# BUSINESS EDUCATION IN PALESTINE INFORMATION TECHNOLOGY AND BUSINESS EDUCATION

Sharif Musbah Abu Karsh Arab American University, Palestine

**ABSTRACT:** This chapter aim at exploring the role of five-selected learning models in enhancing business education; as well as testing the key role of information technology in supporting the application of these learning models in the business education field. The effectiveness of an information technology is analyzed through the appropriateness of the technology in supporting a particular learning model. The mapping of information technologies to learning models identifies technologies in which business schools should invest in order to improve their educational environment and quality. The chapter concludes at exploring the learning models used in business education, and the opportunities for implementing information technology to enhance business education. It demonstrates that information technologies can enable the effective application of objective, collaborative, constructive, Cognitive and Socio-culturist learning in business education. Therefore, this paper states that computer-based learning modules enhance the delivery of learning materials by embedding a structure into learning process. Hence, computer-based learning modules are rooted in the objective rather collaborative or constructive model.

**Key words:** business education, information technology

## INTRODUCTION

Many countries worldwide reinforce their education and training systems capacity to respond to the pressures of globalization and challenges of the knowledge society. Closer cooperation between business and education is one of tools for providing learners with new skills and competences for work. However available on the current forms and modes of cooperation between the education and economic sectors, and the roles and responsibilities of the different stakeholders is limited and fragmented.

In this modern day and age, information technology plays a vital role in all aspects of life. However, if you are not in the field of information technology yourself, you might not know just how information technology touches your life. Information technology is the study and use of systems for storing, retrieving, and sending information. This can include software, hardware, applications, and so much more. Much of what people use in the 21st century was created with the help of information technology.

In many business schools, the blackboard chalk and overheads still remain as the primary teaching tools, even while the merits of information technology to improve efficiency and quality of communication are widely recognized by business professions and researchers. As business schools experience increased competitive pressures in maintaining student numbers and teaching quality, information technology becomes an area that schools should explore in order to improve educational environments and qualities.

However, although computer software has already permeated into business classrooms in many universities, information technology is still largely used as a functional tool to support practical topics of business subjects. It appears that there is clearly a lack of understanding and guidelines of how information technology can be applied to achieve teaching and learning improvement. In order to address these issues, this research paper examines models of learning that are commonly advocated, and discusses how information technology can be interwoven with the learning models to improve business education.

#### CONCEPTUAL FRAMEWORK

The educational field has recently witnessed great developments by means of the growing modern technology. Hence, the development in technology originates modern educational tools that meet the students' requirements in education in today's modern life. As a result, students must be well prepared to cope with the modern technology so as to have better future. Therefore, the modern technology reflexes the future of our students who will become the future leaders, teachers, entrepreneurs, and businessmen and businesswomen. In addition to what has been said, the students' lack of the needed skills and competencies in dealing with the modern technology will lead to insufficiency and then having week abilities in this competitive world.

Hence, the relationship between education and information technology is considered as the foundation stone for creating creative students who are able to have better opportunities; and then maintaining the ability to have a good job opportunity by offering the needed training in schools and pre-graduation. Fortunately, many schools provide access to online courses connected with different means of modern technology like computers and mobile phones. Thus, the computerized courses help students to quickly upload their assignments and other works simply and at any time.

In respect to the aforementioned criteria, there is another important and central issue, which is the role of teachers and their readiness in dealing with the different aspects of modern technology. In fact, there is a heavy duty on the people in responsibility and senior officials to qualify the teachers by offering them training courses and keeping them up-to-date with the latest developments in technology. Consequently, teachers will be qualified to deal with and operate all of the modern technological devices such tablets, mobile phones and other new means of communications.

Having mentioned all of this, there is another important role for modern technology in decreasing the number of dropouts among the high school and college students. This achievement is obtained by offering online courses, where students can continue their education easily. Technology in fact helps to prevent students from being dropouts.

The information technology takes away many previous obstacles that deterred the advancement of this vital field. It helps to simplify the process of learning and teaching conditions. Hence, it appears the "one million dollar question." Can the modern technological means lead to real progress in education? What are the obstacles of using the modern technology effectively? What are the expected benefits of the modern technology tools? However, these questions are answered by thirteen previous studies.

