><i>Collaboration:</i></p> <ul style="list-style-type: none"> <li>• [The teacher] sometimes gives us worksheets, sends it to us, and. . .</li> </ul> <p>--We do it together.</p> <p>--Yes, we do it together in the group, <i>yanni</i>, not only one</p>

girl do it, all the class.

- We use [the laptop] for doing homework and the worksheets at the class and working as a group, it was nice.
- We can draw the squares like this and do it like show for girls, like angles. And last year we take about angles and we do drawing and show the girls. It's nice. We brought pictures for babies and see it the eyes, like for angles.... Like this, fun.
- I help all my friends if they face any problems.
- All my projects I tell them to my friend and they help me.
- I participated with every one and felt welcomed.

*Helping others:*

- I help my friends and when the teachers sent homework on K-Net site. I helped them a lot.
- Some of them don't know how or where they save the file. I go and I help them. Because I know how to use it. The teacher teach me how.
- (translation) As she had learned before she can help them to learn.
- Always I used to help because they were so weak [in] English vocabulary.
- If one has a problem, she doesn't know how to solve it, the

other one knows it, she can help her understanding and explaining.

- We call each other.
- If there are anything hard, we help each other.
- (translation) If one has a problem, she doesn't know how to solve it, the other one knows it, she can help her understanding and explaining.
- (translation) Some girls are just having their homework on the Flash and just giving it to another student without... who don't do it. This is not appropriate.

*Barriers to cohesion:*

- I can't understand anything. I was later in the design I have some problems in the Publisher and our friends are start and finish and until now I don't start.
- All my class don't like the pen because it's broken always. It's very... [fragile] And sometimes it's broken this is a problem, all of my friends are writing and I can't write.

*Social vs. academic objectives:*

- Laptop is good and not good. It's good to learn and it's not good because some girls don't use it in the good way.

Affective expression. In school and at home, most students described feeling an integral part of the class group, although one, who participated in both the survey and the interview in Arabic, described her importance as “not much.” Some indicated that they felt welcome to participate, help each other and share ideas. This was not the case with all students, however, as one indicated she participated only “sometimes with certain students, “ citing examples of particular units or tasks.

Open communication. Students appreciated the opportunities for communication made possible by the technology, but described the conflict between their enjoyment of communication for social purposes as opposed to the school’s emphasis on communication for academic purposes. At school, they were able to connect only to the teacher from their laptops. When connected to the Internet, they could only access academic sites and the K-Net, which included conferencing and email capabilities within the intranet. Some used MSN Messenger at home, though usually for social purposes only. They expressed a desire for an alternative chat site which would allow them to connect to classmates when outside of school. Some described the challenge in balancing social pursuits with academic responsibilities.

Group cohesion. Group work was highlighted by several students. They reported helping others especially in the areas of technology and the English medium. Some students displayed discomfort in recalling instances when they felt left out of the group’s progress due to software or hardware problems.

About asking for help from teachers and fellow students, Students indicated no anxiety: “I feel I want to learn more. I did not feel anything wrong. I feel welcome.” Some displayed a high level of confidence in approaching the teacher and negotiating in order to achieve their aims. Although they could and did email teachers regarding homework, though, those who needed help with assignments while at home indicated their preference to call on friends in the same class. The students admitted that this assistance with homework was at times abused as students shared assignment answers on flash drives. When the researcher commented that this made homework very easy, the interviewees agreed with an uncomfortable giggle, but replied that this sharing of homework was not appropriate.

TEACHING PRESENCE. Teaching presence is apparent through the design, facilitation, and direct instruction in the learning experience. In the eSchoolbag pilot, teachers received training from courseware providers in the use of the hardware and software, and in pedagogy and skills for ICT in the classroom.

Table 3. Experience of teaching presence

<p>Design and organization</p>	<p><i>Course design:</i></p> <ul style="list-style-type: none"> <li>• [They] save the program and do.... The teachers open it and we open it also and we solve some exercises and she explains the lesson in the “smart board” and then we solve</li> </ul>
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the exercises. The teacher have plan on the board and put in the laptop and we see what she do and we do like her.

(translation) For these three subjects, Math, Science, and English, everything that is directed to the content is on the laptop. For English they have two programs, one for the content and one to improve their language. Most of the explanation with Mathematics was on the laptop. Some things on the whiteboard, but mostly on the laptop.

- I remember that there's a game, it's like an English program, and I won in the game, and I felt, yeah, it's good.

*Individual help:*

- [The teacher] explains to the whole class, if someone wants help or has a question she goes directly to her, and if some girls need translation, she translates.
- We can send to teacher some files, she can send for us some files...or play same game each girl in her laptop she do it and the teacher she do it in the board...yanni, it's better.
- I do my plans by myself.
- Sometimes, but I try to do my thing with myself to learn.
- I like the teachers to stay with me.
- The teacher always organize our homeworks and quizzes.

	<p>It make it easier.</p> <p><i>Presentation:</i></p> <ul style="list-style-type: none"> <li>• (translation) The English teacher, her program having activities etc. so she uses different kinds of activities with the laptop. [When] they don't have the laptop the teacher is using PowerPoint.</li> <li>• We feel funny with it because there is pictures, sometimes sounds in the lesson.</li> </ul>
<p>Facilitating discourse</p>	<p><i>Class atmosphere:</i></p> <ul style="list-style-type: none"> <li>• I [was] nervous especially when they open their laptops and I don't find the file downloaded so I go to re-download it and I miss the class. I hate it.</li> <li>• (translation) They say that it's fun but because they use it for long time at once it hurts their eyes.</li> <li>• I feel sad, because the level of English is so low. The English language is the base to understand the other subjects.</li> <li>• I'd like to talk about that, because teachers listen to girls.</li> </ul> <p><i>Encouraging self-direction:</i></p> <ul style="list-style-type: none"> <li>• The teacher made us to play more. We opened the internet</li> </ul>

and we had more games From the UK site, and without the laptop we can search at home.

- The teachers don't help us, only if the girls says for the teachers.
- She expect me to do it my own first. If I can't do it, she help me to solve it.
- In my school they let the students work to get their solutions because if they go to college, they will get used to it.
- (translation) She likes the laptop more because it has the program and all the information. So she can do it using this program and it's all complete.
- I solved chemical means by myself, by the help of computer technology.

*Academic support:*

- If she gives it today, sometimes there are some questions I can't understand, I want to ask here tomorrow.
- When I was absent one day and I don't know what they talk about yesterday, I opened, the Miss sent to me all the files and all things that they did in the class and I opened it and I understand everything as I am in the class.
- Sometimes I forget the assignment, I can say for the teacher send it again and give me a long time, give me a

week, four or five days and I can solve it.

