### 2.4. INTRODUCTION TO e-LEARNING MODELS

Alexander J. Romiszowski define e-learning in very nice clever way in a Table.2.1 below.(Romiszowski, 2004a).

Table.2.1: Romiszowski e-Learning Definition

	(A) INDIVIDUAL SELF-STUDY Computer-Based Instruction/ Learning/Training (CBI/L/T)	(B) GROUP COLLABORATIVE Computer-Mediated Communication (CMC)		
(1) ONLINE STUDY Synchronous Communication ("REAL-TIME")	Surfing the Internet, accessing Websites to obtain information or to learn (knowledge or skill) (Following up a Web Quest	Chat rooms with(out) video (IRC; Electronic Whiteboards) Audio/Video-conferencing (CUSeeMe; NetMeeting)		
(2) OFFLINE STUDY Asynchronous Communication ("FLEXI TIME")	Using stand-alone courseware/ Downloading materials from the Internet for later local study (LOD-learning object download)	Asynchronous communication by e-mail, discussion lists or a Learning Management System (WebCT; Blackboard; etc.)		

e-Learning system is defined as the entire technological, organizational and management system that facilitated and enables students learning via the internet. George M. Piskurich in 2003 defines e-learning as: "Learning that uses computer networks or webs as the delivery or mediation mechanism". While Clive Shepherd in his book "Learning object design assistant" defines e-learning as: "E-learning utilizes computers and computer networks as an additional and complementary channel of communication; connecting learners with learning media, with other people (fellow learners, sources, facilitators), with data (about learning, about media, about people) and with processing power".(http://onlignment.com/wordpress/wp-content/uploads/2010/04/LODA-ebook2.pdf).

The lack of a harmonizing framework for e-education makes it difficult for higher education universities to compare themselves against other bodies in significant ways. The revolution of the ICT leads to the improve of the e-learning huge benefits for the learning in all of the world and hundreds of models and frame works was established and created during the last 15 years.

The e-learning framework literatures investigated have described an increasing understanding of the wide range of diversity in objectives, structures, and players in e-learning. E-learning models in general are trials to build frameworks to address the concerns of the learners and obstacles presented by the technology and made the e-learning productive.

Each designer have put his thoughts, views, ideas, and experience in his model and the wide IT benefits to the education simplest this work in front of most the designers and let these designs to be internationally distributed and known. Also the free distribution of elearning software like Moodle, LAMS was another important factor that pushes a lot of educators and researchers to design new more electronic models.

Most of these models focus on certain design criteria's that could play the big roles in the learning process in general and in e-learning in specific like pedagogical, managerial, ethical, content, sources, evaluation, environments ...etc, and in general designing IT learning materials and using it is not an easy operation and we can said it is very difficult and complex because mistakes in the life can be easily corrected but mistakes in learning process are very difficult to be corrected or forgiven.

Significantly, the e-education framework would permit for different technical platforms, organizational models and pedagogical opinions.

One of the best of these models was **Khan Framework 1997-2009**, which is widely used in e-learning activities in the entire world because it was from the best earliest models and his designer keep developed it in parallel path to the development of the ICT revolution.

A lot of the Middle East universities and learning institutions used Khan Frame work or the design dimension that Khan used it to design their e-learning activities like Arab Open University or Syrian virtual university, Al-Quds Open University

Before executing e-learning productions, learning institutions and universities need to expand the usual needs assessment process by creating a high-level requirement document that includes the Objectives, e-learning readiness score, list of advantages and

potential obstacles to e-learning adoption and a list of possible e-learning configurations .(So, 2005)

**Chapnick** designed a model for measuring the e-learning readiness of an organization aiming at answering the questions:

- a. Can we do this?
- b. If we can do this, how are we going to do it?
- c. What are the outcomes and how do we measure them? His proposed model groups different factors into eight categories: Psychological, Sociological, Environmental, Human resource, Financial, Technological skill, Equipment and Content readiness.

**Psychological readiness**: This element considers the individual's state of mind as it affects the result of the e-learning initiative, and it is deliberated one of the most important elements and has the highest possibility of destroying the implementation process.

**Sociological readiness:** This element deliberates the interpersonal characteristics of the environment in which the program will be executed.

**Environmental readiness:** This element deliberates for the large-scale forces operating on the stakeholder's together inside and outside the learning institution.

**Human resource readiness:** This element deliberates the accessibility and design of the human-support procedure.

**Financial readiness:** This element deliberates for the budget extent and allocation procedure.

**Technological skill (aptitude) readiness:** This element deliberates noticeable and measurable technical capabilities.

**Equipment readiness:** This element deliberates for the question of the correct equipment control.

**Content readiness.** This element deliberates for the subject's topic and goals of the learning.

The Singapore Education Ministry found that this model is especially useful for head teachers whom intend to start e-learning in the schools. However, one of the major disadvantages of this model is that it is designed to measure the readiness of using elearning in business organizations. It does not completely conform in the school environment. (So, 2005).

**Rosenberg** in 2001 design a new model which is completely focus on the technological dimension from his believe that he can do anything from this concept and the technological revolution change all the education concepts and he focus on Infrastructure concern, technology concern, connectivity, learning management system and clarifies the elearning dimensions as Infrastructure affairs, technology affairs, connectivity, and the learning management system (LMS).

He defines it as the networked, which makes it efficient of instant improving, storage/retrieval, distribution and sharing of lessons or information. It centers on the broadest view of learning – learning solutions that go away from the traditional paradigms of learning.

This model focus, mostly on the delivered to the end-user via a computer using standard Internet technology and network, also concentrates on the broadest view of learning – learning solutions that go further than the traditional models of learning.

Rosenberg mentions, that the most expected new learning technologies of the late 20th century, and the main predecessor of e-learning, Computer Based Training (CBT) failed to deliver the predicted concomitant increase in the effectiveness and efficiency of both learning process and content delivery.

The serious obstacle to any such success in e-learning is financial, as the need for maintaining dynamic content on continuously developing technologies and different platforms, provided any investment in quality which it will led for the overpriced for the greater part of learning institutions to engage in.

**Borotis and Poulymenakou** in 2004 produce a new frame work covers the factors of Environment, content, technology, culture and economic.

More of the frame works and design dimensions are stated below in the Table.2.2.

Open University Malaysia also had another e-learning framework, which is the consequence of all the Malaysian experience in e-learning and online learning and it is close to Khan Frame work from the covering of all the elements in the learning operation with more targets on the pedagogy design dimension. Kaur and Abas (2004) formed a framework for evaluating the e-learning readiness of the Open University Malaysia and consists of eight constructs: learner, management, personnel, content, technical, environmental, cultural and financial readiness. OUM's blended pedagogy employs a multi-mode strategy that combines online learning with face-to-face interaction and self-managed learning as presented in Figure.2.1.

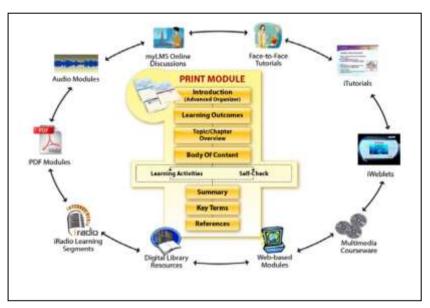


Figure.2.1: Open University Malaysia Module (Ali, 2008)

## 2.4.1. Badrul H. Khan e-Learning Framework

Based on the previous studies, literature reviewed and meeting with experts, one of the best and complete comprehensive theoretical e-learning models is Badrul Huda Khan Octagonal Eight Dimensions Framework. Figure 2.2 present khan framework e-learning framework and its dimensions and sub-dimension components.

The Knowledge guided Khan to create a comprehensive list of notices that are organized around eight key dimensions that shape a course designer's "framework for elearning".(Romiszowski, 2004a).

E-Learning can be defined as Badrul H. Khan state: "An innovative approach for delivering well designed, learner-centered, interactive, and facilitated learning environment to anyone, anyplace, anytime, by utilizing the attributes and resources of various digital technologies along with other forms of learning materials suited for open and distributed learning environment".

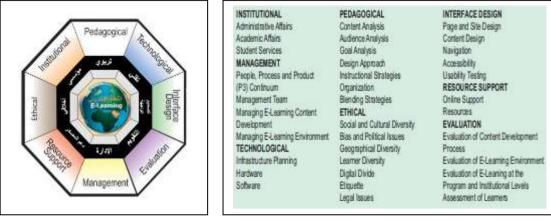
Khan framework can be divided into three major domains: first is the Educational and contain (1. Pedagogical, 2. Ethical, 3. Evaluation) second is the Technological and contains (1. Technology, 2. Interface design) and the third is the Managerial and contain (1. Institutional, 2. Resource support, 3. Management). (Kurti, 2008).

The emergence of a Khan framework made the greatest impact in the revolution of e-learning that take place in the all of the learning sector since this framework describe all the education and learning process from A to Z and he offered the logical base for all the e-learning instructional designers on how to design and implement effective learning environment in the e-learning process using the high interaction that computers and internet providing with taking into consideration and stating all the factors that could affect the proposed designs. From this point of view Khan Framework is a complete system and even can be define it as e-education or framework for electronic using in education with high institutionalization capabilities and this definition mean that Khan framework could be used for any other use of educational technologies in education.

"Khan's framework for e-learning is a useful to consider when following a holistic approach to eLearning that covers it all As can be seen from Figure 2.2, Khan's coffin has eight sides. The pedagogical affairs are given equal weight with all seven others, although, admittedly it is at the top".(Cronje, 2006).

A lot of reasons stands up after this frame work success along the 14 years, but the main reason is the continuity development made by Khan for his frame work even if we made a comparison between Khan 1997 and Khan, 2009 (Table 4.1), we cannot find any big difference on the main or sub dimensions and in general a design for electronic process from

14 years ago and still successful and widely used even with ICT revolution, for sure it is mean that Khan frame work is a great design.(Khan, 2009, 2006, 2005).



**Figure.2.2**: BH Khan e-Learning Framework and its Dimensions and Sub-Dimension Components (Khan, 2009)

### 2.4.2. Demand Driven Learning Module or MacDonald Framework

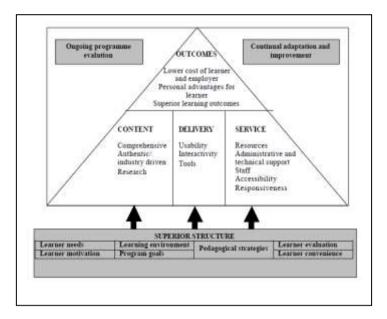
At 2001, MacDonald and a group of researchers invent e-learning module and was the. It was consisted of five inter-related dimensions that in concert create a high-quality e-learning experience structure, and they are Superior Structure, Content, Delivery, Service, and the Outcomes. Each dimension has its sub-dimension elements as below:

1-Superior Structure or the foundation for the quality, the content delivery, and the service, and the sub dimension elements are: Learner Needs, Learner Motivation, Learning Environment, Learning Goals, Pedagogical Strategies, Learner Evaluation, Learner Convenience.

- 2-Content and the sub dimension elements are: Comprehensive, Authentic/Industry driven, and Researched.
- 3-Delivery and the sub dimension elements are: Usability, Interactivity, and Tools.
- 4-Service and the sub dimension elements are: Resources, Administration and Technical Support, Staff, Accessibility, and Responsiveness.
- 5-Outcomes and the sub dimension elements are: Lower costs for the learner and employer, Personal Advantages for the Learner, and Achievement of learning outcomes.

This module was popularly used because it is covering a lot of the education dimensions but the problem of this module that it was not concentrated on the technology characteristics in a world learning driven by the technology.

In Figure.2.3, we can see the delivery dimension, and here it is representing the technology, and it is only the element of the five inter-related dimensions that include to quality e-learning knowledge. E-learning devolves on the information technology to develop the learning procedure away from the walls of any campus resulting in an effective classroom.

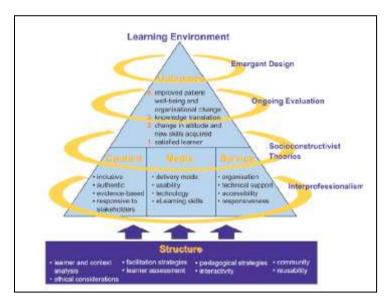


**Figure.2.3**: Demand Driven Learning Module 2001 (MacDonald, Stodel, Farres, Breithaupt, & Gabriel, 2001) (MacDonald et al., 2009; Razak, 2005)

In 2009, some of the same group of researchers has made some modification for their e-learning framework. The eight-year time difference between the first module and the modified with the ICT revolution have urged hardly towards the modification, as shown in the Figure 2.4.(MacDonald et al., 2009).

The Learning Content Management Systems (LCMS) is a multi-user environment where learning developers can create, store, reuse, manage, and deliver digital learning content from a central object repository. Now days, (LCMS) tender many tools that course

designers, teachers, and learners can use during the learning performance. These tools include asynchronous communication through discussion forums (to create considerably efficient social interaction that guides to building knowledge), social media tools. Connectors to external resources for learners such as podcasting, video and image sharing can be supplied within a content management system to help the learning process. In addition, a content management system includes instruments such as grade books, assignment submission.



