MULTIMEDIA USE IN UAE EDUCATION CONTEXT

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ABSTRACT

The growth in use of Multimedia in United Arab Emirates schools has accelerated in recent years. Multimedia can be useful for both teachers and students alike. For example, Multimedia is viewed as an important source of educational aids and a generator of resources that can add a lot to their performance. On the other hand, Multimedia is positively perceived for it makes the learning processes more comfortable and more enjoyable that leads to an improved performance. Generally, children are excited and fascinated by technology, and they are more receptive to lessons that are aided by Multimedia. This is perhaps why many teachers are using Multimedia in their classes to accomplish their learning objectives by creating a more interesting learning environment. For educators, Multimedia provides a golden opportunity to promote interactive, technology-based collaborative learning that is perceived positively by all parties involved. This chapter investigated the role of the multimedia technologies in enhancing students’ performance as many studies showed that technology has a great effect on improving students’ reading, writing and other skills. The study is also aimed at increasing educators’ awareness of the importance of Multimedia Technology use in classrooms.

Field of Research:

1. Introduction

Using multimedia in teaching can be an effective tool in enriching students' learning; though, it is of a great importance to integrate different kinds of technology into the curriculum to get the desired benefits. In order to reach this important result, cooperation should be established among teachers, parents, students, administrators, specialists of curriculum, and researchers to be able to produce a successful integration of technology for the sake of the students' performance.

As part of the “Teachers for the 21st Century’ initiative,” the United Arab Emirates (UAE) plans to earmark up to $55 million for a professional development program for teachers. International experts will advise UAE educators on ways to introduce modern educational methods in their classrooms (Middle East Educator, 2009).

According to Hofstetter (2001), stated that multimedia is the use of computer to present and combine text, graphics, audio and video with links and tools that let the user navigate, interact, create and communicate. Multimedia combines five basic types of media into the learning environment: text, video, sound, graphics and animation, thus providing a powerful new tool for education. Providing teachers with the tools they need to negotiate the changes is crucial to their success (Muir-Herzic, 2004).
This chapter provides an overview of different kinds of educational multimedia and their effective use as they pertain to the United Arab Emirates context; it provides an account of multimedia types, uses, and policies in the UAE with a critical analysis of its effective use with educators and academics in the educational fields. There is an increasing belief that Information and Communication Technologies (ICT) have been gaining importance in education and that its pedagogy has generated the need to preparing proficient ICT teachers who can effectively utilize it in different subjects. Even though the number of computers installed in schools significantly increased during the last several decades (Kleiner & Lewis, 2003), the way we teach in schools has changed little, and computers have not been fully integrated into school curricula (Collins & Halverson, 2009).

Generally, many multimedia types are used for different purposes in the UAE such as for presentations, online and print advertising, Email & viral marketing, e-cards, website development, database software creation, projects, development and production of CD ROMs & 3Ds, audio-visual shows, immersive media & high-end photography...etc. However, their uses in education have been limited to administrative and instructional uses by school staff and teachers. As indicated by many researchers (Forawi, Almekhlafi, & Almekhlafy, 2011; Muir-Herzic, 2004) multimedia activities can advance student learning of various subjects. Recently, Wu-Yuin, Rustam, and Szu-Min (2011) found that the designed learning activities supported by the VPen system, a multimedia program developed for students, could facilitate students’ writing and speaking performance and therefore improve their learning achievement.

This chapter focuses on the multimedia and computer technology applications that are used in the UAE educational contexts and their effectiveness in advancing student learning. In particular, types of multimedia will be identified, schools’ use of multimedia, and the UAE school experience with multimedia and computer technology.

2. Background

It is believed that using multimedia and computer technology does not mean using computers only. When using any kind of technology in the classroom, it should open an endless access to different resources of knowledge. It should help in adding excitement and joy while learning. On the other hand, it should strengthen the idea of individual work as well as the group one for greater constructivist learning experiences. The importance of technology comes from the fact that it not only gives learners the opportunity to control their own learning process, but also provides them with ready access to a vast amount of information over which the teacher has no control (Lam & Lawrence, 2002).

Many studies showed that technology in general has a great effect on improving students' performance. On the other hand, using the internet in the class, as an example, can be fun. Internet is a whole world of information where students can benefit in an enjoyable way. Technology can provide teachers with the ability to convey concepts in new ways that cannot be achieved using other traditional instructional practices.

