

The Mohammed bin Rashid's Smart Learning Program (SLP) Initiative in the Ministry of Education and its impact on English language performance in Cycle2 Classes, in the United Arab Emirates (UAE).

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دراسة حول تطبيق مبادرة الشيخ محمد بن راشد لبرنامج التعلم الذكي (SLP) وأثرها على تطوير مهارات اللغة الإنجليزية في صفوف المرحلة الثانية في مدارس وزارة التربية والتعليم بدولة الإمارات العربية المتحدة.

A Dissertation By
Tamer Elsayed Abdel Galil

Dissertation Supervisor
Dr. John McKenny

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Dedication

My dissertation is kindly dedicated to my honorable parents who were and still the source of my enthusiasm and who have always inspired me to do my best in the bath of education.

I also would like to dedicate my dissertation to my great family, my beloved wife, Heba, who has been always beside me and to my lovely 4 children, Yousef, Lena, Gana and Habeba. In addition, with great love to my great brothers Wael, Ramy, Ahmed and my kind sister Shimaa, whose prayers accompanied me everywhere. They all have given me a great motivation to continue my master degree and were extremely supportive for me.

Finally, I honorably dedicate it to those faithful strivers who struggle for their freedom, dignity and justice in my country Egypt, Syria, Palestine and all over the world.

With deep gratitude, love and respect.

اهداء

" رَبَّنَا إِنَّا سَمِعْنَا مُنَادِيًا يُنَادِي لِلْإِيمَانِ أَنْ آمِنُوا بِرَبِّكُمْ فَآمَنَّا رَبَّنَا فَاغْفِرْ لَنَا ذُنُوبَنَا وَكَفِّرْ عَنَّا سَيِّئَاتِنَا وَتَوَفَّنَا مَعَ الْأَبْرَارِ * رَبَّنَا وَآتِنَا مَا وَعَدْتَنَا عَلَى رُسُلِكَ وَلَا تُخْزِنَا يَوْمَ الْقِيَامَةِ إِنَّكَ لَا تُخْلِفُ الْمِيعَادَ "

انتشرف بإهداء رسالة الماجستير الى:

- ❖ ابي الحبيب الغالي وأمي الطيبة الطاهرة، إلى من كان دعأؤهم سر تقدمي ونجاحي.
- ❖ إلى إخواني الأعرء وأختي الفاضلة من راقفوني منذ صغرى وأناروا حياتي ودربي.
- ❖ إلى توأم روعي ورفيقة كفاحي، صاحبة القلب الطيب والنية الصادقة ... زوجتي الصالحة الحبيبة.
- ❖ إلى ابني العزيز الغالي يوسف وبناتي الحبيبات لينة وجنى وحبيبة فلذات قلبي ونور عيني ودافع تقدمي ورقبي.

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“If I have seen farther than others, it is because I stood on the shoulders of giants”. Isaac Newton...

It gives me great pleasure to express my appreciation to my dissertation supervisor Dr. John McKenny who has been very knowledgeable and gave me great guidance and keen encouragement all over the research stages. I also would like to thank all the doctors and professors who taught us in the British University in Dubai for their help and support all the time.

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Abstract

Technology-based learning in Ministry of Education schools is an area that has a great priority aimed to assist students to adopt modern smart Technologies. This study investigates the impact of implementing Smart Learning Program (SLP) on the English language performance of cycle2 students, in the Ministry of Education, United Arab Emirates (UAE).

It examines the implementation of Smart Learning Program (SLP) in cycle 2 classes, especially grade seven in Ministry of Education, United Arab Emirates. The program is being performed as an initiative from His Highness Sheikh Mohamed Ben Rashid, the Vice President and Ruler of Dubai, who launched the initiative in 2012 after an announcement. It was introduced to schools in the academic year 2012/2013 in 14 smart schools. This year (2013/2014) the program is implemented in 123 governmental schools and by 2017, the Smart Learning Program will be installed in all k-12 school classes.

The investigation concerns mainly the teachers and students attitudes and views towards the program, and how the initiative influenced the students' performance and achievement in English language skills. The overall findings of the study and the examination of the data analysis indicated that the teachers and students' perception of the program and Smart Learning in general is encouraging. Moreover, students and teachers' perception of the program applications, software and educational content increased their awareness of the Smart Learning Environments. A main significant finding is the strong and obvious communication between the learners and their teachers and the awareness of the structure of the Smart learning environment.

Furthermore, the researcher determined some implications and recommendations to enhance the implementation of the Smart Learning Initiative in the Ministry of Education schools.

ملخص البحث

تهدف رسالة الماجستير هذه الى البحث في مدى فاعلية تطبيق مبادرة التعلم الذكي (SLP) في مدارس الحلقة الثانية بوزارة التربية والتعليم بدولة الامارات العربية المتحدة. حيث تم توفير جهاز حاسوب لوجي "تابلت" مزود بتقنيات حديثة ومتصل بشبكة الانترنت وشبكة البرنامج لكل طالب وتم تجهيز الصف الدراسي بشبكات وسبورة ذكية واتصال بشبكة انترنت فائق السرعة وجهاز حاسوب محمول لكل معلم متصل أيضا بالشبكة ومحمل بالمحتوى التعليمي للمواد الدراسية وبالبرامج المستخدمة في تطبيق البرنامج التعليمي كاملا.

تم إطلاق المبادرة عام 2012 كمبادرة من سمو الشيخ محمد بن راشد نائب رئيس دولة الامارات العربية المتحدة، رئيس مجلس الوزراء وحاكم دبي، وبدأ تنفيذها في 14 مدرسة حكومية تابعة لوزارة التربية والتعليم في العام الدراسي 2013/2012 في فصول الصف السابع الدراسي، ثم تم تعميمها على 123 مدرسة في العام الدراسي التالي 2014/2013. ومن المتوقع ان تنفذ في جميع صفوف المدارس الحكومية بحلول عام 2017.

وقد اهتم هذا البحث بدراسة تطبيق مبادرة التعلم الذكي خلال العام الأول من تنفيذه والوقوف على مدى فاعلية استخدام وسائل وأدوات برنامج التعلم الذكي في تدريس مادة اللغة الإنجليزية وأثره على معدل أداء الطلاب في اكتساب مهارات اللغة المختلفة، وأراء معلمي ومعلمات المادة في هذا البرنامج وكذلك أراء الطلاب والطالبات تجاهه ومدى ارتقاء الأداء الأكاديمي للطلاب في مادة اللغة الإنجليزية بعد عام كامل من تطبيقه.

تم استخدام أدوات بحث كمية ونوعية لاستكمال عملية جمع البيانات والتي شملت: تحليل نتائج عينة عشوائية "تجريبية" من الطلاب مكونة من 24 طالب مقيدين بإحدى المدارس التي بدأت بتطبيق برنامج التعلم الذكي بداية العام الدراسي الحالي 2014/2013 ومقارنتها بنتائج عينة أخرى "ضابطة" مكونة من 24 طالب من إحدى المدارس التي تستخدم التعلم التقليدي، وذلك في مادة اللغة الإنجليزية.

كما شملت أدوات البحث استبانة للمعلمين واستبانة للطلاب المقيدين ببرنامج التعلم الذكي للوقوف على أراءهم توقعاتهم المختلفة في المبادرة.

وقد اشارت النتائج إلى وجود نسبة تحسن إيجابي في نتائج الطلاب المقيدون في برنامج التعلم الذكي عن نظرائهم في التعليم التقليدي في مادة اللغة الإنجليزية. كما أشارت نتائج الاستبانة المطبقة على المعلمين والطلاب المقيدون في البرنامج الى وجود نظرة إيجابية وتوقعات متفائلة بنجاح البرنامج على المدى القريب. كما أعلن معظم المشاركين عن رضاهم من خطوات تطبيق البرنامج وأبدى العديد من المعلمين المشاركين عن الكثير من الإيجابيات المصاحبة لتطبيق البرنامج.

وفي ختام الدراسة تم استخلاص العديد من الاقتراحات والتوصيات بهدف تحسين الأداء واستخدام أفضل الوسائل في تنفيذ مبادرة برنامج التعلم الذكي في صفوف مدارس وزارة التربية والتعليم بدولة الامارات العربية المتحدة.

Table of contents

No.	Chapter	Page
1	Chapter 1: Introduction	12
1.1	Introduction	12
1.2	Research Questions	14
1.3	Significance of the Study	15
1.4	The study purpose and objectives	16
1.5	About Research design and Methodology	17
1.6	Definition of concepts & Terminology	17
2	Chapter 2: Literature Review	21
2.1	Conventional Versus Smart Classrooms	21
2.2	The Smart Learning World Wide	22
2.3	Smart Learning program(SLP) Initiative in the UAE	25
2.4	Smart Schools and New Vision	26
2.5	English Language and Technology	28
2.6	Integrated Technology & Language skills	28
2.7	Research on Technology and Reading skills	29
2.8	Research on Technology and writing skills	30
2.9	Research on Technology and Assessment	30
2.10	Integrated Technology & Professional Development	31
3	Chapter 3: Research Methodology	32
3.1	Introduction	32
3.2	Methodology	32
3.3	The Participants of the Study	37
3.4	The Study Instrument	37
3.5	Procedures of the Study	41
3.6	Ethical Issues	43

List of Tables

Table	Title	Page
1	Teachers Demographic Information	45
2	Training Courses Taken by Teachers within 2 years.	47
3	Students' Demographic Information	50
4	Technology background and Smart skills	51
5	Students rating for their attitudes towards the (SLP) implementation	52
6	pre-test Scores of the English Test for the Experimental and Control Groups	53
7	post-test Scores of the English Test for the Experimental and Control Groups	54

List of Figures

Figure	Title	Page
1.1	A Diagram Explanation of Integrated Smart Learning.	19
1.2	Smart Schools Features.	20
2.1	A Snapshot of Integrated Smart Learning Applications.	23
2.2	A Snapshot photo of A Smart Class in UAE.	25
3.1	A Screenshot of the Teachers' survey	35
3.2	A Screenshot of the Software used to Create the Surveys	36
3.3	A Screenshot of the Smart Learning Gateway (students).	41
3.4	A Screenshot of the Smart Learning Gateway (teachers).	42
4.1	Teachers Rating of Their Computer Skills	46
4.2	Percent of Teachers Indicating the Positive Impacts of (SLP) on Students' Performance	48
4.3	Percent of Teachers Indicating the Negative Impacts of (SLP) on Students' Performance	49



The Mohammed bin Rashid's Smart Learning Program (SLP) Initiative in the Ministry of Education and its impact on English language performance in Cycle2 Classes, in the United Arab Emirates (UAE).

ID: 120169

List of Appendices

	Title	Page
1	Teachers' Questionnaire	73
2	Students' Questionnaire	76
3	Students' final test	79

Chapter 1: Introduction

1.1 Introduction

Governments, policy makers and educators have all reached the context that technology based learning and teaching is becoming more and more significant and is making the process of learning and teaching effective. Information and Communication Technologies (ICT) encouraged schools and educational institutions implement various new techniques. According to Robin (2009), using ICT has made many important changes in teaching methodology that helps improve the learning methods and changes the idea of teaching.

The Smart Learning is a kind of technology-based learning or a recently developed educational implementation of technological resources and electronic tools to enhance the process of teaching and learning. In United Arab Emirates, the Mohammed bin Rashid Initiative for Smart Learning is a program that implements Information and Communication Technology (ICT) in Ministry of Education classes and is intended to cover all the governmental schools over the next five years. It produces an innovative learning setting in schools through "smart classes", supported with smart boards and provides students with a tablet PC and high-speed 4G networks. The initiative also provides teachers with modern laptops and specialized training programs to maintain the success of the project. (Smart Learning Programme SLP: literature, 2013).