**Figure.2.4**: Demand Driven Learning Module 2009 (MacDonald, Stodel, Hall, & Weaver, 2009; Razak, 2005)

## 2.4.3. Salmons Five Stages Framework and the e-Learning Ladder

Niall Watts from the University College Dublin state the way to produce a new coherent e-learning framework, and it is an alliance of Salmon's (2000; 2004) five-stage model for online teaching and learning (Figure 2.5) and the Moule (2007) developing e-learning ladder to place detected disadvantages in the Salmon's model as executed to blended learning as shown in Figure 2.6. (Moule, 2007; Watts, 2010).

The Salmon's model has been widely adopted by higher education universities where it is used to educate academics to become 'e-moderators', and it supplied a framework to help expert face-to-face teachers become e-moderators on university online courses. The character of the e-moderators was to support learner engagement and learning

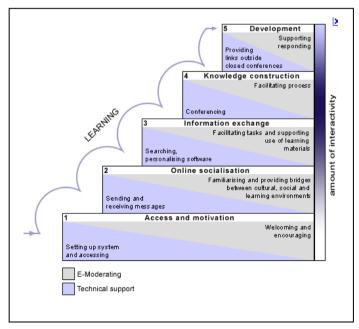
in a completely online course. The model is established on constructivist pedagogical criterions (Salmon 2007), where the learners mixed significantly in their expectations and skills of both technology and of the education system. Some of the technical standing used in the model is special to the virtual learning environment, which cannot be immediately addressed to other technology communication tools.

The five-stage model (Figure.2.5) defines a program to steps to enable learners to develop from novices to free online learners. It centers on the role of the e-moderator in helping the learners and on the technical issues concerned. The five stages are:

Stage 1: Access and Motivation: The e-moderator makes sure that learners can be an entry the system and supplies basic activities to help novices build their technical skills and to help in raising their confidence in the new (both educational and technical) environment.

Stage 2: Online Socialization: The e-moderator supports the students to get to know each other online by exchanging messages and by carrying out simple tasks simultaneously. This increases their confidence and shapes the basis for combined work.

**Stage 3:** Information Exchange: The e-moderator helps the learners to learn new knowledge and exchange facts about it.

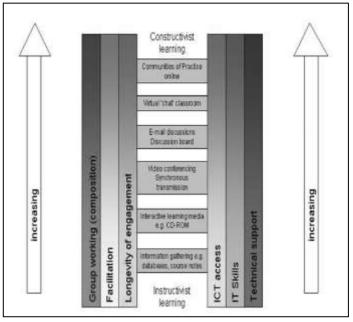


**Figure.2.5**: The Five-stage e-Moderating Model for Teaching & Learning Online from Salmon (2000)

http://www2.le.ac.uk/departments/beyond-distance-research-alliance/projects/SMELT/5stageclassic.gif

Stage 4: Knowledge Construction: The e-moderator supports the learners to evaluate materials and create their own meaning where the finest amount of interactivity happens.

Stage 5: Development: The e-moderator supports the learners to think about and evaluate their own learning. The purpose is for them to become self-directed and free.



**Figure.2.6**: A Conceptual Model of Online Learning: The e-Learning Ladder (Moule, 2007)

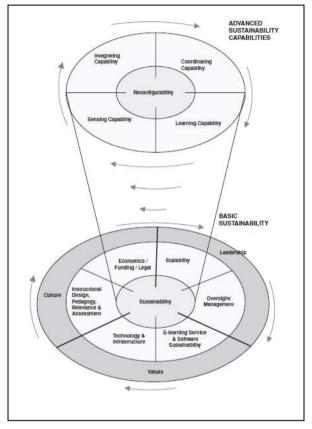
## 2.4.4. The Dynamic Capabilities Reference Model (DCRM)

The model is set up in theoretical research on organizations processes and capabilities for managing and thriving in environments characterized by turbulence.

It is also set up in applicable experiences with service systems, ISO 9126, and other productions in flexible systems and e-learning perfection. The reference model has chosen set of technical and managerial issues related with sustaining such e-learning system. The parts related to both management and technical compounds appearing in the long-term growth of successful e-learning service systems. The first basic purposes of the model are to provide a supported reference model that aids managerial decision making in setting up and helping a joint industry/university e-learning service system. Furthermore, it is addressing the basic and advanced sustainability capabilities that blend partner like application, faculty, learners, and e-learning service system infrastructure concerns. The

second purpose, it aimed to develop a starting point for others working at in the area to improve upon since there is no reference model at present widely approved that places the relevant difficulties. The model can serve as a benchmark for future improvement and observation. The outlook capacity of the DCRM to aid in identifying technical growth possibilities for progressing e-learning sustainability. The model is presented in the

Figure.2.7.



**Figure.2.7**: The Dynamic Capabilities Reference Model (DCRM) (Demirkan, Goul, & Gros, 2010) http://onlinelibrary.wiley.com/doi/10.1111/j.1540-4609.2009.00250.x/pdf

# 2.4.5. The Borotis and Poulymenakou Model 2004 (Lopes, 2007)

The model that was created by Borotis and Poulymenakou (2004) was explained and based on four predefined models by Rosenberg (2007) and the model unity was a resultant of four models unification, justifies its adoption, with some modifications. Attempts to remove the lack of consistency in predefined parts of e-learning readiness through the definition of seven dimensions: Process, Culture, Human Resources, Business, Technology, Content, Training and Financial.

The model is suitable to any type of learning organizations and when applied to universities some adjustments should be made. For example, the training process dimension should be removed as it concerns to the organization capacity to organize, analyze, design, develop, implement and evaluate an educational module, which are competency core of a higher education university. The model and the other changes are presented in the Figure 2.8.

The Business dimension refers to the placement of the e-learning strategy with the higher education global strategy and goals and with the external environment (as legal duties and dependencies with other organizations) and to the level of commitment and help of higher education top-level executives.

The Technology dimension concentrates on the universities technologic infrastructure and on the degree of access to the infrastructure and to the Internet.

The content dimension is related to the availability of actual content, its format, and levels of interactivity, reusability and interoperability.

The culture dimension concerns the higher education habits and perceptions towards e-learning adoption and use. The human resources dimension refers to the availability and skills of the staff and learners involved in the e-learning experience. The Financial dimension analyzes the universities budget allocation to the e-learning strategy.

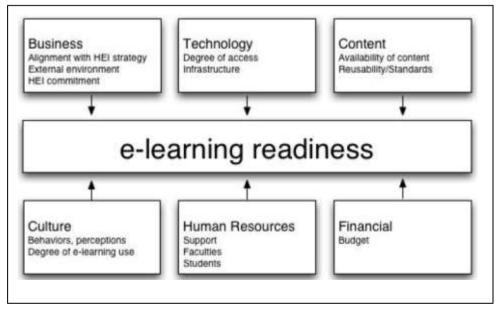


Figure.2.8: The Borotis and Poulymenakou Model 2004(Lopes, 2007)

### 2.5. E-EDUCATION MODELS AND FRAMEWORKS SUMMARY

- 1. Most of the models or frameworks that the researcher read it and discovers it are limited in its capabilities, and it is a solution for special problems and cases, and they are focused only on e-learning only.
- 2. Most of the models or frameworks that the researcher read it and discovers it are designed for the ideal and stable education conditions and the researcher think it is very difficult to try to adopt it in unsecure education environments and conditions.
- 3. The researcher thought that e-learning is the core of the solution, but we need for a complete solution which it is e-education not e-learning only.
- 4. Most of the frameworks deliberate the managerial and organizational concepts and its effect on the learning process, but they do not deal with them as another concept and not learning concept, and the up to date instructional design theories classified it and its effects within the education not learning only (Khan deal with tem as two different concepts), and the researcher use these concepts as separate different concepts for its important effects in the whole operation.
- 5. Most of the framework deals with the technology dimension as general, and the researcher thought it are not correct to be used in its general meaning in any instructional designs regarding the learning, because the educational technology's advantages differ from a type to another, and it is better to specify in deep details, (What does it mean by the technology dimension?) in any e-education or e-learning frameworks.
- 6. Even with up to date frameworks, it was very difficult to find a framework measure the wireless technology conception, which the researcher thinks it is a completely new dimension in the education operation and will change the general shape of education, and let the learning move forward to anyone in the sky very soon.

- 7. Upraising educational institutions capabilities and standards to adopt e-education is the very important factor, and the researcher thought using ICT does not mean that the institution have a highly educational capabilities, and also think upraising learning institutions capabilities does not come from using the technologies only and here the institution infrastructure could be the best place to cite it while most of the designers of the e-learning and e-education frameworks put the infrastructure in the zone of the technology only.
- 8. Most of the framework deals the human resources and khan framework cited it in the resources dimension and the researcher think it is very difficult to be understandable dimension by this way, and for example there is a big difference between human resources and any other resources like financial resources for example.
- 9. There is no doubts that Khan e-learning framework is the one of the best designs and the researcher find it is the best to start from it, and this is his thoughts but when it comes from a great e-learning scientist like Alexander J. Romiszowski who is a Professor in the Department of Instructional Design, Development, and Evaluation, Syracuse University, in Syracuse, New York, the speech here will be different and reinforced the researcher believe, especially if we take into consideration he is specialist in the instructional designs, and he state: "A scan be seen that Khan's framework has eight dimensions, and the pedagogical dimension is given equal weight with all seven others dimensions, although, admittedly it is at the top" (Romiszowski, 2004b). Also Prof Mohamed Ally who is the Director and Professor in the Centre for Distance Education, Athabasca University, Canada and he state "There are many models available but a comprehensive and well accepted model for E-learning is the framework developed by Badrul Khan".(Ally, 2009).

The researcher ask Prof Khan during his meeting with him in (KSA) in Feb.2011 about the eight dimensions places in his octagon framework and his answer was he place them randomly.

**Table.2.2**: Summary of Some E-Learning Framework and Models and Its Dimensions

Chapnick 2000	Psychological	Sociological	Environmental	Human Resource	Financial	Technological Skill (Aptitude)	Equipment & Content
Broadbent 2001	Human Resources	Infrastructure	Knowledge	Capital			
Rosenberg 2001	Infrastructure Concern	Technology Concern	Connectivity	Learning Management System	Rosenberg 2001	Infrastructure Concern	Technology Concern
Macdonald Et Al. 2001	Superior Structure ( Learner Needs, Learning Environment, Pedagogical, Learner Evaluation, Learner Motivation, Program Goal, Strategies, Learner Convenience)	Superior Content (Comprehensive, Authentic, Industry Driven Research)	Superior Delivery (Usability, Interactivity, Tools, Instructional Strategies),	Superior Service (Resources, Administrative And Technical Support, Staff, Accessibility, Responsiveness),	Superior Outcomes ( Lower Cost For     Learner And Employer, Personal Advantages For Learner, Superior Learner Outcomes),	Continual Adaptation & Improvement, Ongoing Program Evaluation	Macdonald Et Al. 2001
Surry 2002	Resources,	Infrastructure,	Human	Strategies	Learning	Evaluation	Support
Schonwald 2003	Organization	Technology	Culture	Strategy	Management		
Broadbent 2003	Technology Change	Business Case	Culture	Resources	Leadership	Talent	Speed For Change
Rusten And Ramirez 2003	Connectivity And Access	Capacity Building	Content, Application Development	Conducive Governance And Policy			
Neville 2004	Learner	Instructor	Technical Support	Management			
Borotis & Poulymenakou 2004	Environment	Content	Technology	Culture	Human Resources	Economic	
Jonsson 2005	Technology	Content	Instructors	Learner			
Barajas And Owen 2000	Infrastructure	Hard Ware	Soft Ware	Skills	Cultural	Organizational	
Sribhadung 2006	Use of The Internet and Acceptable Use Policies	Connectivity Infrastructure And Network	Intergovernmental Issues	Cost	Finance	Partnership Intellectual Property And Copy Right	Sribhadung 2006
Omidi Et Al. 2008	Financial	Technical Experts	Instructors	Technical	Learner	Organizational Strategies	
Jen-Her Et Al. 2008	Institute	Learner	Instructor				
Khan 2009	Evaluation	Interface Design	Technological	Pedagogical	Institutional & Management	Ethical	Resource Support

### 2.6. SOME COUNTRIES EXPERIMENTS

There is an Arabic example said (*investments in the human beings is a trade that will never lose*). A great historical example was from the Prophet MOHAMMAD history and his desire to educate the Muslims, when he expressed for the eradication of ignorance, writing and reading education. The Prophet ordered a large number of prisoners and making them teachers for Muslims boys in return for their release and gains their freedom again after the Battle of Badr.

Learning from others is better than starting from zero , and for that a survey have done among some of the Middle East and also East Asian countries experience in the field of adopting e-learning projects in higher education . The truth is that the researcher study all the Asian (Masami, 2006) especially the countries where their conditions are similar to the conditions in Iraq and pay a lot of attention to Malaysia , especially its e-learning system in USM , and then study the countries in the middle east zone , and I can summarize it by:

## **2.6.1. MALAYSIA**

Malaysia is a Southeast Asian country that is concurrently modern, traditional, advanced and historical with peaceful multicultural residents. Native Malay and traditional ethnic groups such as the Iban and Bidayuh live compatibly alongside a large Chinese and Indian population and this seamless mixing of cultures lends Malaysia an international taste that few countries can claim. Malaysia with its matchless universal smack, low crime rates, and five universities appearing in the QS World University Rankings, Malaysia is becoming more and more favorite study abroad destination especially to the postgraduate Middle East students.