Since the secret of our success is our young generations who will be forming our future, so it is very important to prepare them to face the challenges of our life. The need to introduce technology at an early age in life is very vital for them. For example, we should make sure that students are familiar with the basic skills of using computers which will enable them to use the latest tool for getting knowledge. More importantly, the world in which we live is progressing in a fast way, and so, the education is also expected to change too. We can never forget the old days when the audio-visual lab is isolated from the
whole schools, while nowadays, it is important for every teacher to integrate technology in a way or another in teaching. The use of multimedia in schools has accelerated in recent years. Multimedia can be useful for both teachers and students as well. For example, teachers can have great resources that can add a lot to their performance. Students also can work on their learning by using multimedia in different ways. Children do care about technology, that's why teachers should present their lessons in a way that suits their way of thinking. Nothing can be better than multimedia to give children the right motivation to learn. We can realize that most schools have a certain kind of technology already, but lots of them aren't integrating or utilizing it into classroom practice.

3. Methodology

This chapter used different qualitative methods to support topics and issues presented in the chapter. Mainly descriptive and analytical approach was used with related data and literature review and information gathered for this chapter. Also interviews were conducted with a sample of teachers and principals in Al Ain Educational Zone. This methodology is followed the rationale of many similar chapters. Critical analyses are provided to come up with findings that are followed by utter discussions and recommendations. As this is an exploratory study, results and recommendations need to be taken carefully.

4. Educational Technology in the UAE

Let us have a look at what we call model schools in UAE which provide a comprehensive educational program in an ideally prepared humanistic developmental learning environment. It is worth mentioning that when these schools were inaugurated more than a decade ago, they had advantages over typical schools, particularly in their infrastructure and teacher professional development activities. Due to the success of these schools, most public schools around the country started to follow their path. As a result, these days the gap between model schools and public schools almost vanished when it comes to technology availability and teacher professional development (Almekhlafi & Almegdadi, 2010, 173).

To talk about ways and methods of teaching in the past, one should mention that, in the past, more emphasis was given to teaching theory without any practical and real life time situations. Memorization was more important than understanding. Referring to different kinds of educational theories and approaches in that time, educators used to believe and apply what we call behaviorism. According to that theory, behavior can be studied in a systematic and observable manner with no consideration of internal mental states. Furthermore, it implies the dominance of the teacher; the teacher is the main important element in the educational process and he acts like a model to be followed by his students. Unlike behaviorism which is not as dominant today as it was during the middle of the 20th-century, constructivism is very reasonable and applicable educational approach nowadays. It is a philosophy that views knowledge as the outcome of experience. Constructivism learning theories are, essentially, a branch of philosophy that tries to understand how we construct knowledge. Constructivism theorists ask the following questions (Hofer and Pintrch, 1997; Jonasson, 1996): What does it mean to know something? How do we come to know it? How does this knowledge influence our thinking processes? In this case, we construct knowledge based on our environment and experiences (Clancy, 1986; Winograd & Flores, 1986). Constructionism is built on the fact that children will achieve the best if they find a specific knowledge they look for on their own.

To relate what has been mentioned above, one should say that life has been changed and so, students need a much broader set of skills and abilities to be able to analyze, investigate, collaborate and relate
to what they know. Consequently, computer technology and multimedia can be very efficient tool in fulfilling students’ needs of constructing their own knowledge and experiences if teachers integrate them properly into the curriculum in suitable ways. They add life to the subject as well as enhance and support learning and understanding because of their visual and sound impact on the students’ thinking processes.

5. Educational Multimedia

To integrate technology in teaching is very important; for instance, computer can act as a tutor. Teachers’ contribution in this case is so little. A report entitled Computer Advantages: Tutoring Individuals, states “with computers as tutors, no student will be overwhelmed because he or she is missing fundamentals the computer will repeat material until each lesson has been sufficiently mastered” (Bennett, 1999, p. 3).

The use of computers and other kinds of technology help students to achieve their full potentials. Technology allows participants in the two-way learning process to communicate and interact adding a variety of audio-visual tools that help to enhance learning which becomes easier and faster with the help of different kinds of technology. Dwyer et al. (1991) indicates that computers can be used in collaboration for all subject areas, but, at the same time, teachers should be aware of styles of teaching and how to get the students involved in learning.

One of the advantages of using multimedia is to convey information quickly and effectively to all students and keep them interested in learning, (Zimmer, 2003 taken from Savage and Vogel, 1996).