*Flexibility:*

- When I write something, we have one meaning but we can use more than one word, for example, she puts a word, and I put another word with the same meaning, and it is wrong. The laptop puts wrong. And I told the teacher, I put that answer, not this one, because they are the same.
- If the teacher gives us a short time, we say for her give me a long time, sometimes she gives us only one day or two days. If she gives us along time we can ask her and she explains for us.
- Sometimes the teacher told us if you can't do it in the laptop, write it in the paper no problem.

*Monitoring achievement:*

- If we have the laptop we have a lot of activity we do. The activity gives us marks. But with papers only we have homeworks so that only we take for marks. But with laptops, some teachers send some things to do it ... and she will give her marks.
- When I send the homework for the teacher and my mark, I can in the second day see my mark in the laptop, I open it

	<p>and if she check it, I can see my mark. Sometimes in the same time.</p>
<p>Direct instruction</p>	<p><i>Presentation:</i></p> <ul style="list-style-type: none"> <li>• (translation) She feels that the teacher’s explanation without the laptop is better. She doesn’t know the reason.</li> <li>• (translation) Basically she understands more with the teacher. In the real she says that she doesn’t know why but she learns more, she finds it more understandable, but in other, sometimes also she likes the laptop.</li> </ul> <p><i>Task orientation:</i></p> <ul style="list-style-type: none"> <li>• [The teacher] must check on the girls, what they do on the laptop. Some of them play. She always opens the.... She has like a page that she can see all of the girls. And she not go to one girl see what she do, what she do. She see, and if some girl do wrong, she opens her screen and told the girl.</li> <li>• But some girls disconnect with the teacher and they always playing, playing, playing. . . (translation) some girls it’s just on purpose they go to a game or something.</li> </ul> <p><i>Personal responsibility:</i></p> <ul style="list-style-type: none"> <li>• Administration is making tougher procedures that if you</li> </ul>

take it home you should bring it. If you don't bring it, when you do, they will take it away for three days.. They think that...it's like a habit. It's just starting and they can just continue.

- And if the girl didn't do the homework in the laptop she has to go down in the Learning Room in the break and she solves it. They are afraid and they do it.
- Some girls don't love it... not because it's boring or we are bored. No they don't love it. But I think the administration are so..."don't open anything; don't do anything."
- They close to don't connect with anything. We can't connect with Internet. Only the things we put it we can use. We can open a lot of things but some programs on the Internet are blocked. If I go research on it too many times it will be blocked.
- And every two weeks [the Program Director] comes to check the laptops if there's any Messenger or songs or games.

--And does she usually find some?

--Yes!

--Often?

--Yeah.

--Why don't the girls just delete it?

	<p>--If [the Program Director] coming, they didn't...</p> <p>--Because she doesn't tell you that she's coming?</p> <p>--Yeah.</p> <ul style="list-style-type: none"> <li>• I think at home they can leave us to do anything. But they all say, "No, we will know," and they know!</li> </ul>
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Teaching, both direct and indirect, occurred through a variety of channels, including friends, family, and the school, through program design, resources available, and limits on access.

Design and organization. The students expressed satisfaction with the level of their teachers' participation in the classes, though they indicated that this participation varied among teachers. Teachers' main tasks included presenting lessons, helping students to use the technology, sending work to the students, supervising their use of the websites, and providing translation when required. In order to carry out these duties, the students indicated that teachers had received extensive professional development training during the past year.

Presentations were made by the teacher to the entire class, using the "smart board" technology. Despite the previously discussed preference for paper for revising, the general consensus regarding the presentation of material was that e-learning provided a greater variety of activities for the students. They praised some of the features that enhanced specific courses, such as the design tools for Math, English-

language reference material, and Flash videos of experiments in Science. The multimedia nature of the presentations appealed to some students and games also provided motivation. While most students responded positively to this content-centred design, some students preferred traditional teacher-centred explanations and presentations.

Teachers provided extra help or translation to individual students as necessary. When asked if they worked together with the teacher more or less in e-learning, students agreed that there was more contact, although they reported disparity in the amount of help required by individual students to organize themselves.

For technology support, the students turned to the Program Director and her assistant. While at the school, the researcher often observed students approaching them with their questions and requirements.

Homework was individualized according to student ability, with the students being divided into “Standard” and “Advanced” levels. Students submitted completed assignments electronically to the teacher or the K-Net site. These were marked and the marks made available to the students via the K-Net website.

Facilitating discourse. When asked about their mood or feelings in class, the students reported a range of emotions typical of a cross-section of middle school students, including “happy,” “excited,” “sometimes bored.” Negative feelings most

commonly resulted from technology issues and different linguistic abilities between students in the English-medium content.

In all discussions about the role of the teachers, the students showed evidence of a comfortable relationship, where they were relaxed about asking questions, clarifying problems, and asking for help. Students described the teacher's role as facilitator, recognizing and exploiting positive learning opportunities within and beyond the course material. They were encouraged to solve their own problems, but felt comfortable asking for help if required. The comprehensiveness of the material available via e-learning enabled the students to work independently, using the teacher as a resource person for content-based questions, organizational assistance, and translation. They appreciated the teacher's flexibility and openness to negotiate answers, deadlines, and even the medium used to complete assignments.

Some students explained that e-learning presents new opportunities to monitor their academic progress, as with the laptop, they do a greater number and variety of activities that are evaluated, which enabled some of them to achieve better grades than in the traditional class where only major assignments and tests were marked. Students valued the immediate reinforcement of being able to check their own marks as soon as they were available.

Direct instruction. After presenting a new concept, one of the teacher's tasks was to ensure the students remained on task, avoiding distractions provided by friends or the technology. Students described the administration's initiatives to address the lack of individual responsibility and self-motivation on the part of some students.

One issue of great interest to the students, as evidenced by the amount and animated nature of discussion it generated was the control of access to non-course-related material. While at school, students use the school's network on which outside content is blocked. They can access only those websites related to their program. For those who are able to access outside material at home, the administration endeavours to maintain control of content and use of the laptops via surprise inspections.

ROLE ADJUSTMENT. Cleveland-Innes, Garrison, and Kinsel (2007) identify interaction, instructor role, self-identity, course design, and technology as themes of role adjustment in relation to cognitive, social, and teaching presence. In describing their experiences with e-learning, many students in this study used a "then and now" dichotomy that is evidence of role adjustment. It must be noted, however, that the implementation of the eSchoolbag was intermittent. Students began the pilot project in grade seven, but at the beginning of grade eight found themselves back in a traditional classroom situation due to delays in the arrival and programming of laptops for grade eight content. This reduced the feeling of commitment to the approach on the part of some students, who preferred the familiarity of a teacher-led

classroom to the greater independence and responsibility of e-learning. It also shortened the actual length of time the students had been using the laptops at the time of the surveys and interviews, reducing the opportunity for adjustment.