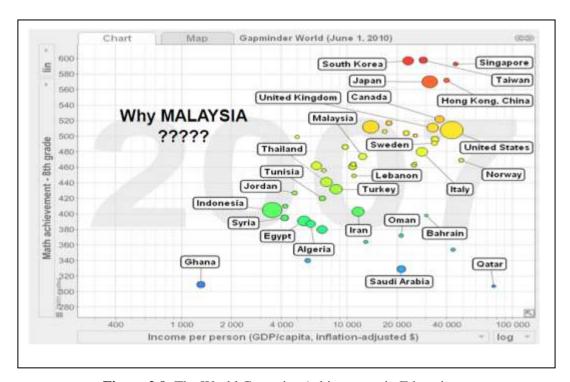
Malaysia is one the countries that made a large investment in human beings and education at the beginning of the seventieth decade of the last century, and we can easily say they are the winners now and their investments was better than all the oil income for several Arabs countries which their annual income are bigger than Malaysia 4 -5 times.

Malaysia which is ranked 28 between world countries, is one of the progressed countries in the field of information and communication technology (Inboden & Streeter, 2009) and its education system ranked 52 which is very good for a country from the third world us believe in "The use of ICT in education through e-learning can play a vital role in democratizing education, especially in developing countries". Figure 2.9 presented the world countries achievement in the field education.

This journey with educational technologies start in Malaysia in 1972 in pre elearning in Ministry of Education, and they establish the national steering committee for elearning in 2002 and now they are in the 9<sup>th</sup> Malaysia Plan (2006-2010), the plan that has highlighted building world-class human capital, which is one of the seven strategies for the development of Malaysia. The Malaysian Government have set up the national Lifelong Learning Council and structured under the MCA Community Education Development Bureau and most of the public and private higher educational institutions start establish at least one centre of life-long learning.(http://www.lll.net.my/English/Pages/default.aspx)

Raja Maznah (2004) has mentioned that most public universities in Malaysia have some form of strategic plan for implementing pure electronic university. This plan includes the teaching and learning program will be conducted via online or web based mode to replace the traditional classroom learning. Universities have sufficient e-learning infrastructure but unfortunate lack of a strategic plan for implementing online learning. Most HEIs focusing more to provide an ICT infrastructure to support online learning compared to firm plan for using ICT as a tool for teaching and learning, course development, course structure and assessment. Planning for use of the ICT in teaching and learning seems to be still in the drawing boards or still in the mind of the person responsible for managing the e-learning. The rapid growth of web-based technology and the high usage of Internet have made teaching and learning via the online mode more viable in recent years. The Harmonization of the learning in Malaysia exceed its limits due to the well operated activities and the high achievements in education, to reach now days

the Blended Education Institutions (Blended Interinstitutional) (Twining) and a lot of Malaysian private sector learning institution offer programs whereby the student does part of his degree course in Malaysia and part of it in the other institution, in learning method is named "twinning". So learners can do their foreign bachelor's degree programs at these international colleges but by study in Malaysia, which have an interinstitutional combined arrangement with host-universities from overseas like universities from USA, Canada, Australia, France, Germany and New Zealand. (Ali, 2007).



**Figure.2.9**: The World Countries Achievement in Education http://www.gapminder.org/data/

Malaysia allocates an average 20% of its development budget for education and this amount ranks Malaysia very high compared to many other countries and reinstates Malaysia' vision to become a knowledge powerhouse in the region and its education system ranked 52 which is very good for a country from the third world, and also Malaysia is a very sophisticated country that developed very well in the field of information and communication technology and they ranked 28 between world countries (Inboden & Streeter, 2009) which it gives us a very clear that the Malaysian government has been very proactive towards ICT development (Asirvatham et al., 2005)

Malaysian government has the initiative to assure the achievement of the e-learning in Malaysia. This has been highlighted in the 9th Malaysia Plan (2006-2010). This plan is actually the second phase of the Malaysia Vision 2020, which aim to make Malaysia as a fully developed country by the year 2020. It stated in the 9th Malaysia Plan that the use of the Internet led to the growth in e-learning as a potential source of online education and training.(Azizan, 2010; Hamid & Anwar, 2007).

Another marker in the Malaysia's education internationalization production is the "Total KSA e-Learning Solutions" program contracted by the Ministry of Higher Education in the Kingdom of Saudi Arabia (KSA) and the Open University Malaysia (OUM) and its associate consultancy company, which holds the name of METEOR Technology and Consultancy Sendirian Berhad, were selected as advisers for the KSA project, which was to be executed in two stages over a term of five years.

The first stage, which started in February 2007, and within the first nine months, it saw the creation of the National e-Learning Centre (NeLC) and the introduction of e-learning services in all higher education institutions and universities throughout the KSA. Furthermore, the Malaysian specialists were hosted in Riyadh to manage the installation of learning management systems (LMS) and related infrastructure, trained Saudi IT personnel in courseware development, and assisted the KSA Ministry of Higher Education in carrying out awareness and promotion programs on e-learning.

The second stage was the geographical enlargement of the e-learning facilities and making it available throughout the Kingdom. The strength of this relationship lies in the knowledge, especially from the view of the Ministry of Higher Education in KSA. That METEOR Company with higher education ministry in KSA can together deliver the e-learning platform that is relevant to the Kingdom.

### 2.6.2. SAUDI ARABIA

Kingdom of Saudi Arabia (KSA) is one of the biggest Islamic countries in the world with the largest stores of oil. KSA strongly enhanced its educational system with all up to date technologies as a result of the comprehensive evolution programs, and it is also considered as the biggest ICT market in the entire Middle East zone. The Saudi government is started to implement new educational improvements like e-learning and the Ministry of education and Ministry of higher education are uplifting and supporting e-learning. The e-learning agenda is also being supported in higher education through builds a national e-learning center in 2006 under the name of The National Center For e-learning and Distance Learning after the ministry of higher education in KSA discovers the urgent need and potential for a co-coordinated and collaborative approach to e-learning in the universities.. (http://elc.edu.sa).

This centre is responsible for a range of research and development initiatives aimed at facilitating next generation e-learning in Saudi higher education, including the National Learning Management System 'JUSUR', based upon the OUM LMS and the National Repository 'Makniz' to store, manage and share learning objects between Saudi universities. The centre also runs a project called 'Tajseer' which is designed to help progress from the more traditional ways of teaching and learning to more advanced methods through the use of technology. (Al-Khalifa, 2010).

KSA has declared officially the utilizations of distance learning and e-learning in all its higher education institutions, and to reach these objectives lead towards the future, has launched dynamism to establish six infrastructures for higher education and distance education.(Al-Fahad, 2009). The national center in KSA plays a big role in developing academic and administrative abilities and management system, e-learning and distance education, building electronic syllabus contents and frameworks of digital for a number of university courses, and build the educational portal for the e-learning and distance learning and recognition programs for e-learning and distance education.(Al-Fahad, 2009).

In the KSA, a real deliberate fast steps towards building information based society have been taken place. Telecommunications infrastructure is progressing in KSA, and Internet services are developing to the more rustic areas, but unreliable technology and infrastructure and miserable maintenance, and technical help could negatively influence the accessibility of, and accessibility to, online learning. However, there are still many challenges like:

- Human resources capacity building which is consider as big and an influential factor in the adopting and successful application of e-learning in KSA.
- A Lack of credit in the efficiency of e-learning and lack of computer learning and knowledge of the requirements of e-learning between learners and educators.
- A lack of incentives for using e-learning.
- -Insufficient managerial understanding, important planning and financial support in public sector governances.
- Furthermore, there is an absence of policy-making in regard to the Quality assurance or excellence confidence in e-learning.

BH Khan State: "I strongly believe that the Ministry of Higher Education in Saudi Arabia can benefit from the perspectives of issues covered in the E-Learning Framework". "Regulations of Distance Education in Saudi Higher Education: Issues & Ambitions (March 13, 2007). Makkah, KSA invited keynote speech. (Via satellite)".(http://www.scribd.com/doc/14137829/ELEARNING-AND-DISTANCE-LEARNING-).

### 2.6.3. EGYPT

The Arab Republic of Egypt is the biggest Arab countries population (above 83.1 million). E-Learning is considered in Egypt as a mean of allaying traditional educational problems that face Egypt education system (AbdelWahab, 2008). In academia, e-Learning is currently the focus of navigation and prototyping to provide new solutions to problems such as huge students numbers in classes, expensive prices of the text books, transportation problems, require for continued education and specialized training, interaction with the international educational community and the enhancement of the level of national education (El-Khouly, 2010).

It was noticed that Egypt have a good infrastructure for communication, the internet service in this country are internationally competitive (World Bank price basket methodology), and it is the cheapest in the entire world (12\$/month) and internet bandwidth is high, with seven secure internet servers per 10 million people which provide a suitable base for e-learning adopting. Egypt is ranked 55 in the education among other world countries. (Inboden & Streeter, 2009).

For the Personal Computer Dynamisms, low-cost PCs and laptops have been available to students and professional within a monthly partial payment. The result of these two initiatives allows the learners and teachers to be connected to Internet from home easily.

National e-Learning Center (NELC) is established within the Higher Education Information Center, SCU. (http://www.nelc.edu.eg/) and its primary objective is to promote and support the development of e-learning in Egypt by improving the development of the learning content to the highest maturity level, to achieve strong presence both locally and regionally. Also now they establish the electronic university (EELU) (www.eelu.edu.eg) and it is a private non-profit University established with the Decree, of the President of the Arab Republic of Egypt in the 16th, August, 2008 and it is one of the higher education foundations also the ministry of higher education forced the

public universities to establishment of the e-learning Centers for 17 in the Egyptian universities. These e-learning centers and bodies start work correctly towards the goals of establishment it and take its roles to provide the learning by using ICT to meet the requirements and the needs of the Egyptian society with a great help to increase absorptive capacity for university education in this Arabic country.

Higher Education system in Egypt can no longer pass over e-learning, and much effort done so far, and the Egyptian trail is the best among all other Arab countries. The real problem in Egypt higher education e-learning system is present in preparing the content of e-learning materials. Several calls for a help to build and organize the contents for undergraduate courses appeared at 2009 but the response was very weak. The teachers need to be trained for prepare e-learning courses. The quality and quantity of research is affected by limited funds, lack of wages and poor relationships between industrial initiatives and universities. "Internationally cited research work proceeding from Egyptian universities is relatively sparse and disproportionately low considering the number of faculty members working in Egyptian universities" (El-Khouly, 2010).

Alexandria University has been ranked 147 in the world top 200 universities by The Times Higher Education World University Rankings, and it is an effective completion for the higher education sector in Egypt. The top 200 universities in the world appear for only a small fraction of the world higher education and any institution that makes it into this table is truly world Class University. In general Teaching activities in the university is one of the five headline categories for the ranking and it is consist of the learning, e-learning and the learning environment (worth 30 per cent of the overall ranking score).

## 2.6.3. (a). The National E-Learning Center

The National E-Learning Centre (NELC) original objective is to advertise and encouragement the evolution of e-learning in Egypt by progressing towards the development of the learning content to the highest majority level, to achieve strong presence both locally and internationally.

The further objectives of the NELC (http://www.nelc.edu.eg) are to:

- 1. Provide an e-learning basis and tools to define, high quality specifications and standards.
- 2. Provide information, capacity building and support for staff and learners in the use of elearning implements and services, in cooperation with the universities.
- 3. Provide countrywide co-ordination for e-learning evolution, where the centre will blend courses manufactured by other projects on a competitive basis.
- 4. Promote the use of appropriate standards and specifications in e-learning evolution, including conventionality with approachability standards and principles.
- 5. Provide support to universities in their assessments of e-learning evolutions and where appropriate, carry out such evaluations, specifically at an institutional level.
- 6. Adopt principles for courseware development in Egypt and support courseware exportation and seaward development.

In order to meet these goals, the NELC's edited a key plan intends to develop a strong infrastructure at each of the public universities, capable of serving an effective elearning system. This will be completed through the setting up an e-learning centre at each of the 17 Egyptian universities. These centers are able to build pedagogically e-courses that fully make use of the actual of ICT in an interactive way. Each will be operated by a centre director, instructional designer, e-content developers, graphics designers and subject-matter experts. The NELC screens the progression of the university centers and develops national standards. The university centers are networked with the NELC through the Egyptian Universities Network (EUN).(El-Khouly, 2010).

((As a summary result from studying the two countries KSA and Egypt, The researcher discover and state easily that these two countries follow Malaysia in their great successful trial to build a modern technology country to achieve the goal of building information based society))

#### 2.6.4. **JORDAN**

The Hashemite Kingdom of Jordan is another close country and bordered with Iraq with high percentage of similarity of the composition of the Jordanian society with the Iraqi in culture and habits and Jordan are ranked 46 in education in the world (Inboden & Streeter, 2009). Iraqi people look for Jordan as their second country and a lot of Iraqi people lives and work in Jordan because of the continuous violence in Iraq.

Jordan has focused on developing its human potential because of its humble natural resources with insufficient supplies of water and other ordinary materials such as oil.(Al-Jufout, Al-Shalabi, & Al-Muhaissen, 2008).