No one can deny the fact that technology at schools can save time and keep information easily accessible to all and reduce the amount of paper we use. Using technology in presenting the curriculum can be powerful tools in helping students achieve higher levels of expertise. It extends depth of existing curriculum beyond what can be gained with traditional ways of teaching.

There are many great programs which claim to have some kind of pedagogic value. These claims may, of course, not be well founded. Educational software has often been very grey and boring and quite unattractive. Nonetheless, teachers have often found that children are more motivated to learn their times tables with the help of a program than otherwise. Multimedia technology can be used to make the programs more interesting with the addition of color, advanced graphics, animation and sound (Una Cunningham and Staffan Andersson, 1999). Currently, we can find different types of educational software; tutorial programs, simulation programs, drill and practice, problem-solving programs and game programs. Using computer technology for students has many advantages as it provides them with immediate feedback; on the other hand, it keeps on motivating and challenging them and so, enriching their concepts and knowledge.

An increase, in factual information exchanges and task conceptualization, interactions between teachers and students when teaching occurred across computers (Karasivvidis, 2004). Using technologies in education, has the potential to improve access to information; it helps in getting tasks done better or more quickly, and moreover, facilitating communication (National Research Council 1999).

Undoubtedly, without these recent technologies in the classroom, strong lessons can still be achieved, but there’s a sharp disconnect between the way students are taught in school and the way the outside world approaches socialization, meaning-making, and accomplishment. It is critical that education not
only seek to mitigate this disconnect in order to make these two “worlds” more seamless, but of course also to leverage the power of these emerging technologies for instructional gain (Kloper, Osterweil, Groff, Hass, 2009)

Using technology nowadays is becoming so widely used. It is obvious that many students spend countless hours using popular technologies in their houses and so, why can’t they continue using them as means of education? Applying technology in education, is interactive and easier to individualize for specific student needs and it can be used in a variety of settings, including on a computer at home or school, a web-enabled or smart phone, or portable device such as a laptop, notebook, or I pad, (Tammy Andrew: 2011). It is a very important issue to make sure that the teachers themselves are aware of using technology to present their lessons in an enjoyable and beneficial way. A critical element is for teachers to be familiar with multimedia technologies in order for them to know how to use them within their curriculum areas. Both Initial Teacher Training and Continuous Professional Development in the area of multimedia in education need to be improved, (European Parliament STOA: 1997). For that reason, schools should take into consideration the issue of teachers’ training on the use of technology to keep them up to date with all technology development and changes taking place around the world. Having the latest news and information about technology that are available to be used in schools, can be invaluable for all teachers who work on their professional development basically to raise up their performance that affects their students’ performance positively.

**UAE Teachers’ Perceptions of Technology Multimedia**

Almekhlafi and Almegdadi (2010) stated major perceptions regarding UAE teacher’s perceptions about the use of technology multimedia in schools. The following data is partially taken from Almekhlafi and Almegdadi. Participants were 100 teachers from two middle model schools, grades 6 to 9, in Al-Ain educational zone, in the United Arab Emirates. Participating teachers were sixty male and forty female. All teachers in both schools had between 5 and 15 years of teaching experience. All had experience using technology in their classes as it is mandated by the model schools. Both schools have good technology infrastructures available for teachers. This situation is similar to model and ‘future’ schools in the UAE and with less emphasis on technology and its infrastructure to private and public schools, respectively. Therefore results of teachers’ perceptions regarding the multimedia portion seemed applicable. It shows that the majority of the teachers are capable of using technology and dealing with issues related to it. The following table is partially taken from Almekhlafi and Almeqdadi (mean out of 5 point scale).

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<tr>
<td>1.</td>
<td>I can use technology in the development of strategies for solving problems in the real world.</td>
<td>4.0</td>
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<tr>
<td>2.</td>
<td>I have knowledge to discuss health and ethical issues related to technology</td>
<td>4.0</td>
</tr>
<tr>
<td>3.</td>
<td>I can use technology tools and resources for managing and communicating information (e.g., finances, schedules, addresses, purchases, correspondence).</td>
<td>4.0</td>
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<tr>
<td>4.</td>
<td>I can discuss diversity issues related to electronic media.</td>
<td>4.5</td>
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<tr>
<td>5.</td>
<td>I can evaluate and select new information resources and technological innovations based on their appropriateness to specific tasks.</td>
<td>4.0</td>
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Electronic Portfolios