## The Model of the chapter

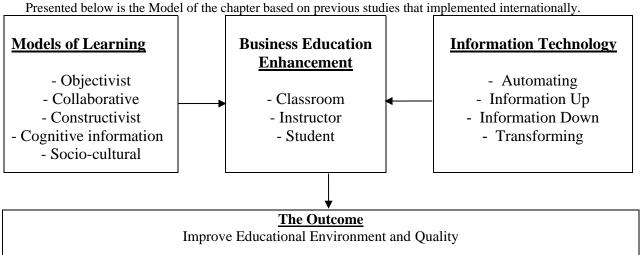


Figure 1: The Model of the Chapter

# **Related Literature and Studies**

# Some of these studies are explained as in the following

The Study of Ministry of Telecommunications and Information Technology (2011), titled "Telecommunications and Information Technology: National Strategy for Information and Communication Technologies (ICT) and Post, 2011-2013". The strategy plan has been prepared based on a methodology that addresses all of the concerned parties including the governmental sector, the private sector, the civil society organizations, and universities. As a result, extensive discussions took place through a series of workshops that dealt with planning the strategy by investigating the following points: Firstly, analyzing the challenges of the status quo. Secondly, identifying strengths, weaknesses, opportunities, and threats of various sectors; and then setting goals and strategic priorities and policies in the sectors of (telecommunications - information technology – and post). As well, determining the strategy of evaluation and controlling. However, in the field of information technology, the plan stressed on applying the following recommendations: (Providing the requirements and the

needed support for implementing the plan, improving and enhancing the sector, creating an enabling environment and legislative procedures to encourage the investment in this sector, and then offering training courses to qualify iconic creative generation. As well, it stressed on developing all fields of scientific research in the sector of information technology, and promoting information literacy.)

The study of the Economic and Social Commission for Western Asia (ESCWA) (2009), titled "The National Profiles of the Information Society in Palestine", which aims at re-flexing a clear and comprehensive image of the development of the telecommunications and information technology sector between 2007 and 2009. This period, in effect, has witnessed a set of positive factors and other negative ones, which affect directly or indirectly the telecommunications and information technology sectors in Palestine.

The study of Badie Sartawi, titled "Information Society in Palestine" that comes to identify the information society; indeed, the telecommunications and information technology in Palestine. It comes at a time where it was difficult to identify accurately the characteristics of any sector or activity because of the difficult situations that Palestine suffers from, for instance, the current political and security situations. As well, the study displays the reality of the telecommunications and information technology infrastructure and services in Palestine, information technology and developing plans, education and skills development, work environment, information technology sector, the determinants of work structure and the possibility of its growth. Then the conclusions, and ended with introducing the study recommendations.

The study of Al'a bin Mohammad Al Musawi (2008), titled "E-learning and Activation Requirements", which aims at determining the readiness and the requirements of the E-learning technologies in the public education system environment in Saudi Arabia. The paper includes the following issues: the requirements associated with the application of E-learning (concepts, requirements, and the proposed developing strategy), the aspects and the requirements of the E-learning (tools and direct requirements, tools and indirect requirements), strategy of implementation E-learning, and the proposed model for applying the E-learning technologies in the public education schools, E-learning technologies portfolio (systems and programs portfolio, training and development portfolio).

There is no doubt that there are national profiles for that distinguished the information society in Palestine from (2007-2009), wherein the most eminent one is the report that done by (ESCWA, 6, 2009). However, the most important aspects of this report are explained in the following:

- Freeing the telecommunications market and information technology from monopoly after a period of domination, licensing new operators, and starting the work of new operators.
- This period has witnessed new growth and increasing in investment in this sector.
- The effective governmental activities during this period have led to issue a number of decisions; as well as legislating laws and regulations to legalize the process of freeing the market from monopoly. This also led to increase competition among investors and offering more investment opportunities, which are considered as basic requirements for developing this vital sector.
- Implementing several vital projects by the government to improve this sector within the government's medium-term plan of 2008-2010.
- Wataniya Mobile launched as the second mobile operator in Palestine (Wataniya Mobile); as well as the entry of the strategic partner (Zain) into the market.