Education organization in Jordan shows a great detected achievement in the last decade years and the journey with e-learning is started since 1998 from the ministry of education, and like many other countries, it started to study the adoption of e-learning in its educational system. The e-learning strategy of the Ministry of Higher Education and Scientific Research concentrates on the Blended Learning and it never locations the distance learning issues. Distance education is not yet certified in Jordan educational system, (Al-Adhaileh, 2010), (It is completely similar to the Iraqi higher education case). In July 2008 the Higher Education Accreditation Commission announced the rules and regulations for accrediting Blended Learning as a first step (http://www.mohe.gov.jo).

These rules put 60% (as max.) of the learning process should be traditional mode and 40% (as minimum) for the synchronous and asynchronous learning using e-learning and other educational technologies. This is actually challenged the public and private universities to go furthermore of their Systems towards e-learning and that is the same what the Iraqi higher education ministry announced it in 2010. (Each lecturer in the Iraqi universities is to prepare 20% from the subject's materials to be used electronically).

http://www.alsabaah.com/paper.php?source=akbar&mlf=interpage&sid=101455

The Jordanian universities have good e-learning programs because these universities start to upgrade its infrastructures and update the university regulations to

adopt e-learning programs. The Jordan university achieved quality concrete jumps the in the field of ICT and e-learning and now have a lot of computers and interconnected to the internet via 155Mbps with link and all universities connected to one e-library system..(Al-Adhaileh, 2010). Another example is the Hashemite University which start the e-learning journey in 2003 and it is now one of the best among the Arabic zone universities and have now a standards for the excellence in e-learning and have a great evaluation system for the e-learning activities in university (Mohammad, 2008), and this university use the Blackboards in its LMS and after that moved further by creating and integrating the world class comprehensive e-learning environment with the latest tools and technologies like, asynchronous content capture tool, online synchronous delivery platform, desktop content authoring tool and online assessment tool.(Al-Adhaileh, 2010). The Jordanian ministry of higher education announce in 2008 the e-learning strategy which is focus in enable institutions to adopt e-leaning with support institutions in their strategic planning with a holistic approach to embedding e-learning in their system and assure the quality of elearning and create a culture and awareness for e-learning and establish virtual learning environment. There are no problems related to connectivity and affordability issues causing low PC penetration and insufficient Internet access in Jordan.

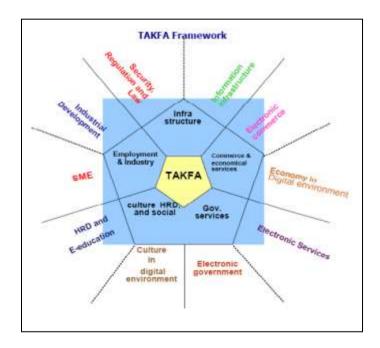
### 2.6.5. IRAN

The Islamic Republic of Iran is located in south-western Asia and neighboring Iraq from the east. Currently in Iran there are approximately 358 higher education centers, including 106 state universities, nearly 139 non-public universities and 113 colleges (mostly undergraduate) placed all across the country. Furthermore, 1,350,000 students study in the Islamic Azad University, which is a Non-Public mega-university with 357 university branches all over Iran. (http://www.iau.ac.ir retrieved on Nov. 2009).(Masoumi, 2010). There are as well about 60 research institutions throughout the country, and the total estimated student number is nearly three and half millions, more than half of these students were enrolled in public universities. Most of the Iranian universities denying traditional educational frames and methods, the new higher learning centers were initiated based on

the European attitudes (medieval European traditions). Iran tops the world countries in the brain drain phenomenon and the evolution of ICT in Iran began at the beginning of the new millennium and between 1999 and 2002, significant funding was allocated for ICT development in note 13 of government public budget between 2001 and 2004.

The government body responsible for developing ICT policies and strategies is the National ICT Agency (NICTA) and it has the overall responsibility for ICT initiatives and presented the application plan of Information and Communication Technology (ICT), called TAKFA (an acronym of Farsi words representing the Iranian National ICT Agenda) and was formed under the supervision of Supreme Council of Information & Communication Technology (SCICT) as the highest decision making body in the area of ICT policy making in Iran. TAKFA as shown in the Figure.2.10, has around seven strategic axes, including education and higher education services.

The general framework of TAKFA comprised of five main parts and in its four parts, they state (Human Resource Development, Cultural and Social Programs: Human Recourse Development & e-Education, Culture in the digital environment). Overall, forty national projects and 110 sub projects in the action plan were defined.



**Figure.2.10**: The General Framework of TAKFA with its Five Main Parts (Khanmesan, 2010; Masoumi, 2010)

Many believe the years until 2005 were golden period for ICT development in Iran and after that the problems for Iran and European Union and the international world society because of the Iran, nuclear programs and the economic sanctions against this country have started and announced.

There are still some obstacles on the way of e-learning in Iran, such as the absence of official local standards, sufficient governmental administration, rude bandwidth, expensive price of connectivity, etc. For perfect use of ICT capacities for e-learning in Iran, cultural, political, and technical and policy issues should be taken into consideration. The use of ICT in the e-learning, in particular, has promoted by the government of Iran during the last ten years and a great deal of funds has been allocated to achieve this goal. Use of ICT facilities for promoting the quality and the quantity of education was one of the important aspects of TAKFA.

Ministries related to the education, higher education and scientific researches submitted several projects to develop and integrate the ICT infrastructures in the educational system. The main governmental body for HE, established a strategy committee to integrate ICT in HE and use the facilities offered under TAKFA in 2002. In addition, the structure was amended to fit with new goals and missions predicted for Iranian HE sector in new millennium.

The Iranian government initiative is to integrate ICT in higher education are:

- -Developing ICT departments at ten leading universities in order to train the required manpower in the field of ICT, increasing the bandwidth of the universities and developing a scientific network.
- -Developing internal network of the universities and research institutes, developing educational management system (SAMA), developing digital libraries and developing virtual universities.
- -Developing administrative automation system, distributing computer among universities, in first step more than 15 thousands computer delivered.

Simultaneously, with other developing countries, Iran is moving to distance learning programs to start on with ever- increasing undergraduate student's population and shortage of infrastructure, financial, and personnel resources to help the learners to fulfill their educational aims. The existing telecommunications systems are incompetent and also expensive to use, so higher education institutions are unlikely to roll too much confidence on them for e-learning or supporting the education activities, or even the science information searching. Poor availability along with posing traditional mindset to the new artifact could be reported as the foremost obstruction in having successful e-learning environments in these countries.

Iranian educational system is confronted some challenges, such as the increasing requests due to the explosion of population, the rise of the student's numbers, the lowering and limited of governmental budgets and the speedy development of ICT and globalization.

Many initiatives have been considering integrating ICT in the educational system, such as developing ICT divisions, expanding the bandwidth of the universities, building a scientific network, national network of schools equipping colleges and universities to computer centers, etc. At the beginning, e-learning was limited to general courses for in-university students, and it was used e-Learning approaches as an option approach, but gradually some government universities run these programs while a number of virtual universities have launched it. At the movement, a large number of universities, institutions of higher education and vocational training organizations have launched e-learning programs or virtual branches.

### 2.6.6. UNITED ARAB EMIRATES (UAE)

The United Arab Emirates (UAE) is a federation of seven emirates (governorates) situated in the southeast of the Arabian Peninsula in Southwest Asia on the Arab Gulf. The most noticeable aspect about the UAE is its speedy rise from a tribal society and a subsistence-level economy to one of the most modern and flourishing countries in the Middle East. The United Arab Emirates University (UAEU), located in AlAin, was the first university and it was officially opened in the academic year 1977-1978.

The academic staff in most if not all higher education institutions in the UAE are of expatriate origin and there is no researches has been conducted to show the accurate percentage between national and expatriates staff in the higher education sector, but it is an approximation that expatriates constitute some 90% of the total UAE academic staff. In order to carry on with the population increase, in recent years the Council of Higher Education has also authorized the establishment of private universities.

After building a good infrastructure in all the living sectors in UAE with an exceptional attention to the communication and ICT sector which had an additional support from the government which acknowledges that ICT infrastructure is of a critical importance to the economic development of the country

((The UAE government recognizes that ICT forms the backbone to most, if not all, of its industries, financial services, e-government, education, and health services)), (General Policy of the Telecommunication sectors in the state of the UAE 2006 – 2010")(Dutta & Mia, 2010)

Furthermore, In brief, the policy set five major objective; establishing polices and regulatory, promoting and developing new technologies, becoming the regional ICT hub, developing the country's human capital, and promising research and evolution. The UAE's telecommunications sector is the most highly advanced in the region. Even though the market was dominated by Etisalat, the big state company, from its founding in 1976, a federal government's order ended that monopoly in 2006 with the licensed second telecom operator Du becoming a new competitor to Etisalat.

Based on four level categories that identify the maturity of ICT level in different countries, the UAE was evaluated as "level three" by the United Nations' Economic and Social Commission for Western Asia (ESCWA) in terms of "ICT maturity"(ESCWA, 2009b), indicating the existence of a clearly articulated vision and advanced national strategy but moderately effective implementation plans.(ESCWA, 2009b). An ICT Development Fund launched in September 2005 with

the aim of positioning the UAE as one of the most advanced ICT countries in the world and is the first of its kind in the Middle East. The internet penetration in the UAE is one of the highest in the region. By the end of 2008 it had increased to an estimated 25%, with ADSL/broadband penetration reaching about 11%.

In spite of important advances in the technologies facilitating in the teaching approaches and contributing to the general improvement of the course delivery process, conventional teaching methods are still powerful in the UAE's education sectors, both schools and universities. (Traditional teaching involves face to face interaction between instructors and learners where the end are mostly passive learners).

The execution of eLearning in most of the academic institutions is still a long way from fully adopted. This may be clearly related to the fact that the infrastructure inside these institutions to support the implementations of such technologies are still evolving. However, the government has set a policy which summaries very clearly the critical need for implementing the most up-to-date educational technologies in order to improve education methodologies and learning in all stages (high schools, technical colleges, and universities). Capturing the American University of Sharjah and the Abu Dhabi University as models, it shows us the great educational advantage of the general management systems (MIS) such as Banner and Logos, which are completely mixed with the online-learning support platforms like the Blackboard-based Learn. ICT and eLearning accordingly become one unlined structure allowing administrators, teachers, and learners to harmonize the learning, examination, and supervision (of learners performance and progression). It also showed how eLearning itself, as one of the new educational technologies, has made important inroads within the higher education landscape of UAE institutions. In effect, "hybrid (in-class/online) learning" is now practically the dominant educational standard.

Prof Dr. Idris Hadi Saleh told the researcher:

"when I have been nominated to be Higher Education Minister in Kurdistan Government from 2007-2010, I have visit AUS in UAE after long study to this university MIS which was banner software, then I have visit the company branch in Dubai and discuss the subject of adopting this MIS software to Kurds universities and we reach a conflict point because of our ministry limited budget, but we were completely confident that MIS banner software was completely the best and what we need for our universities since we are in real shortage of software programmers in Iraq and we cannot build such good MIS for our universities". Meeting with HE on Wed.22<sup>nd</sup> of Sept.2010 in Erbil-Iraq.

Another good model was the Knowledge Village (KV), which was established in 2003 in the Dubai Free Zone for Technology and Media, and it was the first in all the Middle East zones, and it was designed in a similar way to the Malaysian technology park at Kula lumpur. It houses more than 200 institutions of training and education, offering programs include undergraduate, Masters, MBA and Ph.D. programs in such fields as computing, technology, business management, life sciences, fashion and media.

At the end, it smoothly to observe a few matters characterizing the quick development of the UAE's higher education scene, ICT infrastructure, and advanced, limitedly online learning approaches. In specific, it is considered that learner culture had helped or slowed down this rapid shift in the educational model, e.g. The issues of language, digital culture, and plagiarism. Parallel, the attitudes of teachers to the "hybrid learning" is not in the acceptable limits in a country developed very quickly and rapidly in every consideration, not least in the educational and technological areas.

In 2007, Dubai International Academic City (DIAC) was start as a free zone dedicated only to international higher education, where educational institutions from Dubai Knowledge Village will move to DIAC, which is concerned with K-12 education. The new aim is for the KV to only host training institutes and educational service organizations. The development of DIAC after a few years of the launch of the KV seems to confuse, especially when institutions at the KV will relocate at DIAC. It appeared that at first the KV was the idea to include all institutions but with time and growth, the idea of creating a separate city for university and higher education became a requisite.

### **2.6.7. LEBANON**

Lebanon is located in very beautiful and important place at the eastern end of the Mediterranean Sea and it is the smallest areas between all the Arab countries but they have the most famous university and it is *The American University of Beirut (AUB)* which was established in *1866* by American Protestant missionaries and it is the oldest higher educational institution in the Arab region, it is also considered as a leading higher educational institution that is modeled on the American system of education and uses English as medium of instruction. Although the university is the oldest in the region, but the use of ICT in its educational programs is considered as new compared to the age of the university.(Baroud & Abouchedid, 2010).Lebanon's consociation mixing model has clear incriminations on its educational system in which is structured to have public and private institutions which pronounce the country's population social beautiful mosaic.