Not so many countries in the Middle East area are successful in employing ICT context in governmental schools. United Arab Emirates is one of the prosperous countries that stimulated its educational system and learning process through ICT and smart learning program. Dubai government has initiated electronic learning since 2000:



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ID: 120169

"Information Technology is a top priority on the list of education objectives in the UAE in general, and in Dubai in particular, where His Highness Sheikh Mohammad Bin Rashid Al Maktoum, Vice President, Prime Minister and Ruler of Dubai, launched his own educational initiative for the schools of Dubai in the year 2000. Mohammad Bin Rashid Al Maktoum Secondary School was the first to implement this initiative, followed later by the schools of Abu Dhabi in a comprehensive plan to spread the experience among all schools in the country".(Ministry of Education, 2013)

For the purposes of developing teaching and learning, Dubai and some other cities all over the country implement smart tools and apply ICT framework for the learners in their schools. In April 2012, HH Shaikh Mohammad Bin Rashid launching the Mohammad Bin Rashid Smart Learning Initiative that aimed to develop and enhance education to meet the best standards and to be a basic element of UAE Vision 2021. The e-learning initiative is strongly related to the general electronic transformation of all government sectors and organizations (Gulf news, 2012).

The idea of presenting new environments, contexts and opportunities for learning made new thoughts for developing learning towards 'E-learning' and Smart technology (Woollard, 2011). According to Woolard (2011), the world of e learning is conquered by a lot of technical definitions, abbreviations and other new words and acronyms. It is regarded as any kind or form of teaching, tutoring or training that satisfy the needs of learners in different ages and abilities through electronic multimedia resources, internet, computers, mobiles and any other technology-based devices (Woollard, 2011). Moreover, the concept of e learning can also be defined as the ability of learner to learn in some way or type that is different from conventional or ordinary learning (Juke, 2010).

A number of researches assert the fact that many positive outcomes emerged from using technology-based learning that include: increased learner engagement, high scoring and achievement, reduced disciplinary problems (Baldwin, 1999) and moving smoothly from teacher-centered learning towards learner-centered education (Bebell, 2004; Penuel, 2006).

Baldwin (1999) stated that there are positive effects on learners' behaviors while studying at home. For example they spend more time doing their homework and school tasks than watching television. Moreover, Russell, Higgin and Bebell (2004) recognized that when learners were provided with their own PCs or laptops they used them more frequently at home for academic purposes. Many parents and learners in governmental and private schools said that it is a challenging experience to use smart learning tools and laptop technology to perform school tasks and assignments (Smart learning: literature, 2013)

Numerous reports from teachers have shown the success of the initiative and the smart learning (SLP) in its first year. Implementing the project depends mainly on the teachers' skills, knowledge and previous experience in using technology-based learning. According to Dwyer, Ringstaff and Sandholtz (1991), the implementation level of the learners' performance is strongly affected by the teachers' attitudes about teaching. Therefore, the smart learning environment and the technology-based learning will be worthless if there is less knowledge, experience and skills from teachers to be able to apply technology in their classrooms.

Many studies have focused on the significance of e-learning in learning process. However, fewer studies focus on the relationship between smart learning services in its new definition and the foreign language performance or the second language acquisition.

1.2 Research Questions

The Smart Learning project has been initiated in some classrooms worldwide. Emirati schools started to use computers and e-learning resources in teaching EFL skills for more than a decade. At the beginning of the academic year 2012/2013 some public schools started to implement Smart Learning project (SLP) in grade seven aiming to replace the teaching and learning practices in the traditional classroom with the best technological practices.

The initiative seeks to apply innovative ways of using technology-based resources to enhance the process of teaching and learning. Moreover, the project aims to provide teachers with basic procedures for integrating tablet PCs and laptops into Emirati English language classrooms. As a result, this study aims to examine the influence of using these tablet PCs, laptops and other smart tools on English language performance of 7th grade students. The study aims to find an answer for the following questions:

- To what extent is the impact of using Smart Learning Project (SLP) on English language performance?
- Do students enrolled in Smart Learning Programme in the UAE develop better EFL skills than students in normal education do?
- Should we proceed in converting our schools into smart schools?

1.3 Significance of the Study

This study is considered a kind of mixed method studies that combines quantitative and qualitative research to stand on the effect of Smart Learning programme on students' achievement in English language performance. It is expected to assist two main goals:

- To support with incorporating technology into EFL skills and performance.
- In addition, to set some recommendations for some of the technical and technological challenges in Emirati public schools.

The study in this field was chosen with the help of several motivating factors: Firstly, the urgent need for the usage of e-learning and smart technological resources in education to encounter the innovative educational changes. Secondly, the concept of Smart learning is very up-to-date and there is no evidence that previous researches concerning the Smart Learning project have been conducted, so this study may assist other educators and researchers to review the methods of learning and teaching in second language acquisition. Thirdly, the technology-based learning may be regarded

as a source of enthusiasm and motivation for Emirati learners in their new educational environments.

1.4 The Study Purpose and Objectives

The purpose of this study is to investigate how learners and teachers in cycle 2 schools make use of smart technology and smart learning resources in English classes and to what extent do they make sense about the initiative implementation in public schools. In addition, how the change in teaching and learning methodology with usage of smart learning technologies affects the scores of the learners in English language subject. The main objectives of this dissertation research are:

- To initiate a comprehensive description of the smart learning program initiative with the help of teachers and students' views towards the project in its first year of implementation.
- To analyze the students' achievements and scores in English language subject after one year of their enrollment in smart learning schools and detect any significance change in their levels in comparison with students enrolled in normal education.
- To observe and describe the teachers and learners attitudes towards the Smart Learning Program Initiative and the implementation of the project in cycle 2 schools in the ministry of education.

More specifically, according to the above-mentioned objectives the research looks for answers for the following questions:

- to what extent do teachers and learners enrolled in smart learning program initiative apply the project in English language classrooms in grade 7 cycle 2 schools, during the academic year 2012-2013 in ministry of education, United Arab Emirates?

- Are there any changes in the learners' scores that make obvious significant differences between the English language performance of the learners who are enrolled in smart learning program, and that of those who are enrolled in the traditional learning?

How does the Smart Learning program initiative contribute to better academic achievement in English language acquisition?

1.5 About the Research Design and Methodology

The study design uses the mixed method design to conduct the research. The mixed method combines both quantitative and qualitative data to enhance the results and findings of the research and help fulfil the study. Therefore, analyzing the learners' scores in tests together with teachers' questionnaire surveys and classroom observations are among the methods of data collection to conduct the study.

Creswell (2008) described another definition of the mixed method design “collecting, analyzing and “mixing” both quantitative and qualitative research and methods in a single study to understand the research problem” (Creswell & Clark 2007 in Creswell 2008, p.552).

1.6 Definition of Concepts & Terminology

As the term smart learning is very contemporary in the field of education, there has been an urgent need to define some related terms. The following technological and educational terms are commonly used in smart learning program. I defined them initially to smooth the reading the study and facilitate these terms all over the dissertation.

Technology Integration: The integration of technological resources into teaching and learning for "students' deeper understanding of complex

ID: 120169

ideas and skills to support meaningful learning". (Ashburn & Floden, 2006.p. 3).

E learning:

"E-learning is a complex construct of teaching and learning strategies, a way of organizing the curriculum and a method of teaching. It is also a learning theory identifying those aspects of knowing and understanding that relate to computers or occur as a direct result of the use of computers" (Woollard, 2011. P.2).

Web-based Learning:

"is sometimes used, as 'online learning', 'virtual classroom' and 'asynchronous learning'. Overall, these words refer to the same practice; however, different writers use other terms as if they referred to the same practice" (Mason & Rennie, 2006. P .xvi).

Distance Learning

"It is the kind of learning which -in the UK for instance - usually implies print-based learning materials plus some form of face-to-face (f 2f) or online tutoring, but which can refer to correspondence education, videoconferencing or even e-learning in other parts of the world. Whatever the technology, distance education is a method rather than a philosophy of education"(Mason & Rennie, 2006. P .xvi).

Blended Learning

"Blended or hybrid courses mix online and face-to-face (f 2f) components. In fact, courses in which there is even a minor online component (e.g. a supporting website, email access to the instructor, an online reading list) are sometimes referred to as eLearning courses. Furthermore, all courses blend a range of learning media or learning opportunities: at the most basic level, they involve thinking, reading and blending new information with existing knowledge" (Rovai and Jordan, 2004)

Constructivism

"A theory about learning which considers that learners construct knowledge for themselves. Each learner individually constructs meaning as he or she learns. ELearning is strongly associated with constructivism, as both are learner-centered rather than teacher-centered"(Mason & Rennie, 2006. P .31).

Smart Learning

"The term smart learning is fairly close to blended learning. It is becoming increasingly popular around 2000 and is now widely used in North America, the UK, Australia and some Asian developing countries' schools and in academic as well as training circles. The original and still most common meaning refers to combinations of online and face-to-face (f2f) teaching. However, other combinations of technologies, locations or pedagogical approaches are increasingly being identified as examples of smart and blended learning"

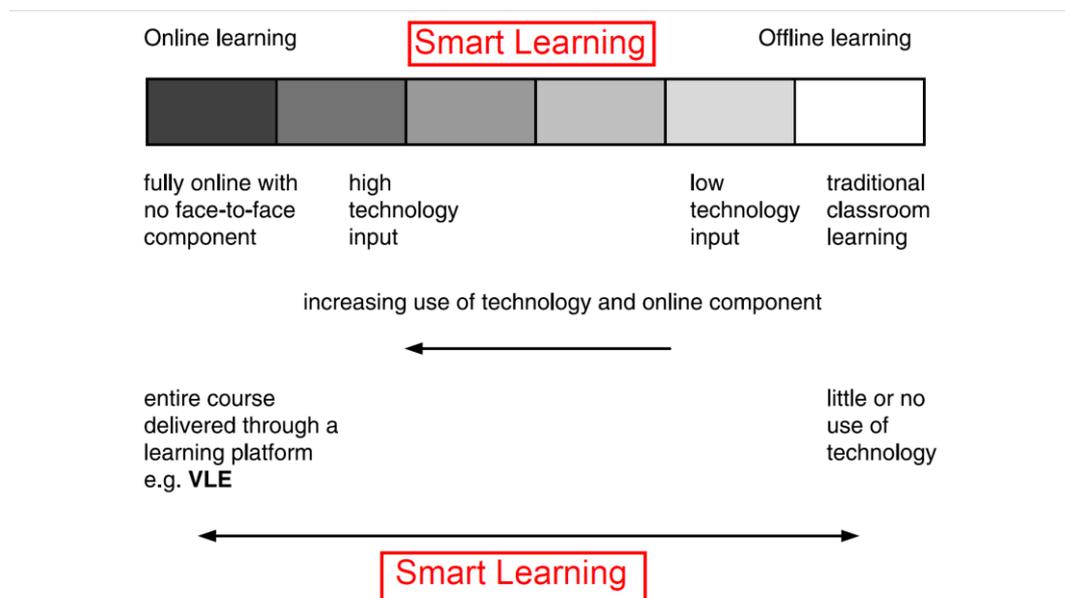


Fig.1. A Diagram Explanation of Integrated Smart Learning

Source: *ELEARNING, the Key Concepts*, Robin Mason and Frank Rennie (Mason & Rennie, 2006. P .14). (Re-drawn by Tamer Elsayed, 2014).

Smart Schools "The smart school is a learning institution that has been systemically reinvented in terms of teaching-learning practices and school management in order to prepare children for the Information Age. A smart school will evolve over time, continuously developing its professional staff, its educational resources, and its administrative capabilities. This will allow the School to adapt to changing conditions, while continuing to prepare students for life in the Information Technology Age. To function effectively, the smart school will require appropriately skilled staff, and well-designed supporting processes. Moreover, Smart school system atmosphere encourages an active thinking process. For example, a new teaching methodology must be developed to facilitate discussions, probe questions, encourages students to think and stimulate creativity" (Kushan, 2007).