Electronic portfolios have been used for program evaluation in the UAE. There is, however, a limited use of them in advancing learning and assessment. In another study conducted by Forawi, Almekhlafi, and Almekhlafy (2011), ‘Development and validation of electronic portfolios: The UAE pre-service teachers’ experiences,’ it was concluded that senior college of education students held certain perceptions regarding development and use of electronic portfolios in the UAE universities. This study had threefold purposes, (1) describe the process of developing an electronic portfolio for the UAE teacher education programs, (2) find out relationships of the use of portfolio with the other program variables, and (3) examine the UAE pre-service science teachers’ perceptions regarding their performance through the use of electronic portfolios. The assumption is that if electronic portfolios were to be used with pre-service teachers, they need to be successful in accomplishing their goals, worth the time spent in creating them, and advance learning and completion of programs. Participants were 67 female pre-service teachers at a national UAE university who were enrolled in their last course in the program, Capstone Experiences. Among the 67 pre-service, 37 were in the Arabic section, 10 were in the Early Childhood section, and 9 were in the Science section, and 11 were in the other sections namely Islamic Education, Math, and English. A survey was developed by researchers to include aspects related to the electronic portfolio development, usefulness, and experience gained to adequately provide insight into participating pre-services’ perceptions. Twenty items were included, in additional to 11 sub-items that were purposefully presented to reflect good practice and theory in a 5-point Likert scale.

A major result indicated that the use of electronic portfolio is considered a pragmatic vehicle to assess pre-service teachers’ performance and evaluate teacher’s education programs. In using new multimedia technologies such as the portfolio, the assumption seems to be that we can substitute one medium for another—keeping the benefits of traditional print formats while adding a host of new conveniences. In a previous research study (Forawi & Wonderwell, 2003), it was found that pre-service teachers’ learning and teaching skills have been impacted by use of electronic portfolios. Participants of that study developed understanding of learned materials and technology use through their portfolio’s reflective narratives. They were able to show a progress in their learning and readiness to become teachers. There is a great need to address whether the experience of creating an electronic portfolio contributes to the development of reflection and overall teaching excellence and, if so, how this improvement occurs. Research indicated that electronic portfolios are robust with many purposes which can be for learning, assessment, and employment.

We need also to meet the needs of the infrastructure needs of the schools by preparing and equipping our schools with different kinds of technology including computers so as not to be isolated from what is happening around. Using computers is very important as it helps students to play an active role rather than being recipients of information transmitted by a teacher.

The use of instructional multimedia in classrooms is unequivocally important in advancing student learning and understanding of materials. Various software, internet sources and the web appear to offer some advantages. First, once resources are posted on the web, they are available at low cost to any school that has a connected computer and data projector. Second, multimedia can be used to provide learning materials that can reduce the demands on the time of teachers. Technology brings about changes to the classroom roles and organization. It allows the students to become more self-reliant. Students may use peer coaching, and teachers may function more as facilitators than lecturers (Means, 1997). Universities have been using web resources to support students learning and consequently personal use after graduation, but with less effective use after at workplace. The UAE experience seems...
to fit this profile. Few teachers incorporate use of website into instruction, such as science-chemistry, physics, math and languages. In a study conducted by Forawi and balfakih (2009), students were able to incorporate Vernier multimedia and sensor probe ware to conduct science activities related to water quality testing in summer camp.

6. UAE School Experience with Multi Media

To start talking about the huge development in the use of multimedia in classrooms specifically in UAE, let us give an example about what is taking place in Dubai when integrating new technology in the schools. In 1998 Dubai started a new experience starting with English language teaching. Teachers got training on the multiple uses of multimedia interactive DVD that include the use of electronic boards, group work, and individual work. Lesson procedures were thought out in advance, and post lesson discussions of different topics took place to ensure a high level of performance. This experience was evaluated and it showed that the results were amazing in the sense of the results of students’ performance. To show the great positive effect of this experience, I am going to shed light on the report that is taken from (UAE Dubai Modern Education School, Multimedia English Lab Final Report, (2002). The figure below is giving us percentages of the responses of the students in grade2, 3, 4 and 5 towards using a certain type of technology in their education.