An important point for consideration is the strong support of higher education to traditional styles of pedagogy in education, with the illumination of existing gaps in student access to the digital resources and world. The other areas of concern applying to the development of e-learning relate to culture and infrastructure. These concerns do not rule out reporting important e-learning developments that took place in higher educational institutions in Lebanon. Over the last two decades and from the start of the 1990 the formal initiatives to integrate ICT took two shapes:

- 1-The first was to merge ICT in the managerial, business, and monetary regions.
- 2-The second was selected educational institutions and universities.

Among these ambitions, a real revolution was started towards the digital Lebanon society with considerable help from the UN organization. In the education sector, changes in the learning styles in many honorable and leading institutions of higher education have started to change the old traditional styles of pedagogy from a teacher centered to student-centered learning as facilitated by ICT utilization.

In parallel with the different strategies, policies and activities that taken to integrate ICT in the works of public sectors, there has been a noticeable development of ICT

infrastructure, increase of PC owners and Internet users. As for eLearning penetration, available statistics show an inconstant perpetration from 2005 to 2007.

In Lebanon, the idea of virtual universities does not exist due to restrictive rules and regulations in which the licensing and matters of distance learning or on-line learning programs is not allowed or certified by the ministry of education and higher education in Lebanon but even with this there are some piecemeal initiatives have been undertaken for on-line learning programs/distance learning degrees in a very limited number of higher educational institutions. A number of universities have engaged themselves with affiliations with universities overseas such as the "Ecole Superieur des Affaires" (ESA) whose graduates would attend courses in the university campuses in Lebanon and then receive their degrees confirmed from the associated university (as is the case European School of Management in France).

A video conferencing set up has been set up in the Lebanese University (LU) to enable faculty members from Toulouse University in France to deliver their courses and learning materials to the (LU) students from farness in order to allow the initiative to be completed as agreed between the two universities, and to defeat the absence of security in the country.

A virtual learning environment (VLE) is a system formed to support teaching and learning in an educational frame, and in Lebanon is attended as an alternative medium for teaching in higher education surmounting political difference that risked students' finish of their educational programs.

A VLE will normally work over the Internet and parts from the adoption of VLE have been executed by many higher educational institutions during political crises in Lebanon. The ICT use in the form of blended learning is a common role in these institutions.

In addition, the teaching methodology in some of the lead universities in Lebanon is changing, involving the shift in the teaching methodology from a teacher centered learning to student-centered learning, making use of ICT. At higher educational

institutions, the use of e-learning is mostly blended learning and also the mobile learning is very limited in this country because of the highly cost of communications services.

Distance education degrees are not certified by the Lebanon authorities in higher education, and also it is not allowed the distance institutions.

The majority of higher educational institutions use ICT in education but the strong bureaucratic obstacles to change are clear evident to the academic administrators and education decision-makers who point out those financial pressures on colleges and universities, which have been increased in the recent years, and they are imposing campuses to reduce expenses, especially on ICT infrastructure.

Only higher educational institutions that enjoy a relative richness being supported by external funding powers, graduates, student tuition fees and other authorities are financing on the latest advancements in ICT. Even so, the outcome of implementing ICT on students' learning is still unclear due to the different paucity of evaluation and consideration studies on ICT use in learning in Lebanon's higher educational scene.

# 2.6.8. Some Other Countries

**Republic of Turkey** is one of the Europe Islamic developing countries which have a boarder with Iraq and they invade and control Iraq for long years was under the control of the Ottoman Turkish Empire from the 15th till 19th centuries. In the texture of the Iraqi population we have a Turkmen society and they lives in the Kirkuk governorate in the north of Iraq.

E-learning in Turkey is so progressed if we compare it with the e-learning in the other Middle East or Arabs countries but if compare them to other Europe countries we will find them not progressed if we compare them to other Europe countries in the European Union.

Turkish higher education universities accept millions of new students each year, and the e-learning in educational settings Anadolu University is considered as the largest e-learning system in Turkey because of the extensive use of online support materials, also the portal e-learning portal provides digitized version of their textbooks, streamed

version of broadcast TV programs, audio books, and multimedia learning materials created in accordance with the textbook content, online trial exams with automated feedback system, asynchronous and synchronous facilitation services, and help desk for administrative and technical support to learners.

The University also offers almost all of these materials as free access learning materials to any who would like to learn. Furthermore Anadolu University has completely online programs. For instance, the Information Management Program is the first completely online associate degree program in Turkey. The program has around 1500 graduated and around 2000 current learner. English language Teacher Training Programs is a one of a kind hybrid blended learning program in which learners take completely online courses in their 3rd and 4th years after joining face-to-face evening courses during the first two years.(Yamamoto & Aydin, 2010).

E-learning in Turkey is still in its infancy stages (Aydın & Tasci, 2005) and there are a lot of matters to be solved. Dependence to the vendors, lack of qualified staff as well as teachers exaggerated hopes, unappealing and useless learning materials, preconceptions about learning at a distance, and lack of laws are some of the important issues that should be taken into consideration. E-learning is one the quickest growing innovation in Turkey same as all around the world. Since early 2000 quite a number of Turkish companies and especially higher education institutions have been literally jumping into e-learning bus without any frontend diagnoses. (Yamamoto & Aydin, 2010).

The Sultanate of Oman is one of the Arab countries in southwest Asia on the southeast coast of the Arabian Peninsula. This small country population with about 2,845,000 in 2009 estimation, have a good education system in all its study levels with the basic aim to modernize the education to align with the rest of the world, and make the integration between theory and practice, conception and occupation, education and life fullness in developing all details of an entire character the acquisition of self-learning skills in the framework of a lifelong education inculcating the values and habits necessary for mastery and excellence in learning and teaching meeting the needs of human development in the

context of comprehensive social development.(AlMusawi, 2010). Oman's strategy to fully liberalize the communication sector has provisioned to allow private operators of internet services, and the governmental Oman Telecommunication Company (Omantel) becomes a private sector company in March 2002.

It currently provides the states fixed-line and internet services, and also it has completed several fiber optic projects in the inside districts and linked the remote islands with microwave link Wireless connectivity for broadband services is available for adoption in Oman. Meanwhile, the mobile communication service suppliers offer a wireless connectivity for accessing the Internet. Such a service connects to the Internet, using a Wi-Fi enabled laptop, PDA or mobile device to make it promising to conduct remote meetings and tele-presentations as well as process emails. (AlMusawi, 2010).

Oman have over than (50) public and private higher education institutions. Those are regulated and administered by the ministries of higher education. The Accreditation Council was set up in 2001 to regulate the accreditation, assessment and quality control of the Sultanate's higher education institutions and several plans and programs have been drawn up to guarantee the standards of the higher education sector.

In 1998, Omani government set up the National Information Technology Committee to manage the development of the Oman information technology sector and to work towards an e-government and e-learning dynamisms and they implement the first Oman ICT strategy. (AlMusawi, 2010).

This strategy targeted improving educational opportunities in Omani higher education. A science and technology policy that consists of clear strategies and a detailed road map to ensure its successful implementation of research and development was formulated (MOI, 2008). In response to academic and training needs, Omani specialists in educational and information technologies have formed a professional society, the Omani Society of Educational Technology (OSET). It was also evident from this survey that on an average an Omani individual spends (USD7.8) per month for Internet access (International Telecommunication Union, 2006).

For example, the Ministry of Higher Education has initiated recently a restructuring program aiming to provide the existing six colleges of applied sciences with more applied information technology.

A particular emphasis is directed towards improving the learning methods by developing and implementing a unified LMS which serves the new form of these colleges. Such system is particularly intended to improve the e-learning skills in the six colleges (Gattoufi, Al-Naabi, and Gattoufi, 2007). Some of these institutions own their videoconferencing facilities. In 2005, the college of education at Sultan Qaboos University has opened a new department offering a bachelors degree in instructional and learning technologies to prepare information technology teachers and LRC specialists. The first batch of graduates from this department joins the service in the schools in 2009. While these institutions are not oblivious of the advantages of e-learning, many Omani educators will be better convinced with more research evidence on the quality, security and credibility issues of e-learning.

In Syrian Arab Republic which is a Middle Eastern country located in southwestern Asia and bordering Iraq, at the eastern end of the Mediterranean Sea and it was the center of early world civilizations, the government exercises great efforts to additionally democratization of education, which is completely free at all stages in this country like Iraq. The process of improving educational structures, contents, and regulations was all completed in order to enhance quality and performance to achieve the educational goals within the framework of the Country general policy.

The government also faithful to building educational management, improving the potential of the educational staff through pre- and in-service human resources capacity building, updating methodologies and technologies, dedicating more emphasis research and experimentation, developing to the educational assessment process, and introducing computers and information technologies into the core of educational activity. Syrian Virtual University (SVU), Damascus, is fully certified and authorized by the Syrian Ministry of Higher Education only. The main objective of this SVU is to provide the Arab learners

worldwide a great degree class education. In order keep up with the academic and quality standards practiced internationally, SVU finished an agreement with the UK Open University; followed by agreements with some leading online universities in Canada, Europe, Australia, and the USA. The university has a single role to exercise in establishing and publicizing a new educational culture in Arab Middle East, that is: Lifelong Learning. This university e-learning framework used is Khan e-learning framework. (Hamdan, 2010).

#### 2.7. SOME COUNTRIES EXPERIMENTS SUMMURY

- 1. Several countries in the Middle East, particularly the United Arab Emirates (UAE), Qatar, Bahrain, and the Kingdom of Saudi Arabia, are working proactively to develop effective education systems and productive research agendas. Some are committed to developing a knowledge society that will contribute to economic development.
- 2. The use of ICT in education through e-learning can play a vital role in democratizing education, especially in developing countries.
- 3. All the progressed countries in the field of e-learning have a high steering committee specialized for e-learning adoption and they structured or shape it in different ways like National e-learning Center or National Program or a Committee.. etc, and the specific role is to simplest the adoption procedures and make the researches about it.
- 4. UAE is a good example and extraordinary experiment which must be followed closely for the other Arab's countries about the way in which UAE higher education, with its variety of formats and styles, is evolving in this country, and how the demographic and financial resources are driving it.
- 5. All the countries that have been stated and summarized its real e-learning situation in this paragraph, believe that human resources capacity building (HRCB) is one of the biggest e-learning constrains and they have paid a great attention to the HRCB and all the researchers believe that It is very important factor in any e-learning process adoption.

- 6. Good communications infrastructures is for sure leads to a good e-learning adoption and most of these countries suffers from the bad communication infrastructures and most of them pay a great attention to that and start to build high standards ICT infrastructures.
- 7. Distance education is still not certified in a lot of Arabs countries and Iraq is one of them.
- 8. All the education systems suffers from the great believing in the old traditional face to face, especially at the level of the decision makers.
- 9. Countries with the big populations, like Iran, Turkey and Egypt, suffers from the increasing demands for the higher education in the Middle East zone, and they start the correct the ways towards the virtual universities and distance education.
- 10. Malaysia is the best among a lot of world countries because they have a great education philosophy and they have everything that any country needed to build its higher education system.
- 11. Human resources are an important dimension is any project not only in education, but here it has a great impact and influence. Most the countries pay a great attention to that and some of the even create a special ministry for that like Malaysia and allocate a special budget for it.

As a summary from studying these countries trials (Table.2.3), the researcher found that Malaysia is the leader in improving the education in all its levels among all other Islamic countries and third world countries, and its powerful improvement comes from several reasons, especially the stability in this country, well future planning and adopting ICT and made a full use of the educational technologies in its higher education institutions.

Furthermore, the researcher finds that KSA asked for the experience of the Malaysian officially. The Egyptian follows them and their steps in higher education and now also follow officially as government to government, and the Jordanian follow the

Malaysian trials in establishing the smart schools and import what is useful from Malaysia.

Other countries like Yemen, Iran, and Turkey looking with high attention to the Malaysian trials in this field which it is great by all the meanings.

Iraq has a long historical friendship relation with the government of Malaysia, and the researcher finds that very clear during his visit to the Malaysian Foreign Affairs Ministry in Putrajaya.

The Malaysian society mosaic composite is similar to the Iraqi society from a lot of different views like multi races, multi cultures, multi languages and the highly Islamic population percentages.

In Arabic culture we have an argument said (Who does not know you, not informed of you) and this is the truth that the researcher found it in this Islamic far country and without any type or kind of the courtesy I am proud that I am in Malaysia, proud to know it's simple quiet people, proud to live in it more than four years till now, proud to complete my study in its USM, proud by all my professors and friends here, and proud that I am researcher trying to transfer Malaysian experiment and experience to my country Iraq.