Table 4: Experience of role adjustment

<p>Technology</p>	<p><i>Skill with technology:</i></p> <ul style="list-style-type: none"> <li>• In Grade 7, some works was difficult in the first only but after that it became easy.</li> <li>• At first it's difficult. When we do it tons and times ... easy.</li> <li>• (translation) At the beginning they did not know how to use the programs but after that it was so easy.</li> <li>• (translation) There was no problems with them after. They just have learned. It was all ok.</li> </ul> <p><i>Motivation to use technology:</i></p> <ul style="list-style-type: none"> <li>• (translation) At the beginning they felt they were very proud that they were the first school at Doha and they were very special having something. After that they felt that there were some difficulties with it and there were some students were using it in an inappropriate way, not only for studying.</li> <li>• When first time they gave us the laptop we feel proud about our school. Oh, we have laptops. But after that it was two weeks or three weeks we feel tired and very fast we think it's</li> </ul>
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easy we will only do something, *yanni*, slow things, quizzes.

We think only we will write notes like that, but sometimes if we can do nice things in laptop we feel... better, excited.

- (translation) She said that at the beginning they were very excited to use it but after that it was getting boring and boring.
- Because it's school work. It's like a school book. The laptop becomes like a book. You know if you have something only for studying, you'll feel bored....  
--You go to hate it.
- I was happy, but I [thought] it's not very important to learn. When I had the quiz, I saw my marks go down. I saw the questions come from the laptop and I said, "Oh, I must learn this." After that I go.
- But, no I think with the laptop I will do better because sometimes my computer in the home... stops, have problems. I take the laptop. And because we have laptop activity in here, we must tell the teacher some activity or some, before the time is finished. I take the laptop and I do it. I think the laptop is easy for us. If you have lots of papers its easy. You have two things, and you can... you choose. You want to do it in the laptop you want to do it in the paper. Sometimes the teacher told us if you can't do it in the laptop,

	write it in the paper. No problem.
Teacher role	<ul style="list-style-type: none"> <li>• (translation) At the beginning, the teachers they came from the outside explain everything to them and also [the Program Director] was very helpful. If each student had a problem she just goes to [the Program Director] and she help her, explain to them.</li> <li>• In the beginning [I asked for help] all time, because it's the first time I use the lap but now I think I know everything.</li> <li>• (translation) It's about the terms and language. Before, the previous teacher was translating some words, but now no.</li> </ul>
Self-identity	<ul style="list-style-type: none"> <li>• New students need to learn...(translation) to answer questions and not to rush in it and to make it in a hurry and how to protect it and to keep the laptop ok.</li> </ul>
Course design	<ul style="list-style-type: none"> <li>• (translation) The Program Director told them that some things will be more...better.</li> </ul>

Technology. Students agreed that the greatest initial adjustment lay in learning to use the new tools. Some recognized a progression in their use of technology, both in skill and motivation. Some described how the initial novelty of the technology soon faded and left a need for motivating content and approaches. One student,

described achieving high marks as a strong motivator to learn and participate with the laptop.

Teacher role. Several students described the support received from teachers, outside staff, and the e-learning program staff during the early stages of the program.

Self-identity. Some students recognized the increase in their own responsibilities, both in learning and in using and maintaining the technology. One appreciated the increased control offered by her mastery of the tools and skills of e-learning, as it allowed her to complete assignments on paper, the laptop, or her home computer, which she found very convenient.

Course design. The combined face-to-face and e-learning format of their program allowed students to access as much or as little support as each required and to move along the continuum towards greater independence at their own rate. This aspect of the course design enabled it to address the needs of students of diverse academic, linguistic, and motivational backgrounds. Despite challenges, the students comments indicated an optimism that adjustment is still ongoing, on their part and on the part of the school, and that their concerns are being addressed by the staff and administration. When asked what it is like to be a student working with the laptop, one participant replied, (translation) “We are learning.”

## “IN OUR SCHOOL. . .”: THE E-SCHOOLBAG EXPERIENCE IN CONTEXT

Qatari culture is in the midst of a rapid transition. Due to ever-increasing revenues from oil and natural gas, consumerism, modernization, and technology have swept what was until recently a very traditional society. Although evidence of this modernization is visible throughout the country in building and infrastructure projects, shopping and sporting centres, and even in changes in traditional celebrations in Qatari households, essential values of Qatari people are slow to change. The participants in this study attended Al Wakrah Girls Independent Preparatory School. The school is located in a small urban centre just outside of Doha, the capital of Qatar and is the only girls' Independent School in the town. Although the girls who attend the school are mainly Qatari or from other Arabic-speaking backgrounds, they have diverse family and socio-economic backgrounds. Some come from families that are very progressive and have embraced the rapid pace of change in Qatari society, while others are from homes where more traditional behaviours and attitudes dominate. This dichotomy was apparent through the course of this study in three main areas: educational values, English-language ability, and experience with and use of technology.

Educational values. According to Hofstede & Hofstede's (2005) Dimensions of National Culture, Arab-speaking countries rank high in the areas of Power Distance, Uncertainty Avoidance, and Collectivism. High power distance in a society normally translates to a school environment that is teacher-centred, where teachers outline

the intellectual path of students and initiate all communication. Knowledge in such societies is viewed as the personal wisdom of the teacher rather than an impersonal “truth” that is accessible to all. The teacher-student relationship is based on respect, obedience, and dependence on the teacher by the students. These characteristics contrast with nature of an e-learning community, where the teacher’s role is to facilitate the learning of students who display independence and initiative. In such a community, success depends greatly on the skill and initiative of the student. At Al Wakrah school, rules and policies, teacher behaviours, and available support enabled those students who wished to embrace the e-learning experience to achieve success, within the limitations of their academic, linguistic, and domestic realities. This approach was not welcomed by some students, who felt more comfortable in an environment where they were simply told what to do by an authoritarian teacher. Such students found it difficult to succeed in a situation where personal initiative was rewarded and work was done relatively independently from a teacher figure. During the interviews, several participants contrasted between those girls who were interested in learning and becoming independent, with or without technology, and those who preferred a highly structured classroom environment.

According to Hofstede & Hofstede (2005), people in high-uncertainty-avoidance societies are usually hesitant to try out new ideas and products. They tend to believe in one Truth to which they are privy. These nations have been slower to introduce electronic communication tools, even if eventually they use them as much as low-uncertainty-avoidance cultures. They rely on the advice of “experts” in order

to adopt new products and to repair and maintain their property, and tend to use fewer resources such as books and newspapers. In contrast to this traditional orientation, the e-learning initiative at Al Wakrah school is one of open-ended learning with teachers as facilitators. Learning is a more independent undertaking, where students are expected to use the electronic tools and resources and their own initiative in order to achieve educational objectives.