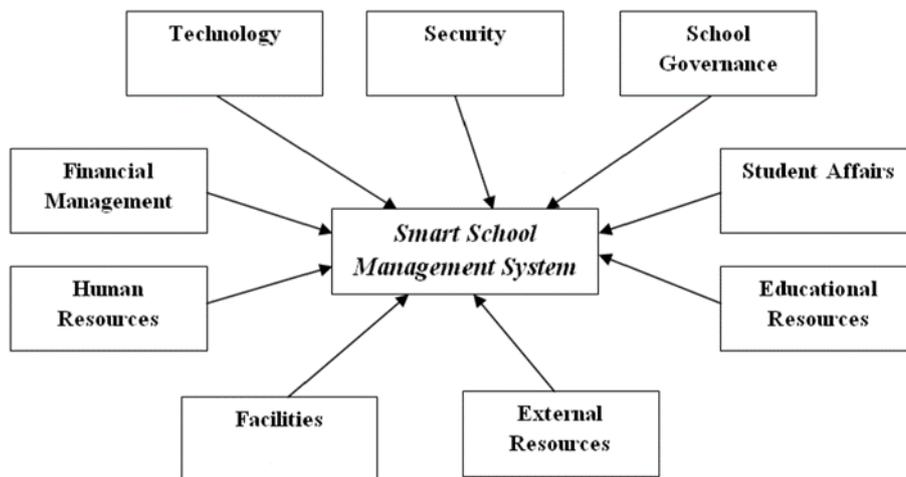


Fig. 2. Smart Schools Features

Chapter 2: Literature Review

2.1 Conventional Versus Smart Classrooms

It can be clearly seen that there are great differences in teaching and learning environments when comparing traditional classrooms to technology-based classrooms (El Sabbagh 2013, p.7). According to many recent researches (Abu Shunnar 2012; El Sabbagh 2013), the last 20 years have witnessed an incredible change in the way that employers incorporate technology into their private lives. These changes have taken time to narrow down into the academic industry, but gradually educators have recognized the necessity to adjust their teaching process to mirror the shifting environment of technology-based education (Phillips, 2010).

El Sabbagh (2013) highlighted that teachers in conventional classrooms spend too much time making classroom discussions, giving instructions, asking questions and managing their classrooms while students are listening, making notes and not motivated. On the contrary, teachers in technology-based classes and smart environments lead, guide and direct activities and discussions with students whereas students work and communicate with each other in groups using smart resources.

Abas (2003) argues that applicable usage of technology to improve learning amongst students is "major responsibility of teachers in smart schooling system. Technology is used as a tool and should be integrated into the curriculum rather than be taught separately as an end in itself. It is best learned within the context of meaningful tasks. Similarly, improving thinking and creativity among students is another bright aspect of smart school"(Abas 2003).

According to the previous view, technology- based learning and smart schools have three central ideas should be applied to the domains of professional duties of teachers. He asserts that "Significant changes in professional practice will only occur when these concepts are effectively translated into the professional development of teachers. He suggested that these three concepts include appropriate use of technology, thinking and creativity enhancement and value inculcation". In order to achieve that, the classroom teachers need to help their students decide for themselves the convenient way to learn or 'when and how' they learn.

Teachers need to know modern methodologies that include student-centered education, group work or teamwork, and interactive project-based instruction and individually independent learning. In the same way, using interactive multimedia, internet and cooperative learning skills make it easy for teachers to raise students' awareness of new technologies. Teachers can instruct their students how to develop and improve sound moral cognitive abilities to reach advanced phases of moral development. They need to incorporate tasks that emphasis on moral development that help students form values, shape a value system and improve reliable philosophy of life (Abas, 2003)

2.2 The Smart Learning World Wide

Nowadays there is a growing impact of modern technology and digital environment on youth through a marvelous usage of the internet, social media, or interactive games. With the help of this rise in digital world, education becomes more and more practical and involves high levels of physical reinforcement. Meanwhile, procedures and administrative responsibilities have enlarged the loads on educators,

supervision and administration. Smart Education facilitates such burden, releasing our teachers to emphasis on what they should do (Phillips, 2010).

According to Phillips, M (2010) Smart Schools use Education technology to improve education "through the usage of various devices such as tablets, interactive displays, interactive whiteboards, adaptive devices and many other products. The tremendous advancements in Ed Tech have led to the development of speech and recognition technology, interactive software, and the utilization of portable products".

Smart Education or technology-based learning has become widespread all over the world and new rising markets broadly outfit the requirements of educators from all levels and from different streams, national governments and international standard bodies, stakeholders for training and workforce skills. "The Smart Education and Learning Market reports are segmented by products, learning modes, and applications. Smart Education and Learning market forecasts are provided for each region from 2012 to 2017. The major vendors offering Educational products and services to the end-users are Apple, Blackboard, Samsung, Dell, HP, Jenzabar, IBM and Toshiba" (RESEARCH AND MARKETS, 2013).



Fig.2.1. A snapshot Explanation of Integrated Smart Learning Applications.

Reports published by *Research and market* (2012 & 2013), stated that The Smart learning is in great demand as revealed in the massive development of its market and products worldwide for example services, software, hardware and educational equipment. The reports emphasize on a varied range of products specially used for most applications in the field of smart education, based on their functions and performance. Because of the rise in the use of hardware, its product market is increasing such as Simulation Based Learning hardware, Interactive White Board. However, Open Source software, Learning Management Systems/Learning Content Management Systems, Mobile education application, drive the software side. Moreover, services segment added maximum to the market of technology-based learning and Smart Education. Whereas support services, Portals, Learning Service Provider, etc. are the main players in services sector. The growth in product usage increases the need for adaptive learning programs, digital learning resources and cooperative technologies for teachers and students.

One report published by *Research and market* (2012) deals with the market developments in the field of Smart Education and the progress associated with it indicated the different aspects that will drive and limit the market over 5 years from 2012 to 2017. It also classified the global market based on learning modes, products, applications and geography. According to this report, Smart Education and Learning market in the year 2011 was value \$73.8 billion dollars, and is expected to develop to about \$220.0 billion dollars by 2017:

"It is expected to have a healthy compound annual growth rate "CAGR" of 20.3% from 2012 to 2017. APAC and ROW regions are emerging market, whereas North America and EMEA both are considered as high growth markets. In 2011, North America accounted for about 60.0% of the global revenue, and is expected to grow at a CAGR of 15.2% from 2012 to 2017. EMEA and APAC are estimated to contribute \$55.5 billion and \$42.6 billion, respectively, by 2017; at a CAGR of 24.3% and 26.9%, from 2012 to 2017"(RESEARCH AND MARKETS, 2012).

Another report published by *Research and market* (2013) confirms the same findings about Smart Learning market in the range from 2013 to 2018. It segments the market based on seven types of learning modes "e.g. self-paced e-learning, virtual classrooms



The Mohammed bin Rashid's Smart Learning Program (SLP) Initiative in the Ministry of Education and its impact on English language performance in Cycle2 Classes, in the United Arab Emirates (UAE).

ID: 120169

& webinars, mobile learning, collaboration based learning, social learning, simulation based learning, and game based learning", four categories of products" e.g. hardware, software, services, and content", and four geographic areas "e.g. North America, EMEA, Asia-Pacific, and ROW region".

2.3 Smart Learning program (SLP) Initiative in the United Arab Emirates' Education

In 2012, The Smart Learning Program (SLP) initiative was launched by HH Sheikh Mohammed Bin Rashid, Vice President and Ruler of Dubai after an edict. It was presented to 14 schools in the next academic year and by 2017, the Smart Learning Program will be installed in all K-12 government school classes. According to Mohammed Gheyath, director general of the program “The main goal is to reform education in the UAE to become one of the best education systems in the world”. He also declared that “We’re not giving tablets or internet connections only; we are enhancing the entire education ecosystem, starting from the curriculum all the way through to the technology and gadgets that will help them to access the curriculum”(THE NATIONAL, 2014).



Fig.2.2 A snapshot photo of A Smart Class in the UAE.

The initiative aims to replace textbooks with tablet computers and everyone is connected to the internet. Pencils are not used so far, having been exchanged for stylus ones with which students type on their tablets or the classroom Smart Board. Moreover, students who do not able to raise their hands inside the classroom can send their questions automatically through an instant messaging system. The students can share these messages with the classroom or send it privately to the teacher. (See figure. 2.1)

Because of a series of educational applications, which can be accessed offline, students and teachers are able to take their private, school-issued tablets home. That helps the pupils read and answer the homework assignments, their teacher's lesson plans and read their textbooks electronically (THE NATIONAL, 2014).

2.4 Smart Schools and New Vision

The aim of the smart school is to completely change the Education system by focusing on individuals' development .The vision of the smart school is to use technology in a wide scale to improve the education system to children as well as achieving the aims of spreading technology awareness among workforce.

The smart school is a learning institution that is invented to prepare children to the Information Age as we live the age of globalization. The smart school needs skillful staff who has the ability to make the learners to adapt to changing conditions that need active thinking such as developing new teaching methodology which facilitates discussions and arguments that lead learners to be creative and active. (The UAE Smart School Implementation Plan, 2013)

2.4.1 Elements of Smart School Success

Halim et al., (2005) stated that there are four parameters contribute in success of smart schooling system. These four parameters are curriculum, pedagogy, assessment and teacher-learning materials. These are the most important points which contribute in the success of smart schooling as well.

2.4.2 Curriculum

The curriculum of the smart school should be overwhelming that is technological, meaningful, multicultural, socially related, open-ended and goal-focused. It should support integrated learning and allow students to make progress by their own , in addition , the smart school syllabus will care for student's needs that let them think creatively ,skillfully and innovatively .So, the curriculum should be done to meet the students' interests and achieve a balanced development, skills, appropriate use of the language and integrate knowledge (Jaafar, 2008).

2.4.3 Pedagogy

In smart schools, pedagogy seeks to make the learning process more interesting, stimulating and meaningful that include students' minds and bodies, it builds basic skills to make the students ready for challenges may face in the future. Pedagogy uses convenient strategies for learning to enhance complete development and efficiency in order to promote students' performance to catch up with different learning techniques

and strategies. There is a suitable accessibility to online resources with appropriate features of the content (BackroadConnectionsPtyLtd, 2013b).

The content is supported and promoted by very careful choosing of suitable learning resources which written appropriately online with downloadable and printable (NCVER 2012).

2.4.4 Assessment

The idea of assessment in the smart school will be totally different from the ordinary system that allows all the students with their parents and teachers to log online to follow up the performance .The assessment will be flexible and uses many criteria that help the students to evaluate and improve their performance even after graduation. This kind of assessment that helps to realize the National Philosophy of Education will give a complete picture for the students' improvement.

2.4.5 Teacher Learning Material

Students in Smart Schools need special materials as well as teachers want new designing for teaching-learning materials that are very essential for being in the mood of catching up with the latest technological change.

2.4.6. Environment

The surroundings of learning process must be motivated and supportive that encourage both students and teachers to innovate and do their tasks in a peaceful atmosphere. The smart schools must be equipped with all software programs and

teachers should be aware of the latest technology that help students to accomplish their work properly.

2.5 English Language and Technology

Technological devices such as tablets and smart phones facilitate the process of learning English anytime and anywhere. That is because it is very difficult to take the hard copy as well as books with you all the time, whereas you can follow up your materials and subjects easily. These items of technology can work as information bank that store multimedia on the internal drivers or removable memory cards or on the web that can be accessed easily anywhere anytime (Terrell, 2011).

The facility of accessible technology today such as digital cameras, mobile phones, GPS and others that make the communication with teachers simple and easy anywhere to do their tasks and be on the everlasting route of learning English and not only static in the classroom. Various devices of technology and software facilitate the delivery of the content well and get perfect feedback as well as monitoring the progress.

2.6 Integrated Technology & Language skills

The internet is a great treasure of English learning games and activities that can help learners to acquire new ideas about learning the language in an interesting way. These games of learning language are good helper for learners to get in touch with new language (Dalton, 2005).

It is very clear that technology has an important role in strengthening the comprehending of English language for both teachers and students in the primary sector. The available technology nowadays help teachers greatly inside the classroom and be supportive to the students at home or during their daily move. Technological use relies on the concept of what works in one context may not be applied in another although the creative users can see the potentials for ideas that meet the learners' needs. The continuing reduction in manufacturing of software materials and

technological items will lead to the excessive use of them in learning English that help the teachers to satisfy their 21st century students (Pereira, J. 2012).

2.7 Research on Technology and Reading Skills

The children who grew up with the technology of using computers and smart phones are easily deal with in their games and can be used in their lessons studying whereas some parents encourage their children to learn by linking ideas with some learning games. Tech-savvy teachers that grew up with the technology have stimulate children to digital play through combining computer games with educational texts that known as digital games-based learning (DGBL).