Table.2.3: Summary of Some Countries Trials with E-Learning and Distance Education

Country	e-learning Infrastructure	communication	Laws & Regulations	Using Types	Video conference Using	Virtual Univer	Distance Education	Public Univer. Used e-learning programs
Malaysia	Good & have national program and center	Excellent & very cheap	Authorized	Blended & mobile Learning	Highly Used	Have	Have one of the biggest in the world Malaysia Open Univer.(UOM)	Public University & 28 private learning institution
KSA	Good & have effective national elearning center	Excellent	Authorized	Blended & mobile Learning	Highly Used	Have	Have Malaysia Open Univer.	28 Public University & 28 private learning institution
Egypt	Good & have national program and center	Very Good & very cheap	Authorized	Blended & Mobile Learning	Highly Used	Have	Have Malaysia Open Univer.	18 Public University & 16 private University with 2.5m student
UAE	Very good Do not have a national program	Excellent but expensive	Authorized	Blended & Mobile Learning	Highly Used	Do not have	Not certified	Total number of 70 Learning institutions
Turkey	Good & have national program and center	Very Good But expensive	Authorized	Blended & Mobile Learning	Highly Used	Have	certified	53 Public University & 24 private University with more than 2m students
Iran	Acceptable	Good But expensive	Authorized	Blended Learning	Used	Have	Have one of the biggest in the world	54Public University & 24 private University with more than 3.5m students
Jordan	Good but do not have a national e-learning center or program	Very Good But expensive	Authorized	Blended & Mobile Learning	Highly Used	Not Allowed but have branches for the Palestine Univer.	Not certified	10 Public University & 17 private learning institution
Lebanon	Acceptable	Good But expensive	Not Authorized	Blended Learning	Highly Used	Not Allowed	Not certified	One Public University & 44 private learning institution
Syria	Acceptable	Very Good But expensive	Authorized	Blended Learning	Highly Used	Have	Syrian Virtual University	16 Public University & 17 private learning institution
Iraq	No infrastructures at all	Very Bad And very expensive	Not Authorized till now	Trails only for CAL only	Used	No	Not certified	No real using

#### 2.8. SOME UNIVERSITIES JOURNEYS WITH E-LEARNING

#### 2.8.1. The University

The university is an attractive society with many covers: academic, scientific, social, cultural, economic, political, religious, and commercial. It is worlds of its own organism were learned people; educate students, experts, scientists, researchers, teachers, leaders, and preachers. Whatever it is, the noble vision and mission of the university are to generate, expand, and circularize the knowledge in all directions for the progression of human civilization.

The university is the marker of civilization development because it represents human higher learning in many directions of knowledge. It represents the progress in human thinking, knowledge, and technology in many characteristics of life. Ever since it's first founding 1500 years ago, it has been the source of knowledge, premiership, and high culture. It has been the organizations were learned people, civilized people, elites, and leaders begin from.

In spite of this period, it is still an institution of the selected few to perform higher education and better life. It is still a place for the observance of passage of elitism and recognition of better mind and qualified learning. No other society's institution has the advantage and class of the university.(Hussin & Asimiran, 2010).

The university has defended the status and has become the birth of political revolution, taking charge of reformation in any society. It has, however, at some instances, become the matrix of social revolution, and at many instances become the accelerator of intellectual revolution by directing new paradigms and technologies. The universities have helped in the achievement of national priorities and development programs.

"University governance is largely about guiding the university towards achieving its vision and goals as an institution of professionalism, scholarship, research, and knowledge advancement".(Hussin & Asimiran, 2010).

## 2.8.2. University of Prishtina in Kosovo, Kosovo

Many universities assign technology to enhanced learning in order to help learners. Mrs. Erdelina Kurti in her research "Students 'experiences on eMesimi; an e-learning system in University of Prishtina, Kosovo" (Kurti, 2008), state some living and learning conditions which the researcher found it is equivalent to the Iraqi living and learning conditions like the post variance country with a vulnerable economy still needs the basic technological infrastructure for learning. Some of its universities still need proper computer labs with internet connectivity.

University of Prishtina as the only state university in Kosovo, and deals with a lot of challenges when it comes to beginning of technology enhanced learning by (eMesimi) which is an e-learning system based on Moodle and its e-learning framework was Khan Octagonal framework of e-learning (Khan, 2005), and the system is used for offering courses for students in University of Prishtina since 2005. (Kurti, 2008). The eMesimi architecture and organization is presented in Figure 2.11.

At the beginning, eMesimi enterprise started on summer 2005 as a web based CMS and this system was used for the course's offering in the Prishtina International Summer University in 2005. Since then eMesimi was used as an e-learning system for eight courses mostly in the computer science area. Since 2005 in this system have been registered 746 learners in different courses. In November 2005 through eMesimi the teacher started to offer audio lectures that students could play/download these courses and lecture. On March 2006 on the website of eMesimi video lectures were ready for use, mainly as short tutorial sessions and streamed through YouTube and Google Video servers. Now, on this system, each semester there are two actively running courses. The most important result obtained from deeply discovers this study that use Khan framework is that:

- 1. The Moodle software is appropriate to be used with khan framework
- 2. Offering videoconferencing lectures in VCLE is an excellent way of providing educational materials in e-learning and can support the Khan framework widely.

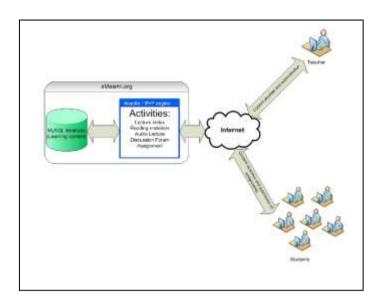
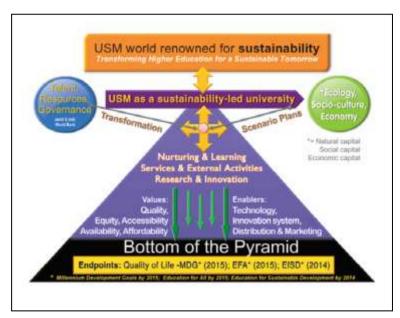


Figure.2.11: eMesimi – Architecture and Organization (Kurti, 2008)

## 2.8.3. Universiti Sains Malaysia in MALAYSIA (USM)

USM was established in 1969 as the second public university in Malaysia and it was first known as Universiti Pulau Pinang. USM is located at the north of Malaysia in Penang Island, and it has 25 colleges and 34 center of excellence and has three campuses. Penang is a high-tech based island and has been involved in the manufacturing of electronic components for more than three decades. USM is among the finest in the Islamic universities, and it is ranked 309 in the QS Top universities world ranking. (Razak, 2005).

In March 2008, the Malaysian Higher Education Ministry asked all localized universities to present their recommendation for consideration to be emplaced under its Accelerated Programs for Excellence (APEX). This is a fast track development programs for universities of higher learning to complete and to be identified as world class universities. After going through an exact and long selection procedure, involving a presentation to the selection panel and its following on-site proof visits, USM was chosen as an APEX-status university under the APEX program by the Ministry beginning 3 September 2008. Figure 2.12 presented the USM APEX university activities diagram.



**Figure.2.12**: USM APEX university activities diagram http://www.usm.my/index.php/en/about-usm/making-a-difference/apex-status.html

USM had investigated the various avenues available for (USM) to go abroad on promoting Education for Sustainable Development (ESD) and to act as a Regional Center of Expertise (RCE) for the state of Penang. Several programs have been achieved by USM like the healthy campus, University in Garden. USM believes in the Trans disciplinary cluster as adopted in its research and development philosophy that promotes Trans disciplinary practices through the formation of research clusters. Through this clustering, USM strives for a balance between promoting science and technology and the arts and humanities.

The majority of the universities and e-learning institutions in the world's adoption of e-learning began in a combined of traditional face-to-face and online learning, and the instruction takes place both in the classroom and online, and where the online part moves towards to be a natural supplement of traditional classroom learning. (Fook, Kong, Lan, Atan, & Idrus, 2005). USM with considerable history in employing educational technologies since 1971 (Figure. 2.13), and it is very clear that the School of Distance Education (SDE) in USM created distance education in 1971 in Malaysia and Asia and also having pioneered it. Through this innovative education approaches, working adults are able

to undertake undergraduate courses while remaining in full-time employment. Up to 1982, all the teaching material was in the form of printed notes provided by the lecturers. 1983 saw the systematic redesign of learning materials into printed pedagogic self-instructional modules incorporating audio and video cassettes, slides and film strips. The modules produced then were either in the form of self-instruction or a study guide format around a textbook.

USM delivered many 'firsts' in Malaysia in the use of technologies to enhance learning activities. USM was the first to establish audio teleconferencing (ATC) in 1988 followed by the internalization of the electronic writing board with the ATC in 1989. Full two-party video teleconference was instituted in 1995 in all the states in West Malaysia.

As new technologies are proliferating through various facets of everyday life, the e-learning portal has become a medium of teaching and learning in the USM Distance Learning Programs through a home-grown electronic portal in 2003 and full migration to Moodle in 2005. The portal has become an indispensable tool for both administrative and learning support (such as forum, chat and lecture notes), and it is being used actively by both lecturers and students. The idea behind developing this portal was to set up a one stop center for reference for the purpose of e-learning such as articles, books, software, expert advice, and consultation with supervisors or lecturers.(Ismail, Idrus, Ziden, & Fook, 2009).

From 2001, USM, in a trial to re-invent itself into a research-intensive university, took on a more active research character so that cooperation between the university and industry sector could be moreover improved. Following this, the R&D division of USM has been reorganized in line with the concept of clusters (The Internet).(Razak, 2005).

The video conference learning environment (VCLE) has been used in SDE since 1996 as a delivery method for teaching and learning for distance learners. The framework that was used in USM-SDE was derived from the Oliver & McLoughlin interaction model consisting of five interactive dimensions, namely, the social, procedural, expository, explanatory and cognitive dimensions across five combinations of dialogue exchanges

between teachers, learners and the class as a whole. USM-SDE therefore used a blend of self-instructional text, state of the art video conferencing learning environment (VCLE) delivery system and an electronic portal, including the Learning Activity Management System (LAMS). Figure 2.13 presented USM journey with educational technologies.

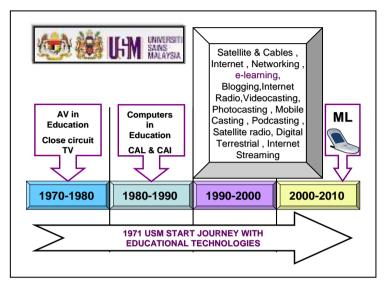


Figure.2.13: USM Journey with Educational Technologies Details

A home-grown learning management system (LMS) was launched in 2003 until the resettling Moodle in 2005 and now and after 15 years USM- SDE has one of the best elearning portals, which are most effective and widely used in this university and the schools. The main reason for its successful is the supporting of the achievement of the University's task, goals and strategy by helping to provide an excellent learning experience for academicians, ensuring the availability of experienced development possibilities for all staff, and supporting modernizations in teaching and learning, concentrating on innovation and the significance of new technologies.

The researcher discover that in order to ease the transition towards the e-learning system, there should be an appropriate pedagogical training focus on issues regarding the formulation and design of the new learning environment. The second main reason for the effectiveness of the USM-SDE e-learning portal after the proper framework, is the good ICT infrastructure of USM which is designed with high quality standards and the good implementing of the university networking and it is a good example for the development of

a technology cluster with Intel funds provides and Cisco helps. USM network layout (presented in the chapter 5, Figure.5.2) show very clear the good and easy university main campus network. USM HQ has understood the great importance of the internet service for the university learning, managerial and academic daily work and take that into consideration and solve the problem by providing the service from four different providers with a capacity of about 130 Mbps.

"A survey research in the USM-SDE published in 2009 stated that the survey conducted had demonstrated that many respondents perceived that technical appliance is significant to implement the E-Learning Portal since they must have access to computers and Internet, the accessibility as well as the friendly features of the portal. However, attention should be given to the uncertainty of the success and time taken of downloading learning materials in E-learning Portal in order to ensure the effectiveness of the portal". (Ismail et al., 2009)

USM-SDE e-learning portal don't need to know any programming experience from the learners or the teachers and it is very easy to use and learn and completely powerful for group works. Moodle plugs a social constructivist pedagogy (collaboration, activities, critical reflection), and it is appropriate, common, lightweight, and effective for 100% online classes as well as supplementing face-to-face learning. Quiz can be created from scratch or imported from many formats and It's SCORM-compliant (SCORM is the standards used for e-learning) and could be used all over the world and by many universities in Malaysia. USM-SDE does not have a specific e-learning framework, because they focus on all the learning elements and all the up to date technologies spread and discover and study it one by one. As a result for that hard continuous work their e-learning framework covers everything and they are now in the first step to transfer this experience into the Mobile Learning. USM School of Distance Education Mobile Learning coordinator Dr. Issham Ismail from USM-SDE state in New Straits Times (Daily News Paper, 13 July 2010, page. 11, Prime News):

"e-learning was also more efficient today with the widespread use of communication devices such as mobile phones. Therefore, USM will propose to the ministry to set up a public university that uses the e-learning approach. USM also launched Mobilelearning@USM which will function as a research centre for virtual learning".(http://www.usm.my/index.php/about-usm/news-archive/67-papercutting-/7076-Mobile-learning-campus-proposal-.html).

# 2.8.4. Al-Quds Open University, Al-Quds, PALESTINE

The idea of the founding this University began in 1975 based on the desires of the Palestinians for higher education, and considering their demographic, social and economic circumstances under the Israeli occupation. QOU Started in 1991 began its educational services with its headquarters in AlQadas (Jerusalem) and extends its educational regions and study centers in all major Palestinian cities through 22 branches that comprised few hundred learners. The number of students has been increasing since then, and it has reached 50,000 in 2005.