There is a strong relationship between a country's national wealth and the individualism dimension in the culture. Until relatively recently, Qatari society consisted mainly of families associated with the pearl trade, who lived in towns and villages near the coast, and migratory Bedouin tribes. The demands of these livelihoods and the harshness of the environment resulted in strong cohesive groups, usually based on kinship. In this collectivistic society, individuals depended on the family group for protection and survival. Children learned that personal opinions were not welcome, and right and wrong were predetermined by the group. With the advent of petrochemical wealth, however, there is evidence of decreased dependence and increased individualism, as citizens have the resources to pursue their own desires. The move to a more information-based economy recognizes and rewards those who show initiative. The experiences of the students in this study illustrate movement along this continuum, as some students who hold on to traditional behaviours hesitate to question and take initiative, while others express confidence in their ability to solve their own problems and achieve success.

Collectivist characteristics were apparent among the students in their consistent reference to the group, whether in describing working in groups, or in using “we” and “the girls in my class” rather than “I” to describe experiences. They felt comfortable with the high level of communication and collaboration required by their studies, which suited their culturally inculcated need for belonging. Their discomfort when problems or constraints of technology isolated them was apparent. In learning, collectivist cultures tend to value learning “how to do,” and fitting in to the group, rather than learning “how to learn,” which may explain the resistance of some girls to work on developing the skills required to be more independent learners, and choosing instead to use the technology to share homework.

English language. Facility with the English language appeared to be linked with students’ appreciation for and enjoyment of their e-learning experience. Those students who were conversant in English generally were not discouraged by the challenges of e-learning, and seemed to appreciate the long-term benefits of the new skills they were required to learn. Throughout the surveys and the interviews, those students who were comfortable responding and discussing in English were usually the ones who recalled positive experiences, whereas those who recalled being anxious or having difficulties often responded through the translator.

Technology. A further salient issue was the students’ comfort with and use of technology for personal and academic purposes. Training staff from the overseas infocomm firms that supplied the educational product were present at the school in

the early weeks to introduce all students and teachers to the use and care of the hardware and software. They provided additional support and training on use and troubleshooting to the Program Director to enable her to take on the role of technology support once they left the school. Some students came from families where one or both parents used computers for work or recreation, where students had their own personal computers, and were comfortable using them independently. These students were able to address school requirements and their own interests and needs vis a vis the technology. One student, for example, was pleased that she was able to complete her work on her home computer, accessing the course website and completing required assignments when she did not have the school laptop at home. In contrast, those students who did not have computers or Internet connections, or academic and technological assistance from family members at home, were required to complete some assignments during their break time at school. With regard to social and recreational uses of the school laptop, students who had their own computers at home did not feel a strong need to load games, music, or other software onto the school laptops, a practice that was frowned upon by the administration.

### ESSENCE OF THE EXPERIENCE

The e-learning experience of the grade 8 students at Al Wakrah school reflects an interaction between components of Garrison, Anderson, and Archer's Community of Inquiry and Hofstede's Cultural Dimensions, within the context of a school-aged

population. The resulting experience comprises three essential elements: motivation, belonging, and adjustment.

MOTIVATION. Motivation among the students was a result of conditions and goals that encouraged experimentation and adoption of new approaches. Familiarity with the English language and with computers was an enabling condition for many students. This, along with goals of educational and professional success, provided encouragement to adopt e-learning practices, as well as to experiment with technology and new forms of relationships, such as that with a teacher/facilitator. Students in this study who expressed an awareness that the skills they were learning through the eSchoolbag project would be transferable to future studies and employment generally showed greater motivation to persist in the face of challenges.

BELONGING. Students' appreciation for the social element of e-learning, that is, the increased opportunity to communicate and interact with other members in the group, reflects the values of a collectivist society as described by Hofstede. Such societies exhibit strong commitment and loyalty to the member group. Several students emphasized the fact that they often worked in groups rather than alone, and that they helped each other and viewed themselves as an important part of the class. They expressed discomfort at times when they fell behind the class due to difficulties with the technology. They also expressed a strong interest and concern for marks, which they use as an indicator of their place in the group. The conflict experienced by several students between communicating for social purposes and

academic purposes represents another aspect of this strong group identification. It may also be a result of the different motivational factors at work in school-aged e-learners as opposed to adult e-learners.

A highlight of the teaching element in the students' experience was the atmosphere of openness and communication with their teachers and other adults in the program.

Hofstede describes:

In the large-power-distance situation, the parent-child inequality is perpetuated by a teacher-student inequality that caters to the need for dependence well established in the student's mind. Teachers are treated with respect; ... students may have to stand up when teachers enter a classroom. The educational process is teacher centered; teachers outline the intellectual paths to be followed. In the classroom there is supposed to be strict order, with the teacher initiating all communication. Students in class speak up only when invited to.... (p. 53)

In fact, the students who participated in this study described a student-centred educational process, where they were welcome to initiate communication with teachers or other support staff and encouraged to solve their problems independently when possible. Despite this, there remains a strong respect for the teachers, with the students indicating that the teachers had received extensive training and were available to them when required.

ADJUSTMENT. A high-uncertainty-avoidance index for Arab-speaking nations hints at the hurdles being faced by some students in accepting an educational approach that runs contrary to many aspects of their traditional culture and experience. Adoption of screen over paper and increased responsibility for learning require adaptation. Even students who valued the presentation, interaction, and independence of e-learning at school admitted that, when they returned to their home environments, the challenges of the innovative content and medium could still prove discouraging.

Motivation, belonging, and adjustment formed the essence of the e-learning experience for the students in this group. Despite a disparity of skills in academics, technology, and the English language, all participants described issues with each of these elements.

The following section will discuss conclusions that arise from the study as well as recommendations for implementation of e-learning among Arab students and for further research.

## CHAPTER V

### CONCLUSIONS AND RECOMMENDATIONS

The purpose of this study was to describe the experience of students in the e-Schoolbag program and to suggest means of support to enhance student success and enjoyment. The results add to the body of knowledge about the experience and needs of Arab students in e-learning. Essential elements in the experience were found to be motivation, belonging, and adjustment.

Regarding the cognitive presence in e-learning, the English medium of the content and technological tools, were associated with the greatest disparity among students in terms of their willingness and ability to initiate, explore, and apply learning, as those students who could use these communication features with ease expressed greater motivation, success, and enjoyment in the program.