There is an activity called (IF) interactive fiction in which the reader take part in the storytelling by becoming the main hero and how he reacts and interacts during the reading process where learners think it is interesting because they can control the events and the plot that need to be solved (Pereira, 2012).

The strategy of pre-reading activities should show the key vocabulary to the learners and teaching basic set of commands and orders which can be understood by the software. Reading in pairs of IF supports oral skills to be developed where the children have a discussion of how the events of the story should be completed .Making learners read in turn one after another help to the active reading to understand completely. To be on the track of the active reading, the learners should enrich the range of vocabulary and commands that used with technology.

2.8. Research on Technology and Writing Skills

Using technology in writing helps the learners to justify their spelling that underlined in red or green by practice. In addition, there are some new programs that can predict the word that can be inserted with one touch of mouse (Motteram, 2013).

The process of writing on the computer gives the learners a perfect way to store the context that can be checked, corrected, revised and edited again to be more relevant. Today's technology of writing is urgently needed to catch up with the latest events

and current subjects that need quick executing like printing newspaper and magazines that depend totally on computer-based tasks. (Ibid, 2012. p29).

2.9. Research on Technology and Assessment

The idea of assessment now is helped greatly by using the items of technology that facilitates evaluation of students. Technology nowadays changed from the past and there are new phases of assessment such as videoing learners while their presentations or being in a classroom or in groups and showing them afterwards to evaluate them. Moreover, teachers can develop any skills to students as they can be asked to record their tasks and can write on websites to be checked online anytime (Nicholls and Brindley 2007, p22).

Assessment has changes greatly according to technology's existence in the schools and its direct effect on learning the language which is assessed all the time through years starting from the 1960s which followed by a great change through the next 50 years (Stoynoff, 2012).

The quizzes that done online can support the tasks of the students easily and anytime which assure the idea of flexibility to the assessment where tasks of students can be marked automatically that give them a perfect feedback concerning their grammar and comprehension tasks. These kinds of assessment help students to repeat their work when needed. There are many free tools online that used to help in online quizzes (Heift, 2009).

Technology is used greatly in testing and the idea of assessment than before but still most teachers use the paper tools of measuring the evaluation for the students and do not use any kind of technology which confuses the teachers due to its fast change and their incapability to catch up with this quick change (Beatty, 2010.p8).

2.10. Integrated Technology & Professional Development

Training in ICT skills is decisive in implementing ICT integration in English teaching and learning .The content that teachers can use computers which related to the materials can show either technology plays a main role on development of learning or not (Samuel and Zitun, 2007.p10).

Some teachers use their own experience in running the class and use computers and log to the web where connecting to other teachers and help each other about getting the complete usefulness through internet. These teachers build their own personal learning network (Couros, 2008). Personal learning networks (PLNs) developed out of the idea of building a personal learning environment (PLE), which is built out of a collection of web tools set up and owned by the learner. This means the learners become independent and producer to the knowledge. The focus of learning has transformed to PLNs since 2007 to reflect that most of the learning in PLE is a result of connecting to other people (Downes, 2007.p19).

Chapter 3: Research Methodology

3.1 Introduction

This study aims to investigate the effect of implementing Smart Learning Program (SLP) on English language performance of grade seven students in the ministry of education schools (MOE) in the United Arab Emirates (UAE). The experiment took the first and second terms of the academic year 2013 to 2014. The new method of teaching English language is 'the independent variable' of the study, which has been

implemented through: (1) the traditional approach in classes that are not included in the Smart learning Program initiative, and (2) the Smart-oriented approach in smart classes. The dependent variable is English language performance. However, the initiative covers all the school subjects, in this research the performance in one subject, which is "English", has been chosen as dependent variable to examine the influence of implementing the program on its performance.

3.2 Methodology

The researcher selected the mixed methods approach to conduct the results of the research. This type of mixed method researching combines the qualitative and quantitative approaches that can be referred as “collecting, analyzing and 'mixing' both quantitative and qualitative research and methods in a single study to understand the research problem” (Creswell & Clark 2007 in Creswell 2008, p.552).

According to Creswell (2002), a mixed method experimental studies try to determine whether any program has a significant effect on a study’s participants. Therefore, a mixed method experimental approach was chosen to examine the influence of implementing the Smart Learning Program on the English language performance of seventh grade students in Ministry of Education in the UAE. Moreover, this research included components of quantitative and qualitative approaches: (1) simple post-program questionnaires for both teachers and students; (2) Official final test of study participants and a review of their marks; and (3) an experimental group and a control group. Furthermore, figures, tables and statistical analysis are integrated all over the study to reinforce its findings, and insure its results.

This chapter introduces the methodology of the present study and describes the research instrument, the participants of the study, the research design, test validity and reliability, data collection, and statistical analysis.

The researcher composed quantitative and qualitative data through a post-test with a control group of twenty-four students "one class" and an experimental group of

another group of twenty-five "one class" students. While qualitatively, the semi-structured interviews with the students and teachers and close-ended questionnaires were conducted with 10 teachers and 95 students who are enrolled in the smart learning program. Applying the close-ended questionnaires to inspect some influences concerning the Smart learning program and its new way of teaching and learning and its impact on the performance of the learners. These questionnaires encourage the students and teachers to provide an answer for the preset response options thus proving useful while comparing responses. "These questionnaires piloted within the selected subjects permit the researcher maintain clarity and effectiveness of the research phenomena under study. Both ways of collecting databases through the mixed approach are expected to focus on the advantages of both the qualitative and quantitative research methods for a better understanding of the impact of using new programs on the learning process" (Lichtman 2010).

According to Creswell (2008), the mixed method also supports maintain the reliability and validity of the research results "The quantitative research allows the researcher to collect from a wider sample size with greater generalization of its results, while the qualitative research provides a good chance to gather deeper information about subjects, settings or phenomena".

About the close relationship between qualitative and quantitative approaches, Long (2000) asserts that majority of the quantitative research does involve qualitative decisions while qualitative approaches also often lead to a quantitative analysis. Therefore, with the mixed method that emerges from such studies enhances perceptions into the relationship of the Smart Learning Program and learning achievement and states the impact on the success of teaching and learning process.

McMillan & Schumacher (2010) stated that the purpose for this design is that "it assures the research results by focusing on the strength of one form of data collection while easing the weakness of the other. The triangulation design enriches the credibility of the study, and it often simplifies the difficulty in merging and comparing different databases". Therefore, insufficient outcomes can lead to further gathering of more data or the gathered databases may need to be reexamined to reach at trusted results.

The estimation of the product or result for the implementation of the Smart Learning program initiative was built on a mixed method that contained a quantitative and qualitative case study methodology. It involved 10 teachers and 95 students as an experimented group who participated in the program implementation, while the control group was chosen from another school that has not implementing the program initiative yet. To collect data from the teachers and students the researcher used two sets of questionnaires.

The researcher analyzed the data using Quest, which is constructed on "Likert five-point scale". The Likert scale is an interactive computer analysis software using the '*Item Response Theory*' (Hambleton & Swaminathan, 1985) and Rasch's '*Partial Credit Model*' (Wright & Masters, 1992). Quest analyses mostly concern the analysis of "case details and item details as well as variable maps generated by the program from the fixed-response data of the students and the teachers". Qualitative data from open-ended questionnaire items and interviews were used to triangulate findings from quantitative data.

3.2.1 About the Likert Scale analysis:

The "Likert Scale" is a common type of rating scale used when a person or a researcher is trying to measure someone's behaviors or attitudes. A "Likert scale" is one of the most widespread (and consistent) ways to do surveys or questionnaires. A Likert scale uses answer choices that alternating from one positive side to another negative one (for example, Strongly Agree to Strongly Disagree) to measure the attitudes and behaviors of a common group of people.

In contrast with a simple "yes / no" question, a Likert scale permits the participants to choose from multiple degrees of opinion. This can be mainly supportive for sensitive or challenging areas or subject matter. Taking a range of answers can also help the user or participant to more simply identifications for areas of improvement. The likely user or researcher can send out his/her questionnaire to recognize the levels of efficiency of the course or the program he/she is teaching, or gathering students' attitudes towards the quality of its content. (Look at figure 3.1)

The Mohammed bin Rashid's Smart Learning Program (SLP) Initiative in the Ministry of Education and its impact on English language performance in Cycle2 Classes, in the United Arab Emirates (UAE).

ID: 120169

Smart Learning Survey

1. 1. What is your gender?

male

female

2. Which grades do you teach?

Six

Seven

Eight

Nine

3. What is your level of education?

Secondary school

Diploma

Bachelor Degree

Master Degree or higher

4. How long is your experience?

Less than 5 years

6 - 10

11 - 15

16 - 20

More than 20 years

Done

Powered by SurveyMonkey

Figure 3.1 A screenshot of the Teachers' Survey

3.2.2 About the Software Used in the Study

"Survey Monkey" is one of the most popular world's leading online survey platforms, which used by more than two million survey senders every day. "SurveyMonkey" has developed the way people provide and receive feedback, making it manageable, easy and accessible for everyone. This establishment was founded in 1999 and helped so many people make better judgments. Moreover, the company has constructed technology based on over 15 years of experience in survey methodology and web development. Researchers and users from every fields use this

The Mohammed bin Rashid's Smart Learning Program (SLP) Initiative in the Ministry of Education and its impact on English language performance in Cycle2 Classes, in the United Arab Emirates (UAE).

ID: 120169

online survey platform, for example, academic institutions, schools, organizations and even soccer leagues everywhere. (Look at figure 3.2)

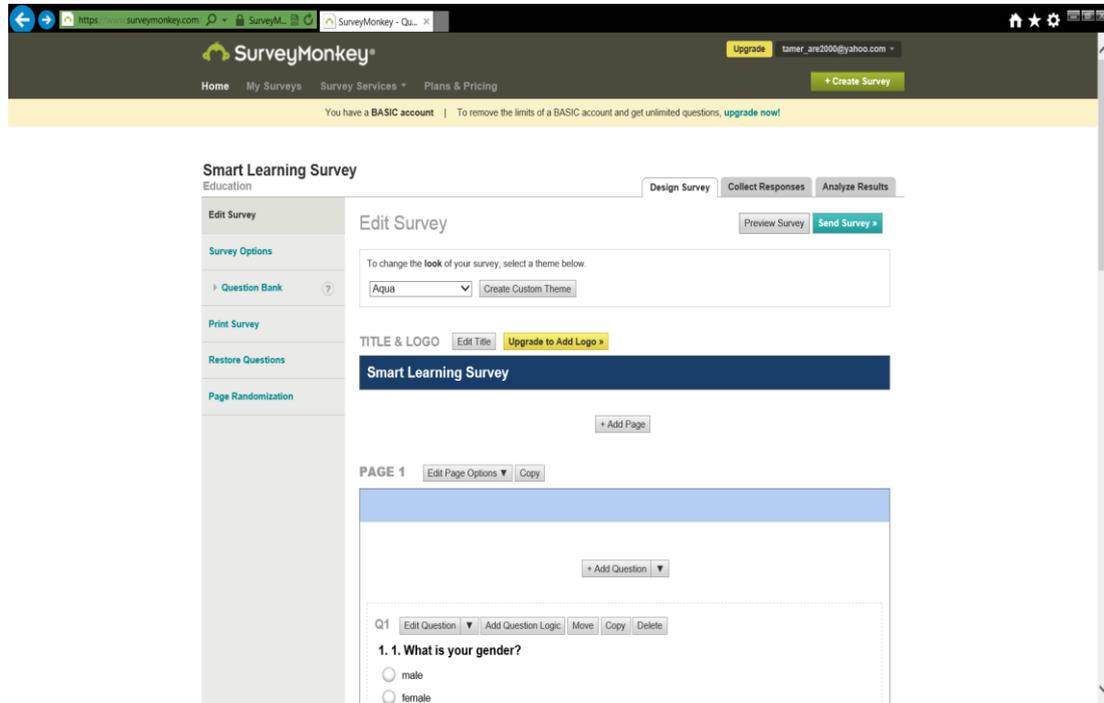


Figure 3.2 A screenshot of the Software Used to Create the Study Surveys

3.3 The Participants of the Study

The researcher selected the participants of the study from grade seven students. For the questionnaires the researcher selected 95 students who enrolled in the Smart Learning Program in Abujandal basic education school, 24 of them "one class" was chosen for reviewing their marks, while the controlled group contained 24 students "one class" from Zayd Bin Al khallab basic education school that has not implemented the Smart Learning initiative yet. Therefore, the study covered approximately "one class" in a controlled group and another "one class" in an

experimental group in cycle2 schools. The subjects were chosen because of the availability of assessment in semester two in this region. The test marks review and the questionnaires of teachers and students for the study was conducted over the first and second term, during 2013 / 2014 academic year.