# **Obstacles of Applying E-Learning in Palestine:**

A set of obstacles prevents achieving the objectives of E-learning. These obstacles are summarized in the following points: 1- The majority of the developing countries suffer from weak infrastructure because of the difficulty in offering the required funding to establish strong infrastructure. 2- The learners suffer from a lack of competency and professionalism in using the modern technology, computer, and browsing the international telecommunications networks. 3- The academic staff and lecturers at universities are not convinced with using the modern electronic multimedia in teaching and training. This refers to their fears from minimizing their role in the educational process; in addition to the replacement and transition of their role to the educational software designers and the specialist of educational technology; as well as the difficulty of applying the assessment process. 4- The community members distrust the distance-education as they believe that the E-learning' position is less than the regular education. In addition, the official authorities in some countries don't grant official accreditation to the certificates awarded by distance-learning universities. 5- The high fees of connecting to the internet, and the high cost of designing educational software products is another prominent obstacle.

# Telecommunications and Information Technology in Education and Training in Palestine

There is no doubt that the release of the E-learning initiative in June 2007is considered as a new era in the use of (ICT) tools in education and training. Also, the government policies and strategies stressed on activating the use of these technologies in education and training. This initiative aims at using the E-learning in the Palestinian educational system, where it considered as one of the most important priorities of the ministry's development plan. Hence, the developments in the digital content for universities and higher educational institutions through adding lectures and teaching materials on these sites may shape a quantum leap in developing the educational content of the taught subjects. Hence, it becomes necessary to indulge lecturers and students in adopting this content, which will enhance the use of these applications after developing specialized educational programs. Similarly, the well planned and the serious efforts by the educational institutions and their insistence on achieving the desired goals in developing the quality of this field with promising programs will enhance the use of the telecommunications tools. Consequently, the information technology use in education and training programs in the higher education will be enhanced too.

However, there are several initiatives and projects implemented by the Ministry of Education and Higher Education regarding enhancing the educational system at schools. These initiatives aim at employing the telecommunications and information technology in developing the educational system and making it more efficient. Achieving this goal, on the first hand, was made after adding the information technology courses into the Palestinian curriculum. On the second hand, Intel project comes to improve the quality of education and to implement teacher-training strategy. The project targets training about (1,000) teachers of the primary stage. This program will be implemented during 3 years starting from 2009 (ESCWA, 2009.8-7).

## MAPPING INFORMATION TECHNOLOGIES FACILITATING TO LEARNING MODELS

## IT Enhanced Objectivist Model of Learning

Recently, it becomes easier to add different contents like videos, pictures, audio tracks, and illustrations into any learning module. Hence, students can use and review the lecture and the educational material at any time. Another advantage appears in the ability of including enhanced models of assessment where the students are provided with instant feedback on their own performance. This goal is achieved by using the computerized learning module that known as the computer-based learning (CBL).

Hence, (CBL) technology comes to simplify the use of modern technology in education. The application of technology in education has some requirements. For instance, the study of (Clark, 1973) states that "The technology imposes a structure into the learning process that may not otherwise have existed. However, despite the common brief that structured and vivid presentation of knowledge enhances learning efficiency". In his study, Clark doesn't find remarkable difference in the students' performance towards the computerized content. In other words, he plays down the role of (CBL) in enhancing the education. In contrast, he appreciates the traditional methods of education. He added, the CBL module increases the instructor controlling which collides with the traditional objective of learning.

## **IT-Enhanced Collaborative Model of Learning**

It's worth to be mentioned that collaborative learning model stressed on the importance of both information sharing and participation via communication and technology. Hence, the technology is employed to improve and ease the communication between the students and their instructors; in addition to ease the communication between the students with their peers. In respect to this issue, many studies explore the problems that face communication in education. For example, (Briggs and Ramos, 1992) state that the large number of students in classes makes students hesitates and fear making presentations publicly. Also, the study of (Harris and Mc Caffer, 1992) shows that "students prefer to raise questions to their instructions electronically than through face-to-face conversation". Moreover, the study of (Leidner and Jarrenpaa, 1995), explains that "akin to the finding that employees in business organizations feel more comfortable sending messages than talking to their peers."

One of the most important tools of communication among students is the E-mail; where it allows them to investigate any issue while reading off-class. In contrast, little disadvantages appears in respect to using E-mail, for instance, it's difficult to response to students inquiries directly from their instructors. However, other negative aspects of using E-mail in communication among students and business higher education require implementing more studies to reveal its pros and cons.