Social presence was an important component for students, as it addressed their need for communication and belonging, especially due to their age and the collectivist nature of their culture. The ability to communicate with teachers and other students in a climate of openness, support, and collegiality was valued by all the participants. The self-discipline required to balance social and academic communication was an issue of concern for both students and staff.

Due to the high power distance of their society and their previous educational experiences, the students viewed the teacher as a vital part of their learning. However, some students expressed eagerness to utilize other sources of knowledge

and support, such as the course material and resources, other students, and family members, and felt confident interacting with the teacher as facilitator rather than content expert. Even those students who lacked the confidence or ability to work independently expressed comfort in approaching the teacher with questions and concerns, in contrast to a traditional high-power-distance classroom where teaching presence is evident mainly in one-way communication from teacher to students.

Given the slow adoption of change in traditional Arab culture, it is reasonable that role adjustment for students in the e-Schoolbag program will be a gradual process. Students were positive about the initial training and the ongoing support they received in using the technology. They recognized that individuals were at different points along the continuum between teacher-centred, face-to-face instruction and individualized, independent, student-centred e-learning. They noted the disparity in English and computing backgrounds and personal academic goals and motivation. Some who expressed a desire to embrace e-learning accepted the need for administrative control and guidance as students gradually gained independence and responsibility to monitor content and communication for themselves. The willingness of some students to embrace a form of learning that contrasts with the traditionally high power distance, high uncertainty avoidance, collectivistic culture of Arab-speaking nations provides a glimpse of the change occurring in Qatari society in pursuit of the goal of modernization.

In order to successfully address issues of motivation, belonging, and adjustment, support must address these from the students' own cultural perspective. Design

should recognize that, this being a society in transition, the two critical skills of technology and English language are not equally distributed among the population. Additionally, those students who possess these skills to a lesser degree may do so because their home environments are culturally conservative and have not embraced rapid changes taking place in the greater society, thus precluding the home as a source of supportive educational values and motivation. Gradual, consistent implementation, starting with computer-based learning in the classroom at an earlier age, under the guidance of a properly trained teacher, might help develop independent learning skills and appreciation for the computer as a tool and resource for learning, not merely for social and recreational uses. Increased structured time on computers at school might help students gain greater skill and confidence with technology, and thus ease the transition to home use.

Development of adequate hardware, software, and infrastructure, such as an effective wireless network in the school, before implementation, would make the technology more transparent from the onset and help build positive attitudes. Additionally, policies, procedures, and course design that are equitable for all and do not penalize those students who do not have computer or internet access and support at home would promote a positive view of e-learning. Course design and policies that encourage responsible student interaction can provide a sense of security for students accustomed to collective activity, and provide culturally appropriate peer support for those students who find the English language and/or technology challenging.

An appropriate level of English in all content, including enrichment and support, and outside web sites, is necessary to ensure that all students have similar access to content and computer-based support.

As this was a very small exploratory study, further research on the students' experiences with e-learning, including a more in-depth understanding of the process of role adjustment among this population, would be beneficial. Broader studies that enlist participation of a greater range of students would ensure that there are no hidden issues related to the demographics of those who self-select. Because of the very different roles of males and females in Islamic societies, a similar study on the experiences of boys in e-learning would also be enlightening. It is hoped that, by understanding the process learners undergo when encountering e-learning methods for the first time, policymakers and distance educators will be better equipped to tailor programs and approaches to the needs of Arab students and national development in the Gulf.

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## APPENDICES

### APPENDIX A: LETTER OF INTRODUCTION--ADMINISTRATION

Dear -----:

I am a student in the Master of Distance Education program at Athabasca University in Canada conducting research for my thesis under the supervision of Dr. Mohamed Ally, Associate Professor, The Centre for Distance Education, Athabasca University. The purpose of this research is to explore the role adjustment experienced by secondary school students as they move from traditional teacher-led classes to more independent e-learning models and to suggest means of support to enhance their success and satisfaction. The experiences of the grade 8 students at Al Wakrah Independent Girls' Preparatory School, because of their participation in the E-schoolbag program for the second year, would be a valuable contribution to this research. I would appreciate the opportunity to meet with the students and document their experiences and perspectives.

There are three phases to this project. In the first phase, the students in grade 8 will be asked to complete a pencil and paper survey during the school day, consisting of about 20 open-ended questions discussing various aspects of their class, comparing their experiences in the E-schoolbag program in grade 7 and in grade 8. The second phase will involve small-group interviews with about 15 students who agree to provide more detail about their experiences. These interviews would also take place during the school day, about one week after the survey is administered. Once the results have been compiled, a final interview will be held with a small group of students to share the results and confirm that they are a valid portrayal of the students' experiences.

The individual students' involvement in this research is completely voluntary and there are no known or anticipated risks to participation in this study. The students will be informed that they have the right to refuse to participate and to withdraw at any time during this research. Each student may refuse to answer any question. All information will be held confidential, except when legislation or a professional code of conduct requires that it be reported. All information collected will be stored in a secure electronic location that can be accessed by the researcher and translator only and will be destroyed once the final paper is submitted and accepted.

If you have any questions about this study or would like additional information to assist you in reaching a decision about participation, please feel free to contact Professor Mohamed Ally at +1-866-916-8650 or via email at mohameda@athabascau.ca.

This study has been reviewed by and received ethics clearance from the Athabasca University Research Ethics Board. If you have any comments or concerns resulting from your participation in this study, please feel free to contact the Research Ethics Board at 1-800-788-9041 or via email askresearch@athabascau.ca.

Thank you in advance for your interest in this project.

Yours sincerely,

Martha Robinson  
MDE Program Student  
Athabasca University  
mrobinson@qatar.net.qa  
+974 586-0114

**Permission to Access Students**

I understand the nature of the study described above and give permission to Martha Robinson to access the Grade 8 students at Al Wakrah Independent Girls Preparatory School for the purpose of completing the described research.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

انا طالبة ماجستير في برنامج التربية في جامعة أثاباسكا في كندا والمشرف على رسالتي هو الدكتور محمد علي مساعد بروفيسور المركز لدراسة المسافات جامعة أثاباسكا . إن الهدف من خلال هذا البحث هو اكتشاف التعديل للدور الذي قام بتجريبه طلاب المدرسة الثانوية حيث انتقلوا من الأسلوب التقليدي وهو اتباع المدرس في التعليم إلى طريقة جديدة مستقلة للتعليم وهي الطريقة التكنولوجية الحديثة ولاقتراح طرق للمساعدة لتحديث تفوقهم وإرضائهم فإن خبرات طالبات الصف الثامن في مدرسة الوكرة المستقلة للبنات بسبب المشاركة في برنامج الحقيبة المدرسية الإلكترونية من أجل السنة القادمة , سيكون إنجاز ثمين لهذا البحث . إنني أود منحي الفرصة لأقابل الطالبات وأسجل خبراتهن وأفكارهن هناك ثلاث مراحل لهذا البحث.