Abujandal basic education school in Fujairah Educational zone was considered an ideal school to conduct this study because it comprises a sufficient number of seventh grade classes that allows for the opportunity of random selection. Each class contains about twenty-four students and the study covered four classes for the surveys and one class for the marks review. In addition, the school was equipped with Smart Learning resources that contain Smart Boards, Tablets with software packages, and Networks that are linked to the Internet, which, consequently, offered excellent conditions for the researcher to perform the study easily and smoothly. The control group, which is "one class" in Zayd Bin Alkhalab basic education school was exposed to only traditional educational system whereas the experimental group was exposed to Smart Learning Program system.

3.4 The Study Instrument

In order to conduct the research and explore the students' achievement in English language after implementing the initiative of Smart Learning program, the researcher collected the marks of English test marks for semester two. This evaluation instrument, which was used with questionnaires, is highly effective in this research as it provided a real understanding of the influence of the program initiative on the levels of the students and how their academic achievement was affected by using Smart learning program.

The marks of the participants were collected after conducting An English exam for the second semester after two semesters of implementing the program. The papers and specifications of the exam were approved by the Ministry of Education, which gave more reliability and validity for the research instrument and tools.

3.4.1 The English language Achievement Test

The English language assessment used in this research was designed according to the test objectives and sub-skills that are incorporated in the specifications of test writing

and based upon the ministry of education textbook and syllabus. There were no instructions or introduction for the exam at the beginning of the test. The written test consisted of reading, vocabulary, grammar and writing skills and there are two other sub-tests for listening and speaking to assess all the skills performance in English language. The overall score of the written and oral tests was out of 100 marks for semester two marks. (See Appendix B.).

3.4.1.1 Test Administration

So as to determine the effects of Smart Learning Program on students' achievement and performance in learning English language, approved tests were done and marks were reviewed to the experimental and control groups at the end of semester two. The study used the ministry test for both groups as a post-test for all participants. The pre-test was at the beginning of the school year for both grades as a diagnostic test in English language, while the post-test was set to each student in the experimental and control groups after two semesters of implementing the Smart learning program in the study. The pre and post-tests were compared and t-test scores were analyzed using a software package SPSS 11.00 to see whether there was a significance in the differences or not.

3.4.1.2 Accessibility

The study researcher is currently working at Abu Jandal basic education school, a governmental school in the Ministry of Education, Fujairah educational zone, UAE. Accordingly having access to the grade seven classes and founding needed links with students, teachers and schools administrations did not take more time or effort. Moreover, the researcher had the advantage of being accepted by both students and teachers who were likely accepting sharing certain test papers and marks reviews. In addition, they participated in the questionnaires, applied the investigated research with its appropriate procedures, and felt an ease to exchanged information, which resulted in good awareness of the study objectives.

3.4.1.3 Test Validity

The validity of the test was approved by the ministry of education as a team of experienced English language teachers wrote it and then specialists reviewed the test content. The teachers were asked to formulate the content of the exam according to the test specifications, the applicability of the questions to content, and the suitability to goals and objectives of the English language syllabus. For the purposes of the study, the researcher put the remarks of the students and teachers, their notes and suggestions, into consideration.

3.4.1.4 Test Reliability

The reliability of the English language test was obtained through following the specifications and steps of formulating tests according to the ministry of education assessment policy. These specifications were applied on the participants of the research as a population of the study. Following the ministry of education criteria ensures that the test instructions, content, form and allowed time proved suitable. The test specifications cover the following aspects: questions' numbers and sequence, quality and quantity of the test items, the subject objectives and the syllabus content.

3.4 The Study Questionnaires

The researcher employed semi-structured questionnaires to explore teachers and students' satisfaction and supposed learning outcomes after their participation in the Smart Learning Program. The teachers' questionnaire contained 13 questions, and involved a mixture of closed and open-ended questions. The questionnaire was divided into three parts; Section one: Demographic information, section two: Technology Background & Smart skills, while section three: Smart Resources implementation. On the other hand, the students' questionnaire contained 16 questions, and involved a mixture of closed and open-ended questions as well. The students' questionnaire was divided into three parts; Section one: Demographic

information, section two: Technology Background & Smart skills, while section three: Smart Resources implementation. However, few questions were designed, requiring a “yes” or “no” response from the participant, other questions were open-ended, permitting the participant to provide his or her attitude, or explain his or her response.

The questionnaire asked the participants to classify age, gender, university degree and years of experience, while it did not ask the participants to write their names. This procedure encouraged complete disclosure of any undesirable opinions, without the anxiety of judgment or unacceptance. Moreover, students were given space to write any other answers if their opinions were not correctly reflected in the options provided. The definitions for Smart Learning Program initiative was clear for both teachers and students, as they had been working in the project for about two semesters.

In order to set up a guideline for analyzing the set of questions in the questionnaire, participants first write if they have earlier participated in a Smart learning program or any other technology-based course. To obtain appropriate information about why students and teachers did or did not like smart learning, the questionnaires covered investigation about the benefits and drawbacks of smart learning. In the same time, it compared the program to the traditional education and the benefits and drawbacks of traditional learning and how to learn English with modern methods of learning. The questions also asked for the opinions regarding the future of

Smart Learning, and additional participants' suggestions, comments and observations.

The teachers and students enrolled in the smart learning course in grade seven in the experimental group were required to finish the questionnaire before they depart, in the final week of semester two. The questionnaires were offered in English language, and students and teachers of other subjects were asked to answer in English. They were taught that if they found difficulty or had an observation or a comment that they might not communicate effectively in English, they possibly could use Arabic, and it would be transformed to English later. The participants were permitted up to 40 minutes to finish the questionnaires. The questionnaires were collected by the researcher upon completion, and evaluated and analyzed.

3.5 Procedures of the Study

The next stages were tracked chronologically while conducting the experiment.

1. An official agreement was taken from the two schools' administrations.
2. The researcher informed the teachers about the experiment and told them about the program questionnaires and the most suitable methods for assessing students to conduct and complete the study.
3. A check on the students and teachers smart tools (tablets, smart boards and networks) was done to be assured that all learning resources could be operating properly. All the teachers' PCs and students' tablets were connected to the Internet and the approved programs software like (Smart Learning Gateway, Smart author, Lesson Planner and other programs of the smart board) were installed on each tablet and laptop. (Look at Figure 3.3 and Figure 3.4)

The Mohammed bin Rashid's Smart Learning Program (SLP) Initiative in the Ministry of Education and its impact on English language performance in Cycle2 Classes, in the United Arab Emirates (UAE).

ID: 120169



Figure 3.3 A screenshot of the Smart Learning Gateway (Students).

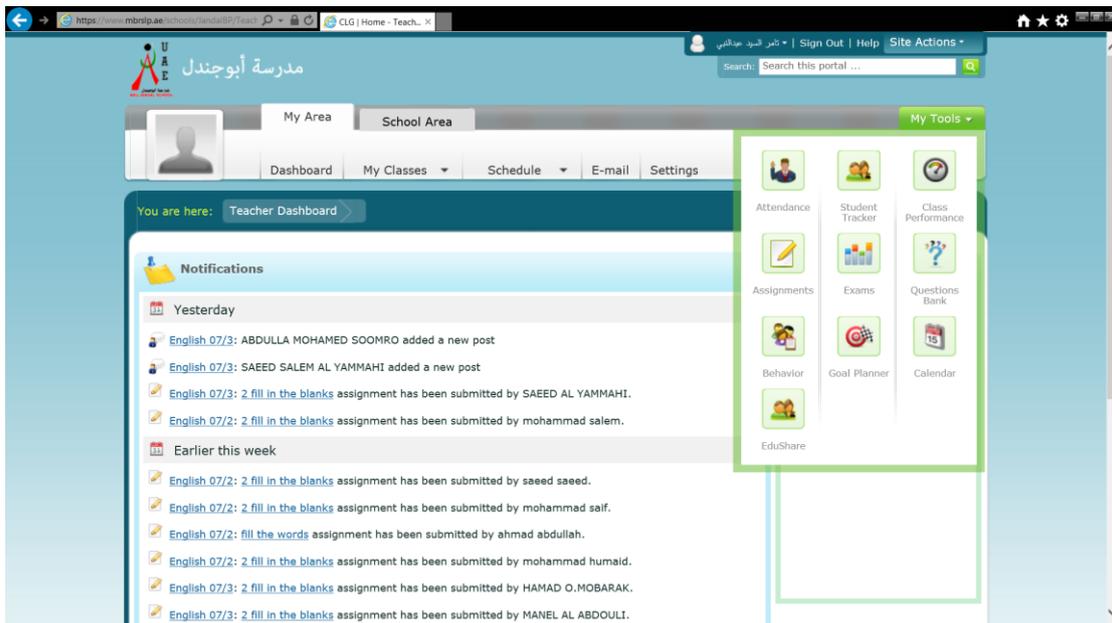


Figure 3.4 A screenshot of the Smart Learning Gateway (Teachers).

4. The installation of the needed software was done by a permanent technician recruited by the program authorities and found in each school for following up. The teachers taught the experimental group without telling them that they

were being observed and investigated. Again, the research questionnaires and marks review took place at the end of the second semester of the academic year 2013 to 2014.

5. An introduction about the study and how to fill in the questionnaires was given by the researcher to explain the purpose of the study for the experimental group to assure them of the privacy of the new method by which they would learn the English language skill.
6. During the period of the research, the experimental group was taught the school subjects and the English language using the Smart Learning Program, whereas the control group was in another school that still taught by using the traditional ways of teaching and learning.
7. The research surveys and questionnaires were initially developed by the researcher using common software and websites that are professional in doing those kinds of study investigations. The surveys asked a sample group of seventh grade teachers of different subjects to describe and to explain the strategies, processes, methods, procedures and techniques they used in their smart classes in order to ensure the accuracy of information about the traditional procedures and techniques used in these classes.
8. The test for the end of semester two was written and developed by the assessment division and supervisors in the Ministry of Education, Al Fujairah Educational Zone and modified and revised many times before approval was granted by the Assessment and Curriculum Department at Al Fujairah Educational Zone (See Appendix C.).

3.6 Ethical Issues

Ethical matters have been given great considerations during the research (Creswell 2008). The research expanded into three groups "the teachers, the students' experimental group and the control group" with deep esteem and respect to the participants and the schools in which the research study was held. The researcher made sure that the entire investigation was conducted in a convincing and reasonable way. Before performing the questionnaires, surveys, and the analysis of test marks, a

formal permission from the participants and schools' administrations was obtained. Moreover, the permission assured that the participants were all volunteers with the option to leave the investigation if they had faced any unease (Phye 2001). The purpose of the study was explained to the participants and the research results and analysis were available for sharing among students and teachers as well as the schools authorities (Bell 1999). The researcher intended to choose just the participants who would agree to join the study and share their results, however, fortunately, all of them agreed to participate in the study. Furthermore, ambiguity of the participants was extremely confident and privacy of the data was considerably maintained.

Meanwhile, the nature of this research was explained to the researcher's employer. Accordingly, the researcher obtained an official agreement to conduct the study inside the schools setting and during the workdays. The outline of the entire study was submitted by the school administrations to the above authorities to get official permission for conducting and completing the research.

3.7 Data Collection

The teachers of the Smart Learning Program and the experimental group of students only were asked to participate in the questionnaires (See Appendices A and B.). At the end of semester two, the experimental group in Abujandal School and the control group in Zayd Bin Al Khattab School were doing the final exam as usual and the marks review of both groups were collected, calculated and analyzed to investigate the differences in English language performance between the two groups.