## **IT-Enhanced Constructive Model of Learning**

There is another important model known as the construction model that concentrates on giving learners the chance to explore and realize issues depending on their own efforts. This model encourages students to get access to information through providing suitable learning environment by using the information technologies. In respect to this, some aspects of these technologies like software packages, shared database, World Wide Web (WWW), and virtual reality are discussed as in the following: Firstly, World Wide Web is considered as one of the most important elements that is widely employed to get access to information. However, there is a similarity between database and WWW, wherein WWW is used to seek information and suiting this information in a way that can meet the need of learners. In respect to business education, there is a great possibility to employ WWW in business education field to get access to information. However, to prove the role of WWW in business education, there is an urgent need to do several studies in this regard. Long ago, simulation technology was used as a mean of knowledge construction; where it offered intensive learning experience and indirect specific theme to students. Indeed, several simulation software employed in serving in business education. Virtual reality technology has a great role in students' assistance to acquire knowledge through virtual experience. It may be possible to illustrate the role of this technology in education through the following example. A class was divided into a number of groups and teams in which each team represents a contractor, and the available jobs. The bids organized into a set of elements that included the costs of construction. This data was entered into a program. A week later, the win, loss, cash flow report, and profits were produced by the program. Hence, this example shows how students can acquire knowledge in a competitive game within the participation of large number of students and within a week. Also, this shows how students can create a virtual reality.

# IT-Enhanced Cognitive Information Processing Model of Learning

There is another learning model that is considered as an extension for the constructivist model. This model is the cognitive information-processing model. For instance, (schuell.1986) states that "Learning involves processing instructional input to develop, test and refine mental models in long-term memory until they are effective and reliable enough in problem-solving situations." Similarly, (Bovy, 1981; Brunning, 1983), explain that "The frequency and intensity with which a student cognitively processes instructional input controls the pace of learning. Instructional inputs that are unnoticed, or unprocessed, by learners cannot have any impact on mental models." (Bovy, 1981) states that "A major assumption of the model is that learners differ in terms of their preferred learning style. Instructional methods that match an individual's learning style will

be the most effective."; where Bovy stressed on the importance of individualized instructions in providing effective learning style. However, he adds that "The cognitive processing model also assumes that the individual's prior knowledge is represented by a mental model in memory and that the mental model is an important determinant of how effectively the learner will process new information. The implication is that the instructional support required is inversely related to the depth of existing knowledge as well as to the effectiveness of the learner's information processing style." Similarly, (Brunning, 1983) explains that "Selective attention is an interrelated function of the display, the cognitive structure of the learner, and the prior experience of the learner. Pre-instructional methods such as topic outline and learning goals might improve learning because they direct attention.

# IT-Enhanced Socio-cultural Model of Learning

Information-processing model of both collaborative and the cognitive models are considered as an extension of constructivism. This illustrates that the socio-cultural model is also considered as an extension that faces and opposes some assumptions of constructivism. Particularly, the socio-culturists refuse Piaget's interpretation that says the main aim of learning is to create abstract concepts so as to represent reality. For instance, (O'Loughlin 1992) states that it impossible to separate knowledge from the historical and cultural elements of the learner. Similarly, Iran Nejad, et al, 1990) illustrates that "The more meaningful, the more deeply or elaborative processed, the more rooted in cultural background, meta cognition, and personal knowledge an event is, the more readily it is learned (While socio-culturalists embrace the concept that there is no one external reality, they argue that constructivism and collaborativism force the minority culture into adopting the understanding derived by the majority. Even a collaborative work group does not foster participation for minorities: "shared understanding" is biased by cultural and social factors".