The first group of degree holders was in 1997 and this stage was especially hard and difficult because it coincided with the first Palestinian Intifada (Uprising) that started in 1987 and continued for six years. The University hurt a lot because of the damaging economic issues of the First Gulf War on the Palestinian population and the Arab Population. All Palestinian universities adopted some form of e-Learning delivery mode of courses and in Al-Quds Open University (QOU), (http://www.qou.edu) has two e-learning initiatives; Avicenna virtual Campus project, (http://pleiad.qou.edu) which aims to produce online courses and it has already offered at this project some eCourses related to its open courses. It has also Academic Portal (www.qou.edu) which allows students and tutors to communicate and exchange materials.

The e-learning framework that is used in this university is Khan Octagonal framework of e-learning (Khan, 2005) and they pass long steps towards e-learning which starts with establishing Multi resources learning center and after that they establish Ibn

Sina Virtual university project which was launched in March 2003 and ended in September 2006 and was approved by the United Nations Organization for Education, Science and Culture "UNESCO". Now days the university is in the way to build the complete blended learning system based on Khan e-learning framework.(Khan, 2009).

The aim of the Ibn Sina Virtual Campus to build a community of universities in the Mediterranean basin, to share in the optimal practices and uses of education through a network of learning centers scattered in these universities and work to promote the use of technology in e-learning and distance learning. And was attended by 15 countries Basin Eastern, and the project seeks end to build a virtual library of e-courses, which are produced at the various centers, and in this connection, the Ibn Sina - Palestine, risky under the umbrella of Al Quds Open University, produced 22 decisions electronically, one of these decisions For blind students, and some of these courses of the best decisions at the level of production States participating in the project of Ibn Sina. The Register site Avicenna Virtual Campus (256 525) visit to the students at Al Quds Open University until the end of the academic year 2008/2009.

The Ibn Sina see in Palestine and embraced by the university which attached great importance to the themes of distance learning and e-learning, the university also provides an infrastructure for computer networks, and the university network is the largest wide area networks (wan) In Palestine.

The transfer of knowledge through a project of Ibn Sina to the center staff of information technology and communications expertise unique to the production decisions of the new electronic, and made available to students through the Internet, which allowed each student at Al Quds Open University and other Palestinian universities, to take advantage of the scientific material available on the platform I'm Sina.

The university start its online learning in the first semester of academic year 2008-2009, and the first target was 10 subjects using the face to face traditional classrooms learning and online learning then the university HQ in the second semester added 26 new

subjects and all was under the Khan 3P - framework designs (The E-Learning P3 Model) (Khan, 2004), and the complete transformation was also based on the Octagonal framework of e-learning managerial, institutional and strategic planning concepts that have been stated in this multi e-learning framework using.

## 2.8.5. Hamdan Bin Mohammed E-University, Dubai, UAE

The HBMeU is a great example for the investments in the education and learning and it is completely first of its type in the Arab world and it is the first electronic online university in United Arab Emirates (UAE) to be allowed and identified by the Ministry of Higher Education and Scientific Research there.

This University even it is very new with very short history but it is a pioneer in elearning with a task to re-shape education by providing a model of lifelong learning, including open approach to short courses, executive development programs, certificate and diploma courses leading to accredited undergraduate and graduate degree programs.

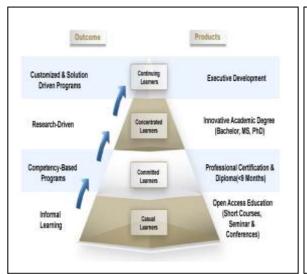
The University offers a wide range of programs to converge with the needs of learners in all sectors of the economy, including business, education, e-learning, healthcare and environment. The HBMeU provides studying possibilities for all through the principle of click-to-learn and also values international integrity, perception and affiliation, and its programs are not only demand-driven, but are adapted to meet the growth calls for of businesses in the UAE and actually at another place in all the Arab worlds.

The university use blended approaches and chases it in the delivery of learning, and it is widely used to define a situation where various delivery methods are integrated together to deliver a specific course. These approaches may include a blend of face-to-face classrooms, online classrooms, and self-paced learning. To achieve the university goals, they have developed an excellent Learning Management System (LMS) based on comprehensive experience in e-learning, quality management, and instructional design to offer a comprehensive solution for anytime/anyplace learning.

The virtual learning environment (VLE) which will be browsed by the learner through the course material and sitting in classes will provide the learner with a stable and easy-to-use interface. The online courses which are approachable by the virtual learning environment (VLE) have been carefully designed and developed by highly experienced subject matter specialists and following well set up instructional design strategies. Course content is presented to the learner in an interactive manner that leads to greater retention of the covered material; it gives different learning styles through the use of audio, video and visual graphics. Tests and exercises are built in within the courses to increase your retention, and keep the material fresh, downloadable PDF files are also ready for use for extra practice.

Blended learning process at HBMeU combines the advantages of the flexible selfpace learning, interacted online collaboration with the high percentage of the learning
process and a small percentage of physical face to face learning appearance include
lectures, presentations, workshops, conference and tutoring. Online collaboration in this
university e-learning involves Synchronous and Asynchronous fundamental interaction
between university members and learners through the web. The virtual classrooms are
usually highly used in the university e-learning framework to execute activities during
which all course learners and the faculty members are linked at the same time, and the
faculty members can use tools (i.e. text chats, audio and video conferencing, electronic
whiteboards, file sharing, etc.) offered through the Virtual classroom to deliver their
courses.

The main reason for these effective e-learning portals in this successful e-university is due to the good communications infrastructures, the good e-learning framework and models used and the great technology transfer from the most progressed universities in the world to the HBM e- University. Figure 2.14 present the lifelong learning model used in the HBMeU and Figure 2.15 presented the BL approach.



Self Paced
Learning

Online Collaborative
Learning

**Figure.2.14**: HBMeU Life Long Learning Model http://www.hbmeu.ac.ae/content/life-long-learning

**Figure.2.15**: HBMeU BL Approach http://www.hbmeu.ac.ae/content/e-learning-and-blended-learning

# 2.8.6. The Hashemite University, Al-Zarqa, JORDAN (HU)

It is one of the big public universities in the Jordan, and it is located in Zarqa governorate, which is very close to the capital Amman. This university is a very good example for the well planning in establishing universities according to the universities high standards. The decision of establishing this university was taken in 1991 and after building a very personable considerable campus, they start the university academic life and the learning started at the beginning of the academic year 1995- 1996. Students were approved to study at the faculty of Sciences and arts, faculty of Economics and faculty of Administrative Sciences and Educational Sciences at the first year.

The Hashemite University is a four-year coeducational traditional university and its objectives were fixed to be a university obligated to excellence in education and research. Its important task is to offer service and consultation to the localized Jordan community and society in addition to the larger Arab society, and to be a foundation in the gathering efforts with other Jordanian universities to increase academic cooperation between the Jordan and the Arab nations and between Jordan and the world. In general and as a word of truth to record what happen to the Iraqi higher education sector in general and to the

university of Mustansiriyah in special, it is very important here to state that Hashemite University and Jordan University of Science and Technology Irbid were in the front and alone to help UoMust to rebuild itself again even they are limited budget universities. Also HU is about to be similar with the UoMust from the sides of the learner numbers, numbers of colleges and centers, the second biggest university in the capital of the country and a lot of other sides.

HU educational system provides learners with the needed amount of flexibility and freedom in choosing the curriculums that meet their preferences and their academic, cultural and social dreams and they achieve that they build a very good e-learning system considering that e-learning revolution start with university founding. (Mohammad, 2008).

HU set up an e-learning center in an administrative level of a college to mirrors the university perception where it visualizes an environment where the use of information and communications technology is considered as a complete part of our everyday practices and administration management. It recognizes the potential to consequences on learning outcomes for learners and the work routines of staff.(Al-Jufout et al., 2008). This center arranges the necessary infrastructure and equipment for starting the increase of e-learning infrastructure. Furthermore, it provides the specific human resources capacity building at all levels and especially for teachers and trainers. The center also helps in the creation of the needed conditions for the evolution of quality educational contents and repairs and hastening the networking and co-operation at the country level.

The HU e-learning center are well-behaved and up to date servers and equipped with all the needed hardware, and they open a very big e-learning lab with 250 PCs dedicated for accessing e-learning material also they open another four labs with 30 PCs each for teaching and training. There are additional Labs for e-learning center distributed in the university faculties with average 100 PCs each beside that each faculty has it individual computer labs. For the content development, the university provides its staff with a fruitful authoring tool which is very easy to use and wealthy in characteristics and through or by

this tool, the teachers will be able to develop their subjects and publish it in different designs and shapes for students.

To achieve that they a HRCB plan which end with 80% of the HU academic staff trained on LMS use, and they are continuing in their plans of training and also developed the trained staff with other e-learning tools. The alike time of e-learning revolution and the starting of the HU has help to build a good technology infrastructure for which is backed with the rest mentioned components of e-learning, such as the online exam system, a complete MIS with a student information system, library and virtual library systems, and working on a full university portal system and the HU is aiding its infrastructure with up to date brand hardware and software for students' and teachers use.

# 2.8.7. University of Bahrain (UOB), BAHRAIN

The University of Bahrain which is set up officially in 1986 is a public university in the Kingdom of Bahrain, and it is the biggest university in Bahrain, and it comprises seven colleges and 13 center of excellence. The UoB new important strategic plan for the years 2009-2014, focuses on the university-wide work in the quality assurance and outcome-based determination process.

UoB is one of the Arabic educational institutes that are in its way to adopt the elearning system and change all of its courses to be online, and they believe that adopting elearning system can help in denominating many challenges that start arise from the broadening number of students locally and regionally compared to the available human, technical, and other resources.(Al-Ammari & Hamad, 2008).

The UoB vision is to be an internationally identified university for excellence in academic learning, creative research, and community future promise that leads to the economic liveliness, sustainability, and the life excellence Bahrain, the Gulf zone, Arab countries and beyond.(Ahmed & Al-buloshi, 2009)

The UoB is a national university devoted to excellence in teaching and learning; innovative research; the generation and dissemination of knowledge; development of the

student's personality, abilities, and knowledge; and building partnerships with the public and private sectors; through differentiation in its academic programs, faculty and staff, student activities, fostering innovation, cultivating a culture for quality, and reaching out to the local, regional, and international communities.

UoB provides its students with sort of services, including electronic enrollment and learning payment, as well as the online variety of courses. The university trials to build and introduce new services, such as e-learning syllabi.(ESCWA, 2009a)

# 2.8.7. (a).Zain e-learning Center

This center was set up in UoB with the help of a Mobile International Company holding the same name of the center (ZAIN), and it is widely worked in Bahrain and some other Arab and Gulf zone countries, in coordination with the UoB Council decision in 2004. The Center was founded to carry on with the up to date developments in Information Technology and to utilize this technology in teaching and learning processes at the UoB.

The center establishing dreams at providing qualitative development in learning and to qualify learning to a best educational production in order to create degree holders qualified for carrying on with continuous changes and using these changes to attend and help Bahrain.

The e-Learning movement is a rapidly growth process and the corner rock in this field is changing the nature of education to the best and providing possibilities to utilize technology in learning–teaching circumstances through offering a distinguishing, and highly identified pattern of electronic self learning to meet serious, continuous and fruitful fundamental interaction between learners and teachers to help them in realizing themselves and fulfilling their goals within an academic framework seeking excellence and quality education.(Ahmed & Al-buloshi, 2009).

The center provides and delivers online courses, ICT and e-learning capacity building, and academic programs, which utilize technology in teaching and learning, in coordination with academic departments and according to its academic staff requires.

In addition, the center organizes capacity building courses for learners and staff to qualify them to deal with the educational process and secure uniformity between electronic courses and traditional face to face courses. And also in this center there is a high secure intellectual property right for all individuals and authors involved in producing the elearning courses.

The center provides consultation services for all departments and colleges concerning the change of textual and traditional courses into electronic courses and all related issues and supporting academic research in e-Learning between University staff by following up activities to the latest evolutions. In the technical and hardware field, the center provides all physical and technical support for all departments and staff wishing to change their traditional courses into on-line courses.

A research using the model of Technology Acceptance Model (TQM) which have been developed to investigate and understand the factors and its influence about the adoption of e-learning at UOB, have stated and indicated that content quality and computer self-efficacy have a favorable secondary effect on the behavioral intention to use the eLearning system through detected usefulness and saw ease of use and the outcome of the cultural factors on the behavioral intention were significant and also the finding of this study has significant hints on the suitableness of adopting an e-learning system is especially suitable to the university's managers and administrators as it reveal ways to raise learner interest in e-learning system at the UoB.(Al-Ammari & Hamad, 2008).

### 2.9. GENERAL STUDIES

It is exceedingly known that productive projects implementation and replication will depend on identifying and assessing project-specific goals, contexts, and implementation operations. Evaluation of e-learning is fairly a new topic in the e-learning field, the effective evaluation methods for e-learning is being conducted and there is a need for an approach of distinctive degrees at the same time.

In comprehensive, when designing the evaluation for e-learning effectiveness in

learning, the assessment of the learning in the course is needed and also the assessment of

its application in the workspace.(Abbad & bargothi, 2010).

Universities have to be skillful at evaluate e-learning field and have a good

assessment model to be used because it will help them to for better e-learning designs that

will allow for sure both the learners and the universities to adopt e-learning systems in the

future.