The researcher cooperated with two English language teachers who were enrolled in the master degree in the British University in Dubai to carry out and complete the evaluation of the students and teachers' written questionnaires. All the written surveys were reviewed more than once and revised many times when required.

3.8 Data Analysis

All over the research, *the independent variable* is the method of teaching, which uses innovative way of teaching and learning using the smart resources in a Smart Learning Program as a new level, and the traditional way of teaching as a second level. The English language performance is *the dependent variable*. The statistical

analyses was conducted in this study to describe the properties of all of the variables involved and to calculate the *means* and the *standard deviations* of students' achievements and scores in their written tests in English language subject. This *Analysis* was used to examine if there is significant differences in the English language performance of the learners who are enrolled in the Smart Learning program to learn through modern way of teaching and learning, and that of those who are enrolled in the traditional education.

Chapter 4: Results and Discussions

Chapter Four discusses how the Smart learning program initiative was implemented in the first year of its initiation in Abu Jandal Basic education school. It discusses the program impact on both teachers and students, and their perceptions towards the initiative. It also evaluates the impact of implementing the Smart Learning Program (SLP) on students' performance in English language skills.

4.1 Teachers' Surveys

4.1.1 Teachers Demographic Information

Ten teachers completed the teachers' questionnaire surveys, six (60%) of them were males and four (40%) females in Basic Education Schools in Al Fujairah Educational Zone, UAE. All the teachers were teaching English language subject, and (8) were teaching grade seventh whereas (2) were teaching seventh and eighth grades. One teacher (10%) has more than 20 years experience in teaching, two teachers (20%)

have sixteen to twenty, five teachers (50%) have eleven to fifteen, two teachers (20%) have six to ten and no one (0%) has less than five years. (Look at Table 4.1)

Number	Gender	Grade	Certification	Experience
1	Male	Seventh	Bachelor	20 or more
2	Male	Seventh	Bachelor	16 - 20
3	Male	Seventh	Bachelor	11- 15
4	Male	Seventh	Bachelor	11- 15
5	Male	Seventh	Bachelor	16 - 20
6	Male	Seventh	Master	11- 15
7	Female	Seventh	Bachelor	11- 15
8	Female	Seventh	Bachelor	6 - 10
9	Female	Seventh & eighth	Bachelor	6 - 10
10	Female	Seventh & eighth	Bachelor	11- 15

Table 4.1: Teachers Demographic Information

4.1.2 Teachers Technology Background & Smart skills

In this section, the researcher stated three main factors influence the teachers' level in applying smart learning objectives: teachers' technology background, professional development courses and their thoughts of smart learning impact on students' performance.

4.1.2.1 Technology Background

The technology background is the main factor that influences the level of implementing the Smart learning program inside the classroom environment. Eight teachers (80%) evaluated themselves as advanced level users of technology, and two only (20%) evaluated themselves as intermediate users, whereas none of the teachers considered him/herself as a beginner user of technology. (Look at Figure 4.1)

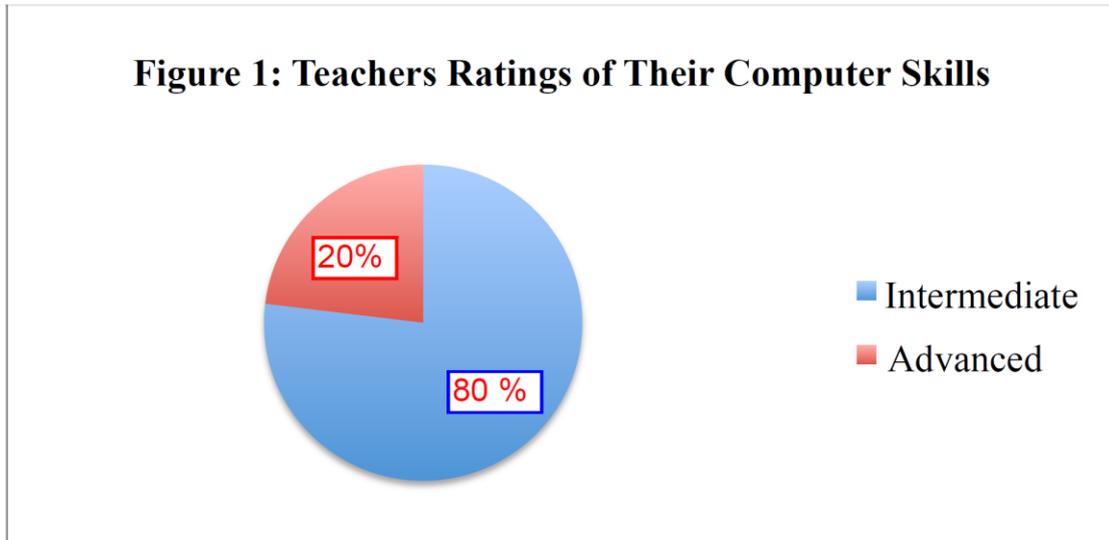


Figure 4.1: Teachers Rating of Their Technology Skills.

4.1.2.2 Professional Development

The teachers' attitudes and thoughts of smart technology is strongly influenced by the amount of training and professional development they undertake. All the teachers (100%) declared that they participated in a smart learning course at the beginning of the school year 2013/2014 for 5 days, even those who teach smart learning program for the second year "three teachers only out of the ten participants" retook the course. Moreover, the program authorities offer a one-hour continuous training for the teachers every week inside their schools to facilitate any difficulties while implementing the smart learning program. (Look at Table. 4.2)

Teacher	Kind of Training "within 2 years"
Teacher (1)	Windows 8, smart reader, smart author, lesson planner, smart board.
Teacher (2)	ICDL, Windows 8, smart reader, smart author, lesson planner, smart board, photo shop.
Teacher (3)	Windows 8, smart reader, smart author, lesson planner, smart board.
Teacher (4)	Windows 8, smart reader, smart author, lesson planner, smart

	board.
Teacher (5)	Windows 8, smart reader, smart author, lesson planner, smart board.
Teacher (6)	ICDL, Windows 8, smart reader, smart author, lesson planner, smart board, IC3.
Teacher (7)	Windows 8, smart reader, smart author, lesson planner, smart board.
Teacher (8)	Windows 8, smart reader, smart author, lesson planner, smart board.
Teacher (9)	ICDL, Windows 8, smart reader, smart author, lesson planner, smart board, IC3, interactive white board.
Teacher (10)	Windows 8, smart reader, smart author, lesson planner, smart board.

Table 4.2 Training Courses Taken by Smart Learning Teachers (within 2 years).

4.1.2.3 Teachers' thoughts of the impact of (SLP) on "Ss" performance

A) Positive Impacts:

The smart learning program initiative has a wonderful impression on (100%) of the teachers as they all declared that it had a positive impact on students' performance and learning achievement. (Look at Figure 4.2)

ID: 120169

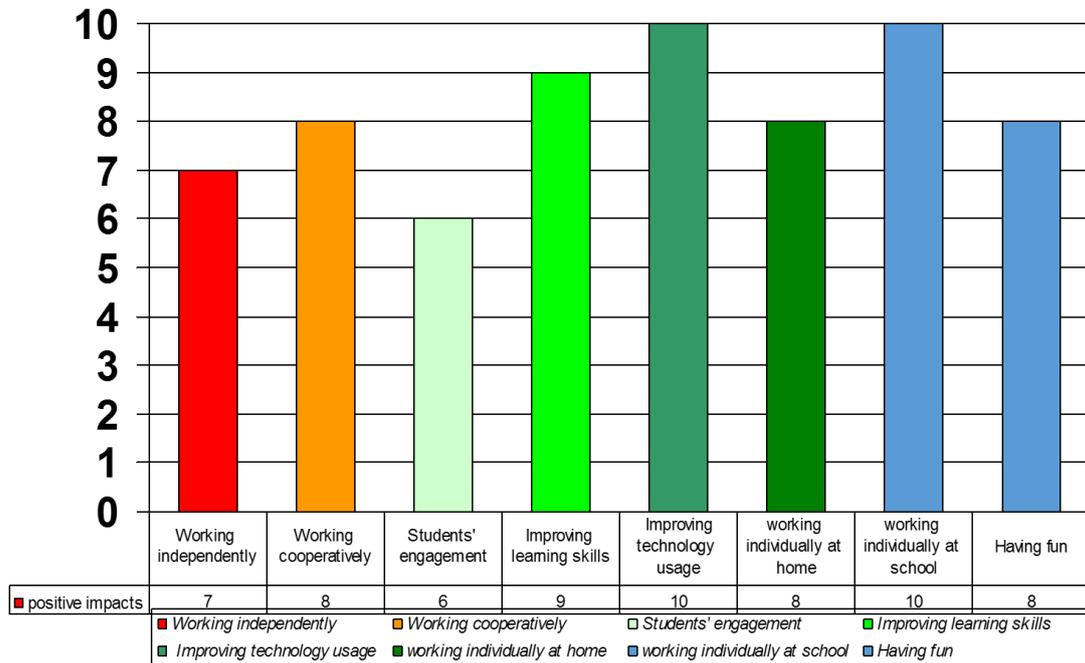


Figure 4.2: Percent of Teachers Indicating the Positive Impacts of (SLP) on Students' Performance

B) Negative Impacts:

All teachers stated that the smart learning program has positive impacts on the learning process; however, three teachers (30%) only indicated that there were negative impacts. The most frequent negatives were:

- 1 – Technical problems: in spite of there is an instructional technician in every school that implement the initiative, there have been still problems in applying the software and electronic content.
- 2 – Plenty of applications: teachers complained of the number of applications and programs that they have to work on every day.
- 3 - Technology integration: for example, charging the tablets' batteries, accessing undesired applications, playing online games or accessing inappropriate websites.
- 4 - Classroom management: teachers reported that they should focus upon managing the class and they asked for further training on how to keep the classroom managed, controlled and quiet.
- 5 – The internet access: the internet speed was not at the desired level as more than one teacher reported that it was not so much reliable. (Look at Figure 4.3)

The Mohammed bin Rashid's Smart Learning Program (SLP) Initiative in the Ministry of Education and its impact on English language performance in Cycle2 Classes, in the United Arab Emirates (UAE).

ID: 120169

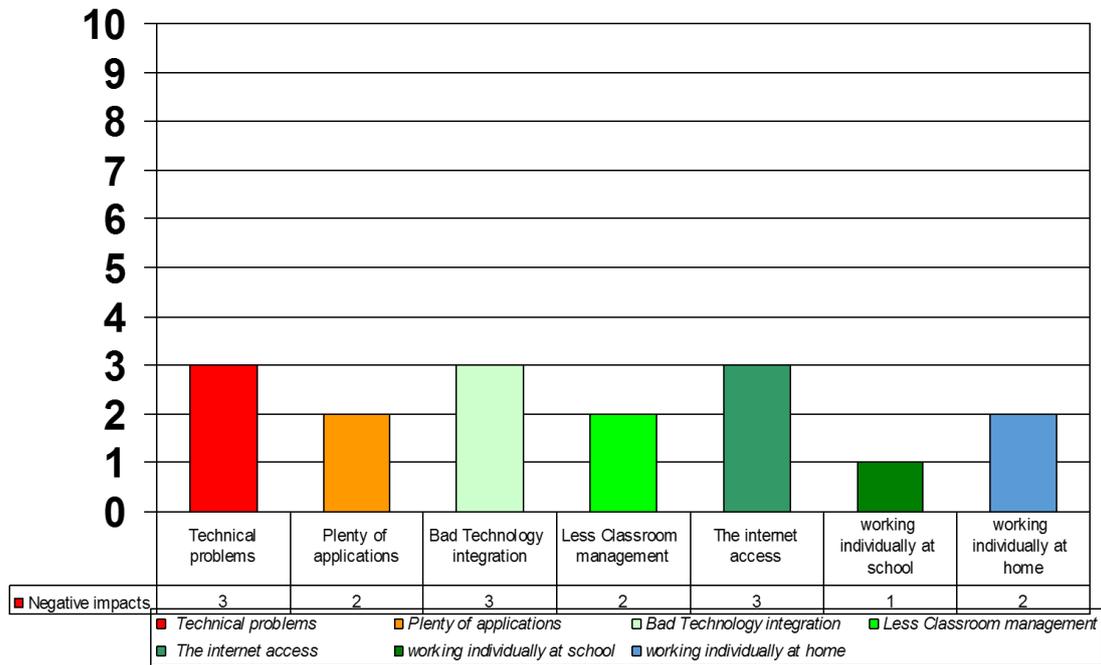


Figure 4.3: The Negative Impacts of (SLP) on Students' Performance

4.1.3 Smart Resources Implementation

Most participants reported that they generally had a positive experience with smart learning devices implementation. They stated that using smart resources was inspiring for them and for their students.