المرحلة الأولى :

طالبات الصف الثامن سوف يطلب منهن أن يكملن إحصاء بالقلم الرصاص والورقة . وذلك في خلال اليوم الدراسي يتضمن حوالي عشرين سؤالاً متعددة الإجابات تشمل موضوعات متعددة عن صفهم ومقارنة خبراتهم في برنامج الحقيبة المدرسية الإلكترونية في الصف السابع والثامن.

المرحلة الثانية :

تتضمن مقابلات لمجموعات صغيرة تتضمن حوالي خمسة عشر طالبة والذين يوافقون على إعطاء معلومات أكثر حول خبراتهم , هذه المقابلات ستكون خلال اليوم الدراسي بعد أسبوع من عمل الإحصاء . وعند الانتهاء من جمع النتائج سوف يقوم الطلاب بمقابلة جديدة تتكون من مجموعات صغيرة من الطلاب بمشاركة النتائج وتأكيد صلاحية خبراتهم . كل واحد من الطلاب المشاركين في هذا البحث متطوع وليس هناك مخاطر للمشاركة فيه . وسوف يخبرون الطلاب أن لديهم الحق في الرفض على الإجابة . وكل المعلومات ستكون سرية إلا ( بموافقة ) مايسمح به , وكل المعلومات التي جمعت سوف تخزن داخل منطقة كهربائية محكمة حيث يمكن الدخول عليها من خلال الباحث والمترجم فقط . وسوف نقوم بالتخلص منها عند الانتهاء من الامتحان الأخير والموافقة عليه.

إن كان لديك أي أسئلة عن البحث وإن أردت معلومات إضافية لمساعدتك في إتخاذ قرار يمكن الإتصال بالبروفيسور لقد تمت [mohamed@athabasca.ca](mailto:mohamed@athabasca.ca) محمد علي على +18669168650 أو عبر البريد الإلكتروني المراجعة حول هذه الدراسة من قبل جامعة أثاباسكا . ولو كان لديكم اقتراحات أو استفسارات بشأن هذا الموضوع نرجو منكم الإتصال بأبحاث إنكس بورد على 180078890

الرجاء السماح لمارثا وبنسون للتواصل بطالبات الصف الثامن في مدرسة الوكرة المستقلة من أجل تكملة البحث المفصل أعلاه .

## APPENDIX B: LETTER OF INTRODUCTION--PARENTS

Dear Parents,

As part of a Master's Degree in Distance Education from Athabasca University in Canada, I am carrying out research into the experiences of Gulf Arab students as they adjust to e-learning, with the intent to recommend means of support to increase students' success and satisfaction with this method of learning. The experiences of the grade 8 students at Al Wakrah Independent Girls' Preparatory School, because of their participation in the E-schoolbag program for the second year, would be a valuable contribution to this research.

Your daughter has been selected to complete a survey on her experiences in the E-schoolbag program. This survey will take about one half hour to complete, after which she may be invited to attend a small-group interview during school hours to further discuss her experiences. Her answers and any other information she provides will be kept private, and destroyed as soon as the study is completed. Only the researcher and assistant will see them. She may choose to end her participation at any time during the study, in which case all information she has provided to date will be destroyed.

The results from this study will help shape the future delivery of education in Qatar to prepare Qatar students for the 21st Century. If you have any questions about this study, please contact the researcher, Martha Robinson at [mrobinson@qatar.net.qa](mailto:mrobinson@qatar.net.qa) or at 586-0114.

Please indicate your permission for your daughter's participation in the study by signing and the lower portion of this page and returning it to the school.

Thank you for your support of this important project.

Martha Robinson

---

I have read and understood the information contained in this letter, and I give permission for my daughter \_\_\_\_\_ of Class \_\_\_\_\_ to participate in the study.

Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

ولي الأمر الفاضل:

كجزء من دراستي في برنامج ماجستير في جامعة أثابا سكا كندا، أعمل على دراسة أثر التعليم الإلكتروني على طلاب دول الخليج، تكيفهم مع استخدام الانترنت ومدى نجاحهم ورضاهم عن استخدام مثل هذه الوسائل التعليمية. خبرة طالبات الصف الثامن في مدرسة الوكرة الإعدادية سوف تكون تجربة ثرية نظرا لاستخدامهم الحقيقية الإلكترونية وستساعدني في بحثي.

تم اختيار ابنتكم للإجابة عن هذا البحث، حيث ستجيب عن استبانة ستستغرق منها نصف ساعة للإجابة، ثم قد يتم اختيارها للاشتراك ضمن مجموعة صغيرة يتم مقابلتها للتحدث أكثر عن هذه التجربة خلال ساعات اليوم الدراسي الصباحية.

علما بأن إجابتها ستعتبر سرية ولن يطلع عليها سوى الباحثة ومساعدتها كما وسيتم إتلافها بعد انتهاء البحث مباشرة.

يحق للطالبة عدم المتابعة في أي وقت وستتلف كافة إجاباتها في هذه الحالة فورا.

نتائج هذا البحث ستساعد في تشكيل التعليم في قطر وتهيئة الطلاب للقرن الواحد والعشرين.

إذا كان هناك أية استفسارات أو اقتراحات فيمكن التواصل مع الباحثة مارثا روبنسون Martha Robinson :

mrobinson@qatar.net.qa / 586-0114

الرجاء توضيح موافقتك عن مشاركة ابنتك في هذا البحث من خلال التوقيع على هذه الورقة وإعادتها للمدرسة.

أشكر لكم دعمكم وتعاونكم لإنجاح هذا البحث

مارثا روبنسون

Martha Robinson

بعد الاطلاع على ما ورد أعلاه أوافق على اشتراك ابنتي \_\_\_\_\_  
في الصف \_\_\_\_\_ في هذا البحث.

الاسم: \_\_\_\_\_

التوقيع: \_\_\_\_\_

التاريخ: - \_\_\_\_\_

## APPENDIX C: LETTER OF INTRODUCTION--STUDENT

Dear Student,

We invite you take a few moments to complete the attached survey. Your answers will inform educators about the experiences of students new to e-learning and show them how to help students like you make the change from teacher-centred learning to e-learning.

Your answers and any other information you give will be kept private. Only the researcher and her translator will see them. Even so, you are not forced to answer any particular question if it makes you uncomfortable. If you do choose to answer, please give as much detail as possible so the researcher can clearly understand your experience. If you do not understand a question, please feel welcome to ask the person administering this survey.