Table 1. Summary of Learning Model

Model	Major Assumptions	Goals	Basic Premise	Implications for Instruction
Objectivism	Learning is the uncritical absorption of objective knowledge.	Transfer for knowledge from instructor to student. Recall of knowledge	Instructor houses all necessary knowledge. Students learn best in isolated and intensive subject matter.	Instructor is in control of material and pace Instructor provides stimulus
Constructivis m	Learning is a process of constructing knowledge by an individual.	Formation of abstract concepts to represent reality. Assigning meaning to event and information.	Individuals learn better, when they discover things themselves and when they control the pace of leanings.	Learner-centered active learning Instructor for support rather than direction
Collaborativi sm	Learning emerges through shared understanding of more than one learner.	Promote group skills- communication, listening, participation. Promote socialization.	Involvement is critical to learning.  Learners have some prior knowledge.	Communication oriented  Instructor as questioner and
Cognitive information	Learning is the processing and transfer of new knowledge into long-	Improve cognitive processing abilities of learners.	Limited selective attention.  Prior knowledge affects	discussion leader Aspect of stimulus can effect attention  Instructor needs
processing	term memory.  Learning is subjective and individualistic.	Improve recall and retention.  Empowerment.  Emancipatory learning.	level of instructional support needed. Anglos have distorted knowledge and farmed	feedback on student learning Instructor is always culturally value laden
Socio- Culturism		Action-oriented socially conscious learners with a view to change rather than accept or understand society.	information in their own terms.  Learning occurs best in environments where personally well known.	Instruction is embedded in a person's everyday cultural\social context

## THE ENHANCEMENT OF BUSINESS EDUCATION IN PALESTINE

## **Educational Situations in Palestine**

Based on UNICEF (2010) statistics, there are 1,141,828 students in 2,611 schools from the first grade till the twelfth grade; 1,955 governmental schools, 325 UNRWA schools and 308 private sectors. Compared to the details demonstrated before, there is a clear change in the number of students. According to the MOEHE, in governmental schools, there are 70% attendance, 22% in UNRWA and 8% in private sectors. Since the last elections in 2006, Gaza has been under siege and the needed construction material has been prevented to enter Gaza, which caused a problem from the increasing number of students, leading to increase the need for the double shifts in schools. Double shifts reached 82% in governmental schools, 90% in UNRWA schools, which lead schools to cut off the educational hours in order to cope with the large numbers of students. In addition, the Ministry adds that there is an urgent need to build new schools in the next coming five years in order to absorb the increasing number of students. Thus, its recommendation was to build at least 100 UNRWA schools and 105 governmental schools. Nonetheless, obstacles hindering the movements of students to their schools have not got easier; they still suffer from long distances and are obliged to walk as far as 25 km to reach their schools. In addition to paying a lot of money on a monthly basis (UNICEF, 2010, pp. 1-2)

# The Higher Education in Palestine

Educational Institutions; Palestinian Higher Education for the Academic Year 2014/2015 **Educational Institutions:** 

Table 2. Summary of Educational Institutions

	West Bank	Gaza Strip	Total
Traditional Universities	9	5	14
Open University	-	-	1
University Colleges	13	6	19
Community Colleges	11	7	18
Total	33	18	52

The distance-learning, there is 1 university with (22), 17 educational centers at West Bank and 5 educational centers at Gaza Strip.

New Student: 62,454 = Female 36,141+Male 26,313

**Table 3.** Summary of New Students

	PhD	Master	Higher	Bachelor	Diploma2	Others	Total
			Diploma		years		
Traditional	28	2.776	103	31,422	1,265	621	36,215
Universities							
Open University	-	-	-	11,302	-	2,495	13,797
University Colleges	-	-	-	1,870	4,718	84	6,672
Community Colleges	-	-	-	-	5,770	-	5,770
Total	28	2.776	103	44,594	11,753	3,200	62,454

**Enrolled Student: 221,395 = Female 133,362 + Male 88,033** 

Table 4. Summary of Enrolled Student

	PhD	Master	Higher	Bachelor	Diploma 2	Others	Total
			Diploma		years		
Traditional	40	7,751	194	121,008	2,624	832	132,449
Universities							
Open University	-	-	-	57,405	-	2,825	60,230
University Colleges	-	-	-	5,903	10,431	112	16,446
Community Colleges	-	-	-	-	12,206	64	12,270
Total	40	7,751	194	184,316	25,261	3,833	221,395

**Graduated Students:** 40,043 = **Female 24,111** + **Male 15,932** 

Table 5. Summary of Graduated Student

	PhD	Master	Higher Diploma	Bachelor	Diploma2 vears	Others	Total
Traditional		2,302	54	21.163	887	761	25,166
Universities		_,,-		,			,
Open University	-	-	-	7,702	-	370	8,072
University Colleges	-	-	-	1,040	2,472	53	3,592
Community Colleges	-	-	-	-	3,142	71	3,213
Total	_	2,302	54	29,905	6,501	1,255	40,043