4.2 Students' Surveys

4.2.1 Students' Demographic Information

Exactly (95) male students participated in the survey. Their demographic information responses indicated that they all were in grade (7) and they were enrolled in the

program for two semesters, during the academic year 2013/2014. Their level in English language subject varied between excellent to fair level. (Look at Table 4.3)

Question	Options	Responses
1. What is your gender?	Male	95 (100%)
	Female	0 (0%)
2. In which grades, are you now?	Sixth	0 (0%)
	Seventh	95 (100%)
	Eighth	0 (0%)
	Ninth	0 (0%)
3. What is your previous grade in English subject?	Excellent	8 (8.4%)
	Very good	22 (23.1)
	Good	39 (41%)
	Fair	26 (27.3)
4. How long have you been in Smart Learning Program?	One term	0 (0%)
	Two terms	95 (100%)
	One year	0 (0%)
	Two year	0 (0%)

Table 4.3 Students' Demographic Information

4.2.2 Technology Background & Smart skills

According to the survey results, the students' previous technology background and their computer skills strongly influenced their performance in smart learning program. Many students (66.3%) reported that their level in technology usage is intermediate, and some students (23.1%) reported beginner users, while few students (10.5%) stated that they were advanced technology users. Moreover, most students (80%) had private PC or tablet at home, and they all (100%) have taken a tablet PC from the Smart Learning Program Initiative. The overall perception of students was positive and they reported encouraging attitudes towards the impact of using Smart learning on their

learning process, especially in working cooperatively (83.1%), working alone at home (92.6%) and having fun (95.9) while (88.4%) reported zero negative impacts.

(Look at Table. 4.4)

Question	Options	Responses
5. What is your level of using Tablets and PCs?	Beginner	22 (23.1%)
	Intermediate	63 (66.3%)
	Advanced	10 (10.5%)
6. Do you have a private PC or Tablet with internet access at home?	Yes	76 (80%)
	No	19 (20%)
7. Did you get a tablet PC from Smart learning program?	Yes	95 (100%)
	No	0(0%)
8. Are you permitted to take your tablet home?	Yes	95 (100%)
	No	0 (0%)
9. What are the areas do you think the smart learning program has a positive impact on you? (you can check more than one)	Group work	65(68.4%)
	Working independently	73(76.8%)
	Working cooperatively	79(83.1%)
	Improving learning skills	56(58.9%)
	Improving technology usage	61(64.2%)
	Working individually at home	88(92.6%)
	Entertainment and having fun	91(95.9%)
10. Do you think there are negative impacts from using smart learning program?	Yes	11(11.5%)
	No	84(88.4%)

Table 4.4 Technology Background and Smart Skills

4.2.3 Smart Resources Implementation

The students were asked to indicate whether they agree or disagree with the benefits of Smart Learning program in each of the following statements to state the percentage of their satisfaction towards the program implementation. The average rating of each statement was ranging using a scale from 1 (strongly agree) to 5 (strongly disagree) for the students responses as shown in Table 4.5.

The over all rating indicated a positive attitudes and strong satisfaction towards the program implementation in classrooms. (Look at Table 4.5)

The statement	Average rating
I can access it in school or at home from my Tablet PC.	1.6
I can communicate with the teacher from my computer.	1.7
I can communicate with the class from my computer.	1.9
The information is always available on the Internet	2.1
I cannot lose my book.	2
Materials and projects cost less on the Internet.	2.9
I can use the tools and functions on the smart learning gateway	1.6
I learn best in a smart classroom environment.	1.2
It is interactive.	1.8
It is fun.	1.1

Table 4.5: Students Rating for Their Attitudes Towards the (SLP) Implementation

4.3 Findings from Students Marks Review

The majority of the participants' responses "teachers and students" for the surveys questions stated that the implementation of the Smart Learning Program (SLP) in classes has had positive effects and enhanced their achievement inside classrooms.

To emphasize these findings, a review of students' marks was done to determine the effects of Smart Learning Program on students' achievement and performance in learning English language, approved tests were done and marks were reviewed to an experimental group of 24 students and a control groups of the same number of students at the end of semester two. The study used the ministry test for both groups as a post-test for all participants. The pre-test was at the beginning of the school year for both grades as a "diagnostic test" in English language, while the post-test was set to each student in the experimental and control groups after two semesters of implementing the Smart learning program in the study. The pre and post-tests were compared and t-test scores were analyzed using a software package SPSS 11.00 to see whether there was a significance in the differences or not. (Look at Table 4.5).

Groups	No. of students	Mean scores	Ss	Standard Deviation	t	P
Experimental	24	15.11	4.51	35	0.60	0.56
Control	24	14.21	4.48			

P>.05 (insignificant)

Table 4.6: Pre-test Scores of the English Test for the Experimental and Control Groups.

As shown from Table 4.5, the mean scores of the Experimental group and the control group are very close to each other (15.11 and 14.21). There is no significant differences between the mean scores, which indicated that the level of students was almost similar to each other at the beginning of the school year.

After two semesters of implementing the Smart Learning Program on the experimental group, a post-test was done and the results of students were collected and analyzed. The mean scores, standard deviation and t-test were calculated. (Look at Table 4.6)

Groups	No. of students	Mean scores	Ss	Standard Deviation	t	P
Experimental	24	20.11	4.51	35	2.39	0.03

Control	24	14.92	4.48			
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P>.05 (insignificant)

Table 4.7: post-test Scores of the English Test for the Experimental and Control Groups

According to Table 4.6, the mean scores of the Experimental group is (20.11), whereas the mean score of the control group is (14.92), the P value is lower than (.05) and the t score is (2.39). There is a significant difference between the two mean scores, which indicated that the level of the students in the Experimental group was positively influenced by implementing the Smart Learning Program (SLP) in Abu Jandal Basic Education School, Al Fujairah Zone, United Arab Emirates.

Chapter 5: Implications and conclusions

5.1 Implications of the Study

The aim for this research was to examine teachers and students' satisfaction of the Smart Learning Program initiative in the UAE and its innovative learning environments. Among many applications for the program, an important basic

potential application of the study is to recognize probable modifications of existing procedures in order to develop the promising learning outcomes for United Arab Emirates' students. The examination of the data analysis showed that the general teachers and students' perception of the program and Smart learning in general is encouraging. Moreover, students and teachers' perception of the program applications, software and educational content increased their awareness of the Smart Learning Environments. A main significant finding is the importance of strong and obvious communication and structure of the Smart learning environment. These are some certain conclusions as investigated from the research results:

- Teachers and Students are strongly concerned with the idea of learning through modern technology-based learning and accessing data without books or papers. However, they fear of losing their homework or assignments due to tablet/internet problems.
- Teachers and Students are extremely concerned with access to electronic books. They displayed strong desire for smart learning due to the simplicity of the access to learning resources and educational materials.
- Teachers urgently want to have extra immediate professional courses to be able to use, manage and control the tools and equipment of the Smart Learning program.
- Students preferred to way they take instant feedback of their homework and assignments.
- Teachers showed reasonable unease over the ability to manage classroom technology and SMART devices.

In fact, the main aim of this study is to investigate both teachers and students awareness of Smart learning, in grade seven setting, in the United Arab Emirates. The intention is to examine the trend of generalizing the program initiative all over the schools of the Ministry of Education. Due to the some limitations, like the relatively small number of participants, this investigation concentrates on Smart learning in English subject only, rather than Smart learning in all school subjects. As a result, the

observations are then relatively limited, but to somehow significant, representing the practice and awareness of Smart learning for basic education in seventh grade setting, in the United Arab Emirates.

In conclusion, the findings of the results of this research indicate that students who use smart resources, tools and applications in the Smart Learning Program environment scored higher marks in English subject than those who learn the same subject in the classical education. It can be estimated that learners could benefit from the technology-based method of learning English subject to enhance their language skills. Using their tablets at home is an advantage in the time and place, for example, to do their homework or assignments. Thus, it may be another advantage if teachers engaged their students in more exercise in how to use common software like "MS word, PowerPoint and Internet Explorer" for enhancing their computer skills at home. Furthermore, it is recommended that teachers and students develop their researching skills from the qualified well-known websites.

5.2 Limitations

Throughout the development of this research, some factors might have taken part in potential limitations in the study. The technological experience and the computer skills were of the most noticeable limitations from some teachers and students. In spite of most teachers and students had a previous experience with the technological

devices and spend a significant time in front of computers at home; this factor was considered an important factor, which could potentially influence the final analysis of the data. In addition, the small sample size may limit the generalizations of research result.

In addition to the smart environment in learning, there could be other factors that might affect the desired changes in students' outcomes, which could make significant changes between the experimental group and the control group. These other factors include educational practices, parents, school technical and administrative support, curriculum and participants' technology awareness. Moreover, the method that was applied in this research to assess the marks and results of the students was a traditional one, which can not be considered an exact evaluation of students' achievement in learning English subject.

Finally, this research was conducted on seventh grade in basic education, Emirati students at Abujandal basic education school in Al Fujairah, the United Arab Emirates (UAE), during the academic year 2013 to 2014. Consequently, the findings and results cannot be taken as generalization outside its population. Furthermore, because this research was restricted to using *Smart Learning Program tools and resources (SLP)*, the outcomes cannot be extended further than these tools.

5.3 Recommendations

In order to integrate the smart technology in cycle two classes, the study recommends some steps and recommendations to implement the Smart Learning Initiative effectively in education. These recommendations include some improvements suggested for further researches.

5.3.1 Curriculum Development and Management

The study findings from the teachers' questionnaires evaluation showed that technology integration did not achieve a parallel development in the curriculum to the extent desired. Thus, it is recommended that the Smart Learning Program puts some objectives for designing a Smart School Curriculum Which could be reviewed and supervised by qualified teachers and supervisors so that it becomes more truthful, realistic and achievable. In order to make the technology integration more successful, student-teacher contacts need to be more personal and frequent. Moreover, for the classroom management, it is suggested that the number of students per class be reduced and the teacher-student smart communications and technological connections be increased and at least one period a week for Smart Learning Awareness for both teachers and students. It is also strongly recommended that the schools should be expanded with more classrooms to reduce the class number, and the number of teachers be increased.

An important recommendation for the development of curriculum, to be a smart one, is to develop a curriculum monitoring team, which could focus on helping schools improve the implementation of the smart curriculum. This team could possibly meet constantly at least three times a year to help schools identify any implementation problems and narrow any undesired gap between what is intended to be done and the actual outcomes based on the teachers' interpretations of the program.

5.3.2 Human Resource Management

Many teachers have mentioned the workload as a constraint in achieving the smart learning goals and desired outcomes. Despite the presence of an instructional technician in every school that implement the initiative, there have been still problems

in applying the software programs and smart content. Teachers complained of the number of these programs that they have to work on every day. For that problem, it is recommended to hire more than one technician in each school that can design and operate the electronic content and the smart devices as well. It is also suggested that some teaching assistants to be engaged in each school to help teachers perform their duties and reduce the teachers' wasted time in other trivial jobs such as designing online homework, maintaining the attendance and monitoring. This will help the teachers concentrate on their professional duties and give them more time to perform better.

5.3.3 Classroom Management

It was noticed that teachers were strongly focused on the problems of technology integration inside classrooms, for example, charging the tablets' batteries, accessing undesired applications, playing online games or accessing inappropriate websites. Some teachers recommended that they should only focus upon the content of their subjects and they asked for further training on how to keep the classroom managed, controlled and quiet. This can be done through peer observations, reading previous experiences or enrolling in extra courses in "classroom management in a Smart Environment".