If you choose to participate please write your name below. This top sheet will be separated from the rest of the survey and used only to keep track of surveys that have been returned and students who agree to be interviewed.

Thank you for considering participating in this important project.

Martha Robinson

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I have read and understood the information contained in this letter, and I agree to participate in the study, knowing that I may refuse to answer certain questions and that I may end my participation at any time.

Name: \_\_\_\_\_

Class: \_\_\_\_\_

Date: \_\_\_\_\_

الطالبة الفاضلة:

ندعوك للمشاركة في ملء هذه الاستمارة في دقائق قليلة من وقتك، إجابتك ستساعد في تحسين التعليم الالكتروني عند الطالبة حديثي الاستخدام للتعليم الالكتروني وتغيير أسلوب التعليم من الاعتماد على المعلمة الى الاعتماد على التعلم الالكتروني.

إجابتك وأي إجابة سيتم الحصول عليها ستعامل بسرية ولن يطلع عليها سوى الباحثة ومساعدتها،ويمكنك ألا تجيب عن أي سؤال لا ترغبه بالإجابة عنه. في حال رغبت بالإجابة يرجى أن تذكر تفاصيل قدر المستطاع لتساعدي الباحثة في فهم أوضاع للخبرة التي تم اكتسابها ، إذا لم يكن السؤال واضحا فلا تترددي في توجيه السؤال للشخص الذي يقدم لك هذه الاستبانة.

في حال رغبتك في المشاركة أرجو أن تكتبي اسمك في أسفل الورقة علما بأن هذه الورقة منفصلة عن باقي الاستبانة وستساعدني فقط في إعادة الأوراق المشاركة وتحديد عدد الذي وافق على الاشتراك.

أشكر لك تفهمك و مشاركتك في هذا البحث المهم.

مارثا روبنسون

**Martha Robinson**

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بعد قراءتي وفهمي لما ذكر أعلاه أوافق على الاشتراك في هذا البحث علما بأنه يحق لي عدم الإجابة عن بعض الأسئلة و عدم متابعة الاشتراك في أي وقت أرغب بذلك.

الاسم:

\_\_\_\_\_

الصف:

\_\_\_\_\_

التاريخ:

\_\_\_\_\_

## APPENDIX D: SURVEY INSTRUMENT

What grade are you in this year? \_\_\_\_\_ في أي صف أنت هذا العام؟

Did you participate in the “E-schoolbag” program in Grade 7? هل اشتركت في برنامج الحقيبة الالكترونية في الصف السابع؟

Yes No

How many hours per week did you use the computer at home for anything different from school work? كم عدد الساعات التي تقضيها أسبوعيا تستخدمين الحاسوب في المنزل لأمر لا تتعلق بالدراسة؟

in Grade 7? \_\_\_\_\_ في الصف السابع

in Grade 8? \_\_\_\_\_ في الصف الثامن

Do your mother, father, brother, or sister use a computer at home or at work? For what purposes? هل يستخدم والدك، والدتك، أختك، أو أخوك الحاسوب في المنزل ، وماهي أغراض هذا الاستخدام

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Answer the following questions about your experiences in the E-schoolbag program at the beginning of Grade 7 and at the beginning of Grade 8. Give specific examples for each grade if possible. If you cannot think of an example, leave the space blank. If you need more space, write the question number and your comments on the back of the page.

أجيب عن الأسئلة التالية من واقع خبرتك باستخدام الحقيبة الالكترونية في بداية الصفين السابع و الثامن، أذكر

أمثلة واضحة قدر المستطاع، إذا كنت لا تتذكرين أمثلة اتركي المساحة فارغة. أما إذا احتجت مساحة أكثر، اكتبى رقم

السؤال خلف الصفحة و اكتبى تعليقاتك.

<p>1. How well did you understand what was expected of you in your assignments and class work? Give examples:</p> <p>Grade 7:</p> <p>Grade 8:</p>	<p>ما مدى فهمك لما كان متوقعا منك في المهام الصفية والمشاريع المطلوبة منك؟ اذكر أمثلة في الصفين:</p>
<p>2. How often did you understand the new material you were learning? Did you find it easy or difficult? Give examples:</p> <p>Grade 7:</p> <p>Grade 8:</p>	<p>إلى أية درجة فهمت الأدوات الجديدة عند تعلمك؟ هل وجدتها سهلة أم صعبة؟ اذكر أمثلة في الصفين:</p>
<p>3. How confident were you that you knew how to answer or complete an assignment? Give examples:</p> <p>Grade 7:</p> <p>Grade 8:</p>	<p>إلى أية درجة كنت واثقة من قدرتك على الإجابة وعمل مشروعك؟ اذكر أمثلة في الصفين:</p>
<p>4. How did you usually solve problems or complete assignments, by yourself or with help? If with help, who helped you and why? Give examples:</p> <p>Grade 7:</p> <p>Grade 8:</p>	<p>غالبًا كيف كنت تقومين بالمشاريع والواجبات، بمفردك، أم بمساعدة؟ إذا ساعدك أحد من ولماذا؟ اذكر أمثلة في الصفين:</p>
<p>5. How often did you use your learning to solve new problems by yourself? Were you confident with your solutions? Give examples:</p>	<p>إلى أية درجة استخدمت ما تعلمته لحل المشكلات المستجدة وحدك؟ هل كنت واثقة من معرفتك وحلولك؟ اذكر أمثلة في الصفين:</p>

<p>Grade 7:</p> <p>Grade 8:</p>	
<p>6. How did you check if you understood new material correctly? Give examples:</p> <p>Grade 7:</p> <p>Grade 8:</p>	<p>كيف كنت تتأكد من فهمك للأدوات الجديدة؟ اذكري أمثلة في الصفين:</p>
<p>7. Who was responsible for your school work and learning? Give examples:</p> <p>Grade 7:</p> <p>Grade 8:</p>	<p>من كان مسؤولاً عن واجباتك المدرسية وتعلمك؟ اذكري أمثلة في الصفين:</p>
<p>8. Did you feel you were an important part of the class group? Explain.</p> <p>Grade 7:</p> <p>Grade 8:</p>	<p>هل كنت تشعرين أنك عضو مهم في المجموعة الصفية؟ وضحِي؟ اذكري أمثلة في الصفين:</p>
<p>9. How often did you share your own ideas with others in the class? Did you feel welcome to do so? Give examples:</p> <p>Grade 7:</p> <p>Grade 8:</p>	<p>إلى أية درجة كنت تشاركين الآخرين بأفكارك ومقترحاتك؟ هل كنت تشعرين بترحيب؟ اذكري أمثلة في الصفين:</p>
<p>10. How did you feel about asking questions of your teacher and fellow students?</p>	<p>كيف كنت تشعرين عندما تستفسرين عن شرح المدرسة و الطالبات؟</p>