It is very important to take the students' impressions in consideration for e-

learning perspective developments. Moreover, because the approval and the comprehensive

use of the e-learning in different universities and the diversity of problem areas are growing

and extending from technological issues to content.

Lots of fears have appeared to regard the quality of the learning level,

characteristics of the technology, expense and maintainability which required a broader

evaluation design.

2.9.1. Hexagonal E-Learning Assessment Model (HELAM)

Hexagonal assessment e-learning model are designed by some researchers

(Ozkan, Koseler, & Baykal, 2008). They arrange the measures available for evaluating an

e-learning system and describe the methodology which is based on 45 criteria for

evaluation. The criteria are grouped into six main categories in coordination with each

standard correlation (Figure 2.16). These six main categories are as follows:

1. Technical Issues: System Quality

2. Technical Issues: Service Quality

3. Technical Issues: Content Quality

4. Social Issues: Learner Perspective

5. Social Issues: Instructor Attitudes

6. Supporting Issues

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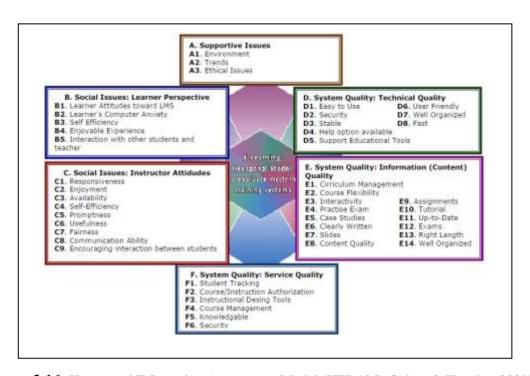


Figure.2.16: Hexagonal E-Learning Assessment Model (HELAM)(Ozkan & Koseler, 2009)

For accompanying e-Learning we have to believe that learning environment with educational technologies comes to be more complex and there is an important need to measure the success and the effectiveness of the e-learning applications systematically in order to measure the efficiently of the educational objectives.

# 2.9.2. Kirkpatrick E-Learning Evaluation Model

- D. Kirkpatrick put a four-level model of quality assessment that can be executed to the traditional methods of learning and also to e-learning.
- 1. Students' reaction: students are asked to evaluate the training after completing the program. First is asked how well they like the training. But other questions are about the relevance of and the fitting to the objectives, the quality of the included interactive exercises, and the ease of navigation.
- 2. Learning results: has the learner increased his knowledge of the topic? What about the achievement?
- 3. Impact of learning on the functioning in the workplace:
- Are any of the new knowledge and skills retained and transferred back on the job?

- Is the student's behavior changed as a result of new learning?
- 4. Impact of learning on the business results: the evaluation of the business impact of the training must be measured.

# 2.9.3. The Sevaq Self-Assessment Model

SEVAQ model is rises for self evaluation of quality in e-Learning. The main goal of the SEVAQ project is growing the quality of the educational courses that are offered through open-and distance learning, e-learning and blended learning. A modern multifunctional self-evaluation questionnaire has been developed in order to gain helpful learner feedback and it is based on the EFQM-model.

# 2.9.4. Education and Technologies Networks

Modern models of learning are radically changing our conception of education to the e-education for human growth in the learning society requires combined learning and requires focusing on building knowledge. These changes appear from shifts in educational objectives, and from new concepts in learning and knowledge creation.

The evolutions in ICT produce approach to learning possibilities, correct inequalities improve the quality of learning and teaching and deliver lifelong learning and supply differences in learning styles and take off walls in the direction of learning by providing increased opportunities and individualized learning experiences.

ICT can enhance educational reform by allowing teachers and learners to step away from traditional approaches to teaching and learning. In a changed teaching and learning environment, there is a move from teacher-centered, task-oriented, memory-based education (with technology at the periphery), to a comprehensive and merged practice where learners work collaboratively, develop shared practices, engage in meaningful contexts and develop inspired thoughts and problem-solving abilities.

In general technologies need a heavy financial investment, higher education universities and colleges are allocating a larger part of their budget for mobile wireless

technologies because they understand that technologies play a crucial role with high benefits in education.

In 2000, universities in the US increased spending on technologies occur even in small colleges, and they spent approximately \$2.7 billion on computer hardware and software and in 2004, spending on technology in higher education has increased to \$5.6 billion, and it was a 3% increasing from the previous.

Local area networks (LANs) are already well set up in many higher education public organizations and universities worldwide area and have fixed Wireless-Fidelity (Wi-Fi) networks incorporating wireless standards are more and more turning to wireless LANs to extend connectivity beyond the bounds of their wired infrastructures.

Wireless technologies and links are extraordinarily useful for universities with large populations of nonresident learners who don't have their own on-campus wired computer connections.

Wireless networking enhances productivity and flexibility and bears value for both users and network administrators in higher-education institutions and even in settings where learners don't ordinarily use computers, teachers must keep make using of wireless networks to display visuals and communicate attendance figures and other managerial information.

- Give learners and faculty members the freedom access to the academic network and the Internet in classrooms, laboratories, lecture halls, dormitories, and common areas from the university or any place anywhere at any time.
- Increase the academic network cost-effectively; even it is hard to wire spots such as old masonry buildings.
- Provide and enjoy larger flexibility and no need to any change or remove LAN
  connections when remodeling equipments or reallocating instructional and office
  space.

- 4. Set up wireless connections easily in anyplace by the learners in remote locations such as distance learning and adult education centers, temporary campus buildings, mobile classrooms, and research centers.
- 5. It is easy and useful for learners, faculty academic members, and staff to share networked devices like printers, scanners, servers, and Internet gateways.
- 6. Establish a networked computer lab in any wireless equipped classroom by just rolling in a "computer cart."
- 7. Design a resiliently networked community disaster recovery or removal area.

## 2.9.5. Who Killed E-Learning

In an comprehensive literature survey Alexander Romiszowski recognizes four methods to investigating success or failure of technological innovation in education and, learning and training, which he shortens as "ELMN" with E representing Electronic or Technological, L being learning and the other two Management and Needs. Romiszowski's argument is that what killed e-learning was an over-emphasis of one of these four aspects above the other, thus leading to distorted strategies. Then he cites Khan's (1997) framework for e-learning as one of the best and Kahn gives eight education dimensions to consider in building successful e-learning.

The UK eUniversity (UKeU) is possibly the most impressive failure example up to date. It started in 2000 with an initial funding of £62 million, with an enrolment goal of 5600 learners, but it closed its virtual doors in 2004, having enrolled no more than 900 learners only, and being incapable of selling their e-learning platform that had an expense about £20 million to build it.

When the university head quarter (HQ) concentrates on sprinting a management affair and focus on the project developments and technology rather than people growth and running a university, this will be led to failure for sure and without any doubts sooner or later. Normally there is no clear e-learning strategy that merges learning and business

needs. The tendency of management to ignore, or even resist learning, is not exceptional to universities in all the worlds. A lot of further problems lie in an absence of obligation to maintenance, and once a system has been bought, and its return on investment (ROI) established it is likely to run forever, with no developing evaluation to see if it is practically doing what it was assumed to do, and without taking everything into account and what is needed to keep it working.

An e-learning strategy needs a attendant modification management strategy. The reason for this was that such a systematic process guaranteed that all involved in the project would be "appropriately oriented, trained, motivated, and managed to ensure full cooperation at all times" (Kessels & Plomp, 1997, paraphrased by Romiszowski, 2004).

He also strengths that "A successful project is just 20% technique and 80% tactics." It has been our experience, no matter how much we try to analyze factors leads to successful implementation, or sustained use of technology in education and learning. It always comes down to some human aspects that are simply impossible to measure. Romiszowski state "We can hear the bell ringing, but we cannot find the clapper".

New solutions are required to reduce the budget cuts carried on these days because and by the current financial disaster, but the invention is not always the same with high and up to date technology.

Some years ago, e-learning was viewed as the one-size-fits-all response to rising necessity for higher education by changing, globalize student bodies, and now it is understandable there is no fast fix and many projects completely failed to supply quality education.

Networking between academics, the exchange of thoughts and ideas, sharing of research results played a crucial role in supplying education excellence.

#### 2.10. THE SUMMARY OF REVIEWING THE LITERATURES AND STUDIES

1.As the researches about e-education is a new definition and becomes more sophisticated, there is also growing attention have been paid to how particular types of online designs and activities engage with or contribute to particular pedagogical goals.

2.E-learning gives great aspiring for developing access to learning is not generally challenged but how this possible can be best collected within public education is far more problematic and is the real challenge. Indication implies the need for fresh institutional roles and models for the delivery of e-learning including collaborations and networks to challenge the traditional forms of educational and institutional organization.

- 3. There are several difficulties in improving e-education and e-learning strategies, because of the very different learning applications that used in different contexts and institutions. In addition to the software which is designed specifically to utilize work-based applications. Almost all educational organizations use general office, financial and management applications and the progressed always use specialist management information systems (MIS).
- 4. E-learning sustainability is a very important element in any e-education framework design and the Software and learning stages are a key issue in trying to improve sustainable strategies for the use of ICT in education.
- 5. USM-SDE e-learning portal is consider great sustainable highly standards and interact framework among all other frameworks and portals used in USM or other universities.

"E-learning project, to remain survive, must be sustainable in a presumption socioeconomic or business frameworks". (Romiszowski, 2004b).

6.Khan e-learning framework is one of the best e-learning designs and covers eight dimensions of the learning environment in three different learning domains, while the all

other designs does not cover half of khan e-learning dimensions in one or two domains as maximum.

- 7.Khan framework even it is produced in 1995 but it is with same learning dimensions even with the daily progressed in ICT and learning field and theories, which it mean that this framework need to be modified at least to be parallel with the ICT revolution. Prof. Dr. BadrulHuda Khan on his last publishing in 2009 about his great framework does not come with new modification to its framework.
- 8. Khan framework could be useful for the learning and e-learning process in the stable societies but it will not be the same in the unstable learning environments, and could be useful to be used in Iraqi higher education environment if it is modified to cover the unstable side of the learning environment in Iraq.
- 9. The revolution and the progress in the field of wireless technologies is changing the face of the e-learning and a new concept and learning methods created like mobile learning.
- 10. The revolution and the progress in the field of wireless technologies are reducing the costs of the e-learning.
- 11. Malaysia journey with educational technologies in general and e-learning in specific is one of the best in the entire world and could be the best between third world countries, and the researcher think it is a good example.
- 12. The Turkish trial for adopting e-learning is the best between all the Middle East countries because it is mixed with the help of the European Union expertise.
- 13. Egypt and KSA are in the correct way to adopt e-learning especially if we know that they import the required experience from Malaysia and mix it with their local and international expertise in very clever homogenous expertise mixture.

14.Establish national e-learning centers or programs is the first correct steps towards any e-learning real adoption in any country especially in the countries that its governmental polices is centralized and competency like Iraq and other Arabs world and Middle East countries.

15. Distance education is not yet accredited in Iraq and most of the Arabs world countries still far away from acridities the distance education even that some of them have open universities or branches for big open universities in the world like British. The researcher think accredited the distance education is very important steps towards the e-education and not accredited it is against the human rights laws that announced by the united nation.

16. E-learning need commitment and management support from universities' executives. This is followed with the need for huge transactions to be made to provide the needed infrastructure (software and hardware) and contentedness. Another important issue is the authorization, regulations and methods, which it need a special framework of regulations and policies for e-learning adoption.

17. A university that wants to adopt e-learning should have at least the minimal hardware requirements, and the software needed to use that hardware. The hardware part of e-learning includes the physical equipment that must be able to supply e-learning (e.g., servers and networks) along with equipment for end-users to be able to access the services. Without suitable equipment and easy access, it is quite hard, if not impossible, to implement any e-learning (Oliver & Towers, 2000). However, as Broadbent (2001) states, e-learning does not need a huge infrastructure. Even a well working Internet connection and supplying enough computers for end users would be sufficient for an effective e-learning project.

18.Moodle and LAMS are the most successful software's in the field of e-learning, and they are widely used and adopted to build a really electronic effective learning environment and the USM e-learning portal could be the best that the researcher discovered it for its real education capabilities, and the several times evaluation process that had been made to

evaluate it, especially if we take into the consideration the big number of best professors and researchers whom work on building it with their long experience in the field of educational technologies.

- 19. In the new e-learning environment, the functions of teachers and learners are changing, but in different ways. The traditional classroom teacher comes to be an online teacher, having to ruler a series of new skills and abilities.
- 20. The learner changes into a non-linear navigator through never-ending huge oceans of information which also requires new skills and capabilities. The education systems of lessons, that used to be focused on securely characterized target learners in specific organizational contexts, are generally now in the public-access domains, so there does little know who may contribute until they are really contributing.
- 21. The sort of possible instructional designs for practicable e-learning exercises are great. The sort of tools and technologies that may be used to carry out these designs is also great. Increasing these factors, the number of different e-learning systems that could be invented and implemented is very great. So, the number of possible reasons for E-learning systems to breakdown or fail is therefore is very great if it is not well planned and executed cleverly.
- 22. A successful project is just 20% technique and 80% tactics, and the e-education project need for a clear and well stepped strategy that covers all the project area with a well planned time table.
- 23. Supplying education through technology requires the development of a national education policy.