Consolidated figures for grades 2, 3, 4 and 5 (Total No. of students 74)

<table>
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<th>Percentage</th>
<th>Description</th>
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<tr>
<td>82%</td>
<td>of students believe that CD-1 is easy to use</td>
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<tr>
<td>95%</td>
<td>of students were happy going to the lab</td>
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<tr>
<td>82%</td>
<td>of students didn't have any hearing or vision problems</td>
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<tr>
<td>24%</td>
<td>of students sometimes watched where their friends were doing</td>
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<tr>
<td>85%</td>
<td>of students read what is on the screen</td>
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<tr>
<td>70%</td>
<td>of students wanted more than one lesson per week</td>
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<tr>
<td>89%</td>
<td>of students thought that learning with CD-1 is more interesting</td>
</tr>
<tr>
<td>84%</td>
<td>of students told their parents about it</td>
</tr>
<tr>
<td>99%</td>
<td>of students would like to use CD-1 next year</td>
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From using the above figures, one can conclude that, students are so excited and happy when using technology in learning as 90% of them were so excited to use to the lab; they even think that using a CD-I is an easy task. More importantly, 82% found the sound and pictures were very clear and they did not face any difficulty in hearing or seeing. 70% of the students preferred to have more than one lesson a week; this percentage can be an indicator of how much students get interested in such kinds of lessons. On the other hand, 89% thought that leaning using such technology is more interesting and fun than the traditional and classical techniques of teaching. A percentage of 84% of the students told their parents
about it which reflects their interest in it and finally 99% would like to use the same method for next year as well.

Reflecting on my own experience with multimedia technologies as a teacher in one of the private schools in Al-Ain, I searched for an answer to the question of the present situation of multimedia and computer technology in teaching and learning in private schools and whether the teachers are getting enough training on the usage of technology or not. To collect data about private schools in Al-Ain, thirty-five female teachers of different subjects; Math, Geography, Islamic Studies, English and Arabic and five principals; 3 female principal and 2 male principal were interviewed. The schools I chose consist of large number of students from K-10. Teachers and principals were chosen randomly. There were four questions to be answered by the teachers. The first question is about how often they use the computer lab for their lessons. The second one is to mention the obstacles that prevent teachers from regular use of technology in their lessons, and the other one is about the teachers themselves if they get any planned training to use technology available in their school. Also, finally they can add any additional comment if they like to.

From these interviews, six teachers of English language, said that they are glad to have computer labs as before they used to teach without using any kinds of technology, so lessons were very boring and teachers were the center of the teaching process unlike nowadays after using technology where students are the main element in the whole process, consequently, lessons become interesting and enjoyable. On the other hand, it is so pleasing that students are able to write and produce neat and correctly spelled work. The teachers added that they used to feel very tired when explaining any lesson without having any technology helping them to demonstrate the lesson and so, lecturing the students in the traditional, classical, boring way was the only alternative. They also commented that after having computer labs, it is now possible for the teachers to use them once or twice a week only, which is not enough to meet all the students' needs and this is the main obstacle they really face; they need to have adequate time to use the lab whenever they need.

When I asked them about their own comments if they would like to add, they said, "we would like to have at least one computer and a projector in every classroom so it will be possible for all teachers to change their methods and techniques and use the most updated information in the most likable way to all students at any time". For English teachers in specific, they feel that it is a must to use the internet as they are plenty of wonderful activities that can enhance students' learning. I can also add that there are plenty of activities for students as well as for the teachers in all subjects and not only for English.

The second part of the interviews was interviewing twelve teachers of Math. The same five questions were asked. The results of these interviews were amazing as all of the teachers gave the same answer but in a different way. They said that they feel that using computers changed students' opinions in this subject. Others said that when taking their students to the lab once a week or every other week as it is not allowed to use the lab at any time they need, students start showing enthusiasm in solving problems using computers instead of papers and pencils. More importantly, they like to prepare their own worksheets which is as beneficial for them as they feel responsible to show the best design and content. One of the teacher added that using the internet makes it possible for my students to participate in some on - line international competition of math. They wish that they can use the lab in all math lessons as their problem is that they cannot use the lab whenever they need; they should book it in advance as the other teachers will be waiting for their turns to come.
The third part of the interviews was with eight Arabic teachers. They said," It is wonderful that we can use different kinds of technology to help our students learn in an effective and a fun way. Using Computers adds a lot to education as it is continuation of the life style of the present generation. As all know most children use computers in their homes for hours and they like using it especially at school so as teachers, we have to take advantages of this situation and make computers available for them for the sake of their learning. One of the teachers said," usually I ask my students to prepare power point presentations especially for grammar lessons; no one can imagine how successful these lessons are". Other teachers added," Some students try to misuse computers in the searching for games or different stuff while doing the task they are asked to do so I need to keep them focused all the time. Other teachers stated," Our school keeps on forgetting the importance of providing us with special training to enable us as teachers to use technology in the right way and to work on improving our skills and abilities in teaching our students.