Grade 7:	
Grade 8:	
11. Did you help other students in the class with any aspect of their e-learning? Did other students help you? Explain.	هل ساعدت احدا من الطالبات بأي شيء يتعلق بالتعلم الالكتروني؟ هل ساعدتك إحدى زميلاتك؟ وضح.
Grade 7:	
Grade 8:	
12. What was your teacher's main responsibility in the class? Give examples:	ما كان دور المعلمة ومسؤولياتها في الصف؟ اذكر أمثلة في الصفين:
Grade 7:	
Grade 8:	
13. Describe your feelings or mood in the class.	صفي مشاعرك ومزاجك داخل الصف؟
Grade 7:	
Grade 8:	
14. When and how often did the teacher explain to you exactly what to do as compared to letting you work out a problem on your own?	متى وإلى أية درجة وضحت لك المدرسة كيف تؤدين واجباتك مقارنة بتركك بمفردك بدون توضيح؟
Grade 7:	
Grade 8:	
15. How often did the teacher work with the class as a group? Give examples:	إلى أية درجة تعاملت المدرسة مع الصف كمجموعة؟ اذكر أمثلة في الصفين:

<p>Grade 7:</p> <p>Grade 8:</p>	
<p>16. How often did the teacher work with individual students? Give examples:</p> <p>Grade 7:</p> <p>Grade 8:</p>	<p>إلى أية درجة تعاملت المدرسة مع الطالبات فرديا؟ اذكري أمثلة في الصفين:</p>
<p>17. Did the teacher expect you to wait for her to help and to explain things or were you expected to try to solve problems by yourself first? Give examples:</p> <p>Grade 7:</p> <p>Grade 8:</p>	<p>هل كانت المدرسة تتوقع أن تساعدك هي أولا وتوضح الأمور لك أم أن تحاولي أنت أولا؟ اذكري أمثلة في الصفين:</p>
<p>18. How often did you ask the teacher for help to organize yourself or plan your work? Give examples:</p> <p>Grade 7:</p> <p>Grade 8:</p>	<p>إلى أي مدى كنت تطلبين من المدرسة أن تنظم لك عملك ومهامك؟ اذكري أمثلة في الصفين:</p>
<p>19. How often did you ask the teacher for help with the computer technology? What kind of help did you need?</p> <p>Grade 7:</p> <p>Grade 8:</p>	<p>إلى أي مدى كنت تطلبين من المدرسة مساعدتك في التعامل مع تقنيات الحاسوب؟ ما نوع المساعدة التي احتجتها؟</p>

<p>20. How often did you ask the teacher for help with the course material? Give examples:</p> <p>Grade 7:</p> <p>Grade 8:</p>	<p>إلى أية درجة كنت تطلبين من المعلمة مساعدتك في استخدام أدوات المادة اذكري أمثلة في الصفين:</p>
<p>21. How often did your teacher encourage students to help each other? Give examples:</p> <p>Grade 7:</p> <p>Grade 8:</p>	<p>إلى أية درجة كانت مدرستك تشجع الطالبات على مساعدة بعضهم البعض؟ اذكري أمثلة في الصفين:</p>
<p>22. Is there anything else you feel has been important in helping you become more comfortable as an E-schoolbag student?</p>	<p>هل وجدت أمرا آخر مهما ساعدك في ان تشعرى بالراحة كطالبة تستخدم الحقيبة الالكترونية؟ اذكره</p>
<p>23. Is there anything that might have helped you adjust more easily to this form of learning?</p>	<p>هل هناك شيئا محدد من الممكن أن يساعدك للتكيف بسهولة أكثر مع هذا النوع من التعلم؟</p>
<p>24. Would you be willing to participate in a short interview to share more of your ideas and experiences in the E-schoolbag program? (Please circle one.)</p> <p style="text-align: center;">Yes                  No</p>	<p>هل ترغبين أن تشاركي في مقابلة قصيرة للمشاركة أكثر في أفكارك وخبرتك في برنامج الحقيبة الإلكترونية؟ (ضعي دائرة حول إجابتك)</p>

**Thank you for completing the survey**

أشكرك لتعاونك معنا في هذه الاستبانة

## APPENDIX E: INTERVIEW PROTOCOL

**Project:** Role adjustment of Gulf Arab students new to e-learning

Date: \_\_\_\_\_ Time of interview: \_\_\_\_\_

Place: \_\_\_\_\_

Interviewees: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

### **Central question:**

How do the students describe their experience in the E-schoolbag program in relation to:

- cognitive presence in learning?
- social presence in learning?
- teaching presence in learning?

### **Subsidiary questions:**

How do they describe their experiences with respect to:

- content
- climate
- discourse

What positive and negative interventions have taken place with regard to role adjustment and what were the results?

\_\_\_\_\_

### **Informed Consent Script:**

“Thank you for coming to this interview. Your opinions and ideas will add to what you wrote in your surveys and will help to give a clear picture of your experience in the e-schoolbag program. This is important in order for teachers to learn how to help students like you make the change from teacher-centred learning to e-learning.

“Remember that all your answers and any other information you give will be kept private. Specific answers you give will only be seen by the researcher and her assistant. Even so, you are not forced to answer any particular question if it makes you uncomfortable. If you do not understand a question, please feel welcome to ask for an explanation. This interview will be audio recorded to make sure we capture your exact words and expressions. Is this acceptable to you?”

### **Interview questions:**

1. Are you using the laptop this year? For which courses?
2. Please explain to me how you use the laptop in your classes.
3. Tell me how you feel about learning in the E-schoolbag program:
  - a) What do you like about it?
  - b) Tell me about a time when you were very happy or excited or felt very good about using the laptop.
  - c) What do you not like?
  - d) Tell me about a time when you felt nervous, confused, or unhappy using the laptop.
  - e) How is your “job” as a student different in the e-schoolbag program?
  - f) Do you prefer e-schoolbag or would you like to have pen and paper? Why?
4. When you use the e-schoolbag, how is your class time different from a normal class? (what you do, what you expect your teacher to do, your responsibilities)  
Can you give me examples related to:
  - a) the course material you are studying (the English, Math, Science assignments)
  - b) how you use the laptop
  - c) your relationship with other students.
  - d) what you expect from your teacher and what you think she expects of you.
5. Tell me about people or activities that have helped you feel comfortable with e-learning.
  - Could the Program Director or your teachers or anyone else have made it easier for you to learn and enjoy the technology? How?
6. Would you be willing to offer support to a grade 7 student starting the program? If yes, how would you help them?
7. Is there anything you would like to say to help me understand your experience with e-learning?

Thank you again for your help. I wish you success in your studies.