5.3.4 Higher Education

In United Arab Emirates, the Ministry of Education planned that the Smart Learning Program Initiative will expand to cover all the ministry schools from grade seven to grade twelve, where all the schools in the Ministry of Education will implement the Smart Learning Program (Ministry of Education UAE, 2013). The question of "where will the 'smart' students in this project go after their 'smart education' in secondary schools?" needs to be questioned in the recent future. It is proposed that syllabuses and courses for "smart higher education" in higher education organizations should be responsible for linking and continuity of 'smart education' initiated in prep and secondary schools level. Therefore, it is suggested that the Ministry of Education in UAE manages plans to review and supervise the curriculum in institutions of higher



The Mohammed bin Rashid's Smart Learning Program (SLP) Initiative in the Ministry of Education and its impact on English language performance in Cycle2 Classes, in the United Arab Emirates (UAE).

ID: 120169

education all over the country to insure the extension of the basic and secondary 'smart education' for these students in the Smart Learning Project. Furthermore, the aims of the 'smart higher education' should be extended from the Smart Learning Curriculum. These aims ought to stress the acquirement and integration of skills, knowledge, values, and language that help students for success in the globalized economy and lifelong education.

5.4 Recommendations for Further Research

The researcher recommends some research ideas based upon the results of this study, which can be conducted in areas such as:

5.4.1 Technology Integration

More researches are needed to be done on the ways of using technology effectively and professionally. These researches are intended to help both teachers and students gain the best benefits of smart resources with the minimum waste of time and effort.

5.4.2 New Assessment Techniques

Since this research focuses on teaching and learning via Smart Learning program and technology integration, the assessment techniques need to be developed to accurately assess the achievement of the students with technology. The new way of learning needs a new way of testing and assessment. Using usual traditional methods for assessing the students cannot evaluate the students learning through smart technology, so there is an urgent need for ways such as "performance assessment and e-portfolios" which could be more truthful and effective.

5.4.3 More Research Coverage

The researcher suggests conducting more researches that should expand to cover more than seventh grade. Next year the initiative will be covering three grades "seventh, eighth and ninth" in some schools, which gives a perfect opportunity for more studies in such a field with other grades or stages.

5.5 Conclusion

The findings of this research indicated that teachers and students expressed their satisfaction and acceptance of the Smart Learning Program objectives, which were

achieved in the first year of implementing the initiative. The usage of smart technology-assisted learning has significantly contributed to enhancements in the quality of teaching and learning process. The results of this study proved that Smart learning Program Initiative not only developed students' results in English language "the subject under experimentation", it also enriched teachers and students' inspiration and attitudes towards the learning process.

The experimental group students expressed that they found smart learning activities and applications are more interesting and engaging than traditional learning methods. Moreover, they demonstrated working more independently and indicated pride and pleasure in their creative efforts. Furthermore, the analysis of the data showed that most teachers and students' opinions of Smart Learning setting is positive. The students reacted positively to the more balanced, less teacher-centered, smart classroom. In addition, the participants' awareness of the program content influenced their interest in the Smart Learning Program environment. Finally, a main finding was the significance of obvious and transparent communication and organization of the Smart Learning Program environment.

According to the data analysis of teachers' surveys, smart resources and devices make the teacher's job easier and smoother throughout the teaching process. For example, in the lesson-planning stage, teachers could use their laptops to plan their work more effectively. For this reason, teachers are more possibly spend less time in pre-teaching, or planning activities. Moreover, teachers expressed that they should improve their classroom management strategies in order to achieve the smart technology-based curriculum objectives. They stated that the program software should not be the only factor, upon which teachers rely, in the development of classroom management strategies, they have to combine factors such as peer observations, instructional strategies, and cooperative work, all utilized together, have important roles to play in the development of the teaching process in a smart learning environment.

In reference to English language, when smart devices are used to practice and to improve English language skills, learners were able to develop multiple language

skills by using smart technological tools. They declared that they positively changed their attitude toward learning, in general, and English subject in particular as follows:

- Learners strongly selected to learn English in smart environments for presentation skills, listening, and general English learning.
- Learners preferred to practice reading and grammar in traditional environments.
- Learners communicated with each other and with their teachers frequently, it could be concluded that the Smart Learning platform design supported better communication.
- 100% of the study participants "teachers and students" would choose to enroll in a smart learning course, if it were their choice.

In conclusion, further investigations need to be conducted on other basic education grades to decide whether comparable outcomes would take place in other grades. There is an urgent need for a continuous investigation conducted on students enrolled in the Smart Learning Program as they advance through the grade levels. This research could observe how learners' learning skills progress as their smart abilities advance. This investigative study showed that the Smart resources, devices and platforms simply provide excellent tools that teachers can use to get students motivated to do their best and to turn out to be smart learners.

It is hoped that the Ministry of Education in the United Arab Emirates will take note of the findings and the recommendations relating to technology integration, assessment techniques, human resource management, curriculum development and management, and higher education as indicated in this study.



The Mohammed bin Rashid's Smart Learning Program (SLP) Initiative in the Ministry of Education and its impact on English language performance in Cycle2 Classes, in the United Arab Emirates (UAE).

ID: 120169

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Appendices

The Smart Learning Program Initiative in the Ministry of Education in the UAE

Appendix 1

Teachers' Questionnaire

This research survey examines the Smart Learning Program implemented in the Ministry of education schools, grade 7 classes in the United Arab Emirates. It focuses upon how the program being used in the targeted schools and the attitudes of the students about the program implementation and their views about it. The findings of the research questionnaire will be used in a study reported to the British University in Dubai, faculty of Education.

The participation of the teachers and students in the study is voluntary, their identity and responses are extremely confidential. Please feel free to put your real honest answers of all the survey questions.

• Section one: Demographic Information:

1. What is your gender?
 - Male
 - Female
2. Which grades do you teach?
 - Six
 - Seven
 - Eight
 - Nine
3. What is your level of education?
 - Secondary school
 - Diploma
 - Bachelor Degree
 - Master Degree or higher
4. How long is your experience?
 - Less than 5 years
 - 6 – 10
 - 11 – 15
 - 16 – 20
 - More than 20 years

• **Section two: Technology Background & Smart Skills**

5. What is your level of using smart resources in teaching?

- Beginner
- Intermediate
- Advanced

6. Have you been enrolled in any professional development courses in the field of smart learning program?

- Yes
- No

7. If YES, please describe it in two lines.

8. If you feel comfortable with smart learning courses please describe any other course you would like to receive.

9. What are the areas do you think the smart learning program has a positive impact on? (you can check more than one)

- Students' group work
- Working independently
- Working cooperatively
- Students' engagement
- Improving learning skills
- Improving technology usage
- Students' working individually at home
- Students feel entertained and having fun

10. Do you think there are negative impacts from using smart learning program?

- Yes
- No

11. If YES, please describe them in two lines

- **Section Three : Smart Resources Implementation**

12. Please describe your teaching experience using smart learning program in your classroom environment.

13. If you have any suggestions that may help improve the smart learning program implementation in your classroom, please include.

Appendix 2

Students' Questionnaire

This research survey examines the Smart Learning Program implemented in the Ministry of education schools, grade 7 classes in the United Arab Emirates. It focuses upon how the program being used in the targeted schools and the attitudes of the students about the program implementation and their views about it. The findings of the research questionnaire will be used in a study reported to the British University in Dubai, faculty of Education.

The participation of the teachers and students in the study is voluntary, their identity and responses are extremely confidential. Please feel free to put your real honest answers of all the survey questions.

عزيزي الطالب

إن هذا الاستبيان الغرض منة التعرف على رأيك فيما يتعلق بمدى فاعلية برنامج التعلم الذكي في تطوير مهارات التعلم لديك. لذا فإنك مدعواً للتعبير عن رأيك بحرية من خلال وضع علامة (√) على الاختيار الذي تراه ملائماً ونود إعلامك باننا نقدر لك مشاركتك في هذا الاستبيان ونكفل لك حق الاحتفاظ بسرية هذه الاجابات و شكرا .

• Section one: Demographic information:

4. What is your gender?
 - Male
 - Female
5. In which grades, are you now?
 - Six
 - Seven
 - Eight
 - Nine
6. What are your previous grades?
 - Excellent
 - Very good
 - Good
 - Fair
7. How long have you been in Smart Learning Program?
 - One term
 - Two terms
 - One year
 - Two years

• **Section Two: Technology Background & Smart Skills**

8. What is your level of using Tablets and PCs?
- Beginner
 - Intermediate
 - Advanced
9. Do you have a private PC or Tablet with internet access at home?
- Yes
 - No
10. Did you get a tablet PC from smart learning program?
- Yes
 - No
11. Are you permitted to take your tablet home?
- Yes
 - No
12. What are the areas do you think the smart learning program has a positive impact on?
(you can check more than one)
- Group work
 - Working independently
 - Working cooperatively
 - Improving learning skills
 - Improving technology usage
 - Working individually at home
 - Entertainment and having fun
13. Do you think there are negative impacts from using smart learning program?
- Yes
 - No
14. If YES, please describe them in two lines

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● **Section Three : Smart Resources Implementation**

15. How many periods do you use smart tools at school?

- Rarely
- Often
- Always

16. How much do you use your tablet PC, from smart learning program, at home?

- One hour
- Two hours
- Three or more

17. Do you have any suggestions, complaints or advice for the smart learning program?

- Yes
- No

18. If YES, please describe them here.

19. Please indicate whether you agree or disagree with the benefits of Smart learning program in each of the following statements :

(1=strongly agree, 2=usually agree, 3= not sure, 4=disagree, 5= strongly disagree)

The statement	1	2	3	4	5
I can assess it in school or at home from my Tablet PC.					
I can communicate with the teacher from my computer.					
I can communicate with the class from my computer.					
The information is always available on the Internet					
I cannot lose my book.					
Materials and projects cost less on the Internet.					
I can use the tools and functions on the smart learning gateway					
I learn best in a smart classroom environment.					
It is interactive.					
It is fun.					

Appendix 3

English Test for Grade 7, Semester Two, 2014 (Fujairah Educational Zone)

<p>اليوم والتاريخ: الزمن: ساعة المادة: لغة انجليزية</p>	 <p>امتحان الصف السابع</p>	<p>دولة الامارات العربية المتحدة وزارة التربية والتعليم منطقة الفجيرة التعليمية</p>
<p>نهاية الفصل الدراسي الثاني – مارس 2014 م (على الطالب التأكد من عدد صفحات الأسئلة)</p>		
<p>I. Reading Comprehension (10 Marks)</p>		
<p>Read the passage then answer the questions below. ()</p> <p>Maria lives in Milano but she works on the island of Sicilia. The journey takes her a long time to get to work. First, she rides her bicycle to the bus station. It is about one kilometer and takes her five minutes. Then she catches a bus to the ferry stop. It is about ten kilometers but it takes her nearly thirty minutes because of the bad traffic. The ferry takes about fifteen minutes to get to the island. There Maria catches a taxi that takes almost five minutes. After that, she should walk five minutes to arrive to the office where she works. In the afternoon, she does it all again, in the opposite direction.</p>		
<p>A- The text above is about Maria's</p> <p>a- family b-journey c-poem d-car</p>		
<p>B- Circle the correct answer.</p> <p>1- The bus takes to the ferry stop: a- five minutes b-ten minutes c-twenty minutes d- thirty minutes</p> <p>2- Maria works in: a- an office b- a bank c- a hotel d- a school</p> <p>3- On the island, Maria walks for: a- 10 minutes b- 5 minutes c- 15 minutes d-20 minutes</p>		
<p>تابع امتحان مادة اللغة الإنجليزية – للصف السابع -نهاية الفصل الدراسي الثاني- مارس 2014 م</p> <p>C- Choose the word that has the same meaning as the underlined words.</p> <p>1- The word “catches” in line 3 means..... a- holds b- meets c- takes d- stops</p> <p>2- The word “ferry” in line 5 means a kind of..... a- bus b- train c- plane d- boat</p>		
<p>D - 1-Where does Maria live? (4 marks) a- in Milano b- in Sicilia c- in Paris d- in Madrid</p> <p>2-Why does the bus take a long time from the bus station to the ferry stop? a- Because the traffic is good. b- Because the bus is old. c- Because the road is bad. d- Because the traffic is bad.</p>		