Employees: 15,584

**Table 6.** Summary of Employees

	PhD	Master	Higher	Bachelor	Diploma	Other	Total
			Diploma		2 years		
Traditional Universities	2,546	2,550	55	2,783	757	1,552	10,273
Open University	470	1,093	-	455	200	362	2,580
University Colleges	178	502	25	649	238	290	1,882
Community Colleges	45	274	5	346	95	85	849
Total	3,239	4,419	85	4,233	1,290	2,289	15,584

Academicians

**Table 7.** Summary of Academicians

	Prof	Associate	Assistant	Lecturer	Instructor	Other	Total
		Prof	Prof				
Traditional Universities	215	367	1,416	566	1,273	-	4,303
Open University	19	52	327	80	807	-	1,431
University Colleges	5	8	81	184	17	357	949
Community Colleges	2	-	13	123	279	30	447
Total	241	427	1,837	953	2,376	387	7,130

#### INFORMATION TECHNOLOGY

# **Surfacing Educational Assumptions The Automating**

# A future look towards introducing resourceful automated classrooms

Automated classroom is the awareness that IT replaces all of the traditional expensive and unreliable means including the human factor with cheaper, more reliable and more trusted one, it is the revolutionary technology. In respect to the organizations, the IT is widely employed to improve quality and providing operational savings through implementing the operational tasks and other related functions more efficiently and in a reliable and structured way. However, teaching and learning are considered as semi-structured activities in which these activities are not included within the automation process. In contrast, it should be mentioned that some aspects of teaching and learning activities have the possibility of automation, mainly the characteristics of the objectivist model of learning through information delivery is considered prone to automation. Therefore, the information technology aims at providing tools for presenting and manipulating educational material in classrooms which is considered in this paper as classroom automation technology. Hence, the basic role of technology in respect to classroom automation is summarized in the following points: (1) providing software and display tools to help limit instructors' interference and aid them in controlling. (2) Helping students to operate independently with their computers and instructor consoles. (3) Learning via computers by providing exercise and practice programs. (4) Providing the constituents of enhancing distance learning.

# **Informing Up**

Providing the instructor with effective access for the information (Schein, 1992) explains that the employment of IT as a management tool for controlling aims at keeping managers well informed with their organizations performance. In education, this idea will help the instructor to estimate the level of the students understanding of the educational material. Hence, the instructor will be able to deal with the difficulties that the students face. In contrast, there are negative aspects in respect to this that include the students' tendency to be reticent; the instructor will be unable to assess his students understanding efficiently and the absence of the instructor in case the students need to explain questions and inquiries. In other word, the sole way to connect the instructor with students is via the key response pads and email.

# The Informing Down

The use of technology to provide further access to information technology plays a great role in providing information to organizations in different specific levels. One of these levels is providing information to lower level employees of an organization. This means that the control of the senior and middle level management will be increased. This process is known as informing down. However, in education, the term informing down aims at providing data to students which allow them to analyze information and discuss different issues within peers set. Informing down technology is tested by providing information to students; and then by providing communication tools. Hence, the designed technologies to provide the information to students are known as the classroom technologies. In contrast, the designed technologies to provide communication tools to students are identified as classroom technology. These technologies, in term of use, are implemented in regular classrooms.

# The Transforming

With the appearance of the supposed continuous learning in education, it becomes necessary to employ information technology to get and share information and ideas with others beyond traditional classrooms. Technology also must be employed to enable effective teamwork among learners. Similarly, IT enables learners to have continuous education with no time limits. Therefore, it enables learners of different levels to get multi-levels and multi-speed creativity. In other words, technology links dispersed students geographically at any time. Hence, the distance education let the learners to participate and co-operate world widely across distances. In other words, the e-learning allows a group of students of similar courses to connect each other's thoughts and share ideas with their peers.