The fourth part was the interview of a group of four teachers of Islamic Studies. They focused on the importance of using computers to find some stories or articles related to their subjects. They said that students always get excited to choose their best readers of the Holy Quran to listen to which is very useful for students who try to copy these great people. And as a result, improve their recitation in return. To ask students to find stories from the internet for the Prophet's Sirah is their favorite job. In general, using technology helps us as teachers in presenting lessons in the best way adding a flavor of fun and life to it. They added, we have never got any training on the use of technology or even nobody asked us if I am able to use technology in classrooms or not. Furthermore, to adapt new learning technologies, the school should place a strong emphasis on the training and skill development of its teachers.

The last part of the interview was with five Geography teachers; they were very enthusiastic about using technology in their classrooms. They said," Finally, with the new lab we can add life to Geography lessons. Within a minute student can use the computer to find maps, live pictures about different places and even essays and articles about different topics in Geography. Using technology allows students for more variety of resources that they can learn from.

The last question was for all teachers was whether there are any disadvantages for using computers and multimedia in the UAE context; the majority of them said that it is just the misuse of the Internet, gaming, and other distractions that can make it a challenge to keep students on-task, but an experienced teacher could keep his students on the right track all the time. Other five teachers said that it is not an easy task to integrate technology in all subjects or topics. Sometimes, it is a real challenge for us to deal with technology as we are not specialized in this area and so we keep on asking for help. We’ve never got any real training; we just rely on our peers’ help.

Finally, after interviewing the five principals, I found out that all of them realized that teachers' performance has been improved since they have started integrating computer's technology in demonstrating their lessons. For example, teachers can organize their students to search for educationally useful material on topics which were of interest to their lessons. They added that not only the teachers' performance was clearly influenced, but also, students' performance has been positively affected in return. Students start getting excited and their interaction has been increased when having their lessons in the computer's lab using computers as means of acquiring knowledge and information. The only point they are unhappy about is that there is not enough computers to be used by teachers at any time they need to use as they have either one or two labs for the whole school which is not fair for teachers whom we always ask to use technology in teaching in their classrooms. They added, there is no
specific educational pattern associated with success, but, of course, there are many other factors which influence success; technology is one of these important factors. They think that teachers should embed technology into teaching and learning processes and of course, schools must adjust its system and practices to be successful in its adoption of the new technology.

7. Conclusions

Using Multimedia and computer technology in classrooms is very vital in enhancing and raising up students' progress. It can add joy and fun to our schools. It provides teachers with a variety of activities as well as new ways to present and demonstrate lessons in. On the other hand, it is obvious that some teachers resist the use of technology neglecting the fact that using computers nowadays is the same as opening a huge gate to knowledge. In such a case, teachers' awareness of the importance of using technology in stimulating students' learning is highly needed. They should have dedicated instructional advisers who help them to integrate technology into their lesson's plans.

Obviously, there are several barriers facing education when implementing any kind of technology. Some of these barriers are related to the teachers themselves and lack of training on the use of the technology. Consequently, it is very important for teachers to get training that meet their needs to enable them to utilize available technology. On the other hand, one should realize that sometimes, the main reason of teachers' resistance to use technology is their ignorance of using any technological device. So providing them with the needed training will help them to accept the change. Furthermore, teachers' training should be on-going and offered at different levels, such as basic, moderate, and expert according to their needs. The other barrier is the technology itself whether it is available in schools or not; as we realized, some private schools have only one lab to be used by all teachers for all subjects so we can expect the amount of each teacher's share. And finally, students themselves who may cause some troubles when using technology especially the internet and so, teachers should keep their students on the right track all the time.

With public schools, the situation is completely different; UAE has good commitment from the principals as well as teachers and all of the stakeholders of education to work on and support students' progress and attainment by applying the most recent and modern methods of technology in classrooms, however, as it is highly believed that even the use of computers was not fully exploited as a teaching and learning method in all schools of the UAE. It has been announced at the beginning of the year 2011 that five initiatives for information technology in the schools of Abu Dhabi and that is really promising of a good future for our schools in the region.