**Table 8.** Technology Fit with the Theories of Learning

<b>V</b> V		e		cultural
<b>V</b> V				
$\sqrt{\lambda}$			<u> </u>	
' '				
$\sqrt{\lambda}$	$\sqrt{}$			
$\sqrt{}$			$\sqrt{}$	
$\sqrt{}$				V
$\checkmark\checkmark$			$\sqrt{}$	
			V	
	$\sqrt{\lambda}$			
	<b>VV</b>			
	$\sqrt{\lambda}$			
		$\sqrt{\lambda}$		$\sqrt{}$
		<b>VV</b>	<b>V</b> V	V
			<u> </u>	
		$\sqrt{}$		$\sqrt{}$
		اماما	2/2/	41
		٧٧	٧V	V
	√√ √√	\lambda \lambd	\forall \foral	\( \frac{1}{\sqrt{1}} \)

 $\sqrt{\sqrt{1}}$  represent the primary match,  $\sqrt{1}$  represent a secondary match

The above table shows the linkages between the technologies and the models of learning. No vision of technology is more desirable than others. Rather, the most appropriate technology depends on the underlying model of learning that the instructor wishes to employ.

# **IT Usage in Palestine**

Currently, IT usage is increasing rapidly especially after the signing the peace process which allows more freedom for Palestinians to build their infrastructure. The Palestinians through mainly the academic institutions especially universities are very active in wanting to join the global developments in information technology. The institutions as well as the government have realized the importance of IT to Palestinians at this point in history in building a nation. With the universities being the major customer of IT, there has been a demand for access to accurate information and resources. They are also playing a major role in the development of the Palestinian information highway.

# **Legal Environments in Palestine**

There are many challenges that face the Palestinian legal system. Due to the lack of an existing autonomous and unified Palestinian law, there has been inconsistency regarding what is legal and what is not. The existing laws are a combination of several powers that occupied Palestine through the years; as well as the present PA's laws. At the same time, most of the law schools in the Palestinian territories as well as the other Arab countries do not teach the use of information technology to search for legal information. Therefore, there is no law that protects the intellectual property, especially software copyrights. The situation in the territories is not ready for such laws because it is not of importance now. At the same time, most Palestinians cannot afford to buy computers. Only the academic institutions own modern computers, and can purchase software, and other products. Even if there is a law against piracy, it will be difficult to enforce it presently.

Another problem that may arise regarding implementing the law is that laws in the West Bank vary from the laws in Gaza Strip. Developing laws that will integrate the different laws will be the next step. Neighboring Israel

recognizes the copyright conventions, also experiences piracy. This spills into the Palestinian territories despite regulations that exist, but are not fully enforced. Despite this problem, it is not of upmost importance and statistics of piracy in the Palestinian territories is difficult to control. In spite of the current situation of piracy in the Palestinian territories, the short run will not incur any huge problems. However, once IT is well developed in the State of Palestine, then the long run needs a respecting of rules to build a state that can develop its own intellectual power. By doing this, Palestine will be able to lure foreign investment for further development. For the time being, intellectual property is not recognized not only in the territories, but also in the entire region.

Table 9. Impact of Information Technology on Business Learning

	Automating	Information Up	Information Down	Transforming	
Technology	Instructor	Keypad Response	Learning Networks	Virtual Learning Spaces	
	Console		_		
	CAI/CBT	Instructor-student	Virtual Reality		
		email			
	Distance		Simulations		
	Learning				
	Instructor C	onsole & Student	Communications Classrooms		
	Wo	rkstations			
Classroom	Hierarchy/Tree	Star	Ring	Dynamic	
Structure	-			-	
Model	Objective	Objective, Cognitive	Constructive,	Collaborative, Cognitive	
		IP	Cognitive IP	IP, Socio-cultural,	

PROCESS DIMENSIONS							
Instructor	<b>←</b>	Control of Pace, Content	<b>→</b>	Student			
Knowledge Dissemination	<b>←</b>	Purpose of Instruction	<b>→</b>	Knowledge Creation			
		OUTCOME DIMENSIONS					
Ephemera	4	Impact on Self-Variables		Long-term			
	•	(motivation, interest, self-efficiency)					
Factual./procedural	<b>←</b>	Impact on Levels of Learning	<b>→</b>	Conceptual			
Lower-order Thinking	<b>←</b>	Impact on Cognition	<b>→</b>	Higher-order Thinking			
Low	<b>→</b>	Impact on Behavior- participation and attention	<b>→</b>	High			
Improvements on	4	Impact on Behavior -performance		Improvements on			
Factual./procedural	7			Conceptual Asses			

# THE OUTCOMES OF EDUCATIONAL QUALITY

# Standards for Academic Programs Quality in Higher Education Include

**Intended learning outcomes (ILO):** Intended learning outcomes are distributed to students; where ILOs are related to the students major. It's also constructed to be achievable.

The academic plan content: The courses content specification appears to be current, flexible, and within the international standards. It is also clear, comprehensive, and enhances developing a critical and resourceful thinking.

**Assessment**: (Bsharatand Rmahi, 2016) states that the assessment of student learning is implemented through using a set of valuation techniques. For instance, the process of informing the students in writing of the followed evaluation criteria, and providing immediate feedback, written and oral, regarding all of the students learning activities with the intended learning outcomes. All evaluation tools are designed in a reliable and transparent way.

# Standards for the Quality Learning Opportunities Include

**Specifications of teaching and learning: There** many different teaching methods like teaching through organizing mall and large groups; as well as individual and self-learning method. However, in today's recent times, more attention is paid toward considering the active learning as one of the most active models. Hence, students

have the responsibility for their learning. It represents the optimal student attendance, and offers active training opportunities.

**Student advancement**: the students' advancement is enhanced through corresponding coursework to their specializations. Thus, the student percentage of dropout is increased.

**Resources of teaching and learning**: There are a set of teaching and learning resources. For instance, there are science labs, computer labs, and libraries. However, the efficiency of these resources in enhancing ILO's, competencies and expertise of teaching faculty meet the aims of the ILO's program.

The quality of the academic administration includes the following standards:(Bsharat, and Rmahi, 2016).

**Objectives:** Both administrators and faculty create transparent descriptions and clear goals for the academic programs.

**Controlling:** Administrators and faculty must control and monitor the quality of all majors and specializations.

**Data-driven decision-making:** Administrators must gather data from students and faculty on regular and systematic basis so as to enhance the decision-making regarding program quality improvement.

#### REFERENCES

- Abdallah Bsharat, Refa' Rmahi. Quality Assurance in Palestine's Teacher Education Programs: Lessons for Faculty and Program Leadership. American Journal of Educational Research. Vol. 4, No. 2A, 2016, pp 30-36. http://pubs.sciepub.com/education/4/2A/5
- Al'a Mohammad Al Musawi (2008), "E-learning and Activation Requirements", First Forum on E-learning, Kingdom of Saudi Arabia.
- Bovy, R.C. "Successful Instructional Methods: A Cognitive Information Processing Approach, ECTJ (29:4), 1981, pp. 203-217.
- Burning, I.L. "An Information Processing Approach to a Theory of Instruction, "ECTJ (31:2), Summer 1983, pp. 91 101.
- D.H. Jonassen, Thinking technology, Educational Technology, 1993, pp.35-37.
- Iran-Nejad, A., W., and Berliner, D.C. "The Multisource Nature of Learning: An Introduction. "Review of Educational Research (60:4), 1990, pp. 509 -515.
- Mehani Mohammad Khany'em (2006), Philosophy of E-learning and its Social and Economic Viability in the Light of the Moral and Legal Responsibility and Accountability. A paper Introduced to the E-learning Conference: A New Era in Education and Culture, E-Education Center, University of Bahrain 17-19 / 4/2006, Bahrain.
- O'Loughlin, M. "Rethinking Science Education: Beyond Beyond Piagetian Constructivism toward a Sociocultural Model of Teaching and Learning," Journal of Research in Science Teaching, 1992, pp. 791 820.
- R.E Clark, When Researchers swim up –stream: Reflection on an unpopular argument about learning from media, Educational Technology, (February,1972) pp.34-40.
- Shams Die'at Hal'f'lawee (2010), Opportunities of Employing the Information Society in the Institution, University of BadjiMokhtar ANNABA. Algeria, pp. 413-422.
- Shuell. T.J. "Cognitive Conceptions of Learning, "Review of Educational Research, 1986, pp. 411 436. The Economic and Social Commission for Western Asia (ESCWA) (2009), "The National Profiles of the Information Society in Palestine", the United Nation, New York, America.

# Interview:

- [1] Interview with Palestinian individuals living in the Palestinian territories.
- [2] Interview with Palestinian businesspersons who did minor business with Palestine: Dr. Noor abualrub. Links:

http://www.birzeit.edu/web/history.html