More importantly, UAE has many future plans to well equip all public and private schools with all kinds of modern technology to keep the education system at the top of all countries and to meet the explosion of information revolution in the whole world as it realizes that using technology in education can add various media and different delivery methods that allow better learn ability that suites all learners' needs and interests. Many training workshops have been held in different areas especially in the government sector to train teachers of how to use the latest technological teaching tools as we all know that interactive teaching can be more effective than lecturing.

Universities need to take responsibility in preparing students for lifelong learning. While engineering and science degrees traditionally do not emphasize the importance of lifelong learning skills new programs of study are now being introduced, often using electronic portfolios to support engagement with learning objectives and reflection. As the literature shows, portfolios are often used in conjunction with
assessment. However, their roles in improving learning and developing reflection are important areas note emphasizing. As indicated by similar UAE studies in this chapter, use of multimedia and electronic portfolio has opened new ways to incorporate such powerful tools to enhance learning at grade and university levels and therefore support self learning and reflection. Despite the challenges of motivating students to develop the electronic portfolios and accommodating time spend in creating them within courses and school work (Heinrich, Bhattacharya, & Rayudu, 2007), these tools can still be effective to use in education in developing countries. In particular, students’ experiences in developing the ‘programatic’ e-portfolio at the United Arab Emirates University are recognized and they promise improvement in student achievement at higher education in the country.

Educational institutions need to change their organizational structure and processes if they want to succeed in adapting and utilizing available technology in the educational field as they are the basic requirement for integrating learning technologies. It is found that to incorporate new technology will be almost impossible with same traditional structure of educational organizations.

Technology concerns knowledge not merely artifacts. To transfer it effectively requires prepared minds on the part of the receivers and some measure of shared cognitive frameworks. The culture has to change as well to make any necessary changes a reality. It also requires coordinated policies on investment, education and training, employment, the economy and development. Thus, technology is the need of today and the future, and the application of this technology means a leap towards success. Consequently, an attention should be paid to introduce technology to our students at an early age in schools to have a shortcut from present into future progress. Finally, it is so important to mention that the UAE is keen to create equal educational chances for our students to get their full rights just like other students in other countries (Shaw, 2002).

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Key terms and definitions

Multimedia Technology: The use of computers to present text, graphics, video, animation, and sound in an integrated way through the advancement of technology. This is an exciting new area for those interested in the use of computers and technology.

Educational Technology: Educational technology is the use of technology to improve education. It is a systematic, iterative process for designing instruction or training used to improve performance.

Communication Technologies: Use of advanced technologies, such as mobiles, digital videos, HD, 3Ds, in communication for greater benefits.
Constructivist Learning: A learning that is based on constructivist theory where students are independent in their attainment of knowledge, skills and dispositions for meaningful understanding.

Educational Theories: The theories that explains teaching and learning such as behaviorism, positivism, and neuropsychology.

Integration of technology: It is the process that utilizes technology tools into various school subjects to maximize student learning.

Electronic Portfolios: According to Forawi & Liang (2005), electronic portfolios are containers of students' best learning experiences that supported by their reflective narratives for authentic experiences that are done with use of electronic medium, such as use of FrontPage, Webs,..etc.

Interactive Teaching: It is the use of different methods that allow students to be active learners and provide them with opportunities to share and participate in the teaching process.

Additional reading

Plugging In: Choosing and Using Educational Technology. This publication describes how to make the best use of technology. The only real measure of the effectiveness of technologies and technology-enhanced educational programs is the extent to which they promote and support students' engaged learning and collaboration.

Using Multimedia to Promote Vocabulary Learning: Supporting English Language Learners in Inclusive Classrooms


**Biography**

Salam Omar Ali graduated from Jordan University, with a bachelor degree in English Literature. She received her master’s degree in Educational Leadership from Abu Dhabi University. Currently, she is doing her doctorate in Education in Leadership from the British University in Dubai. She has an extensive experience in teaching for almost twenty years. Her interest in helping to develop young minds, through utilizing the new technologies in her classes is very obvious. She realized the fun her students get when applying some educational online games and other technology resources; consequently, she started her research quest in the same area trying to enrich the technology file in education. She conducted several research studies to collect data to improve the current situation of integrating technology into teaching and learning to develop student’s knowledge and skills in the Middle East.