

## Review

# Issues in integrating information technology in learning and teaching EFL: The Saudi experience

Dr. Yousef Hamad Al-Maini

College of Languages and Translation, Imam University  
E-mail: [yalmaini@yahoo.com](mailto:yalmaini@yahoo.com)

Accepted June 12, 2013

The Saudi education system is facing a climate of change characterized by an interest in integrating new technology and educational approaches to improve teaching and learning. In this climate, the present paper explores the issues in integrating information technology in learning and teaching EFL in government intermediate schools in Riyadh, the capital of Saudi Arabia. The background to information technology use in Saudi education is introduced, with specific reference to the *Watani* project for integrating computer and Internet use into educational administration and teaching. Taking an interpretive approach, the author offers insights into the current status and use of Information and communication technology (ICT) facilities in the two intermediate schools. A discrepancy is found between intention and practice. Issues are highlighted that contribute to the failure to exploit fully the potential of ICT: teacher resistance, lack of training, and budgetary or resource constraints. The author concludes that the wider exploitation of information technology in learning English, supported by appropriate training, could benefit both students and teachers and offers recommendations for its implementation.

**Keywords:** Issues, technology, EFL, teaching, Saudi Arabia

## INTRODUCTION

In the education domain, Information Communication Technology plays a significant role in improving the quality of the teaching and learning process by enhancing teacher training, motivating learners and facilitating the acquisition of basic skills (Tinio, E-ASEAN Task, and UNDP Asia Pacific Development Information Programme, 2003).

The power of ICT to improve education is vast, many writers and educators argue (Atkinson 1998; Eastment 1999; Williams 1999). Saudi Arabia is keen to adopt this technology in its education system. The government's commitment to modernizing and enhancing educational administration, as well as the teaching and learning process, by exploiting the benefits of this technology, was expressed in the introduction in 2000 of the *Watni* project

to equip schools with computers and link them in an integrating network. Twelve years on, however, the intention of the project is far from being realized, as this paper will show. In order to take advantage of ICT, educators and planners need to consider a few essential issues. Teachers may be reluctant to espouse new methods and technologies for a variety of reasons including entrenched habits, difficulty in incorporating new thinking and materials into a tight and overloaded schedule, and lack of confidence and/or competence in using the new technology and integrating it into classroom activities. There may also be difficulties at the individual school level caused by budgeting constraints and inadequacy of resources in relation to the number of students.

## Definition of Information Communication Technology (ICT)

According to the definition provided by Anderson and Weert (2002, p.14), Information and Communication Technology (ICT) is "the combination of informatics technology with other related technologies, specifically communication technology". In addition, in another major study, Blurton (1999) discovered that the term Information and Communication Technology (ICT) referred to a set of electronic tools and information resources used with computer hardware and software to create, store and manipulate information and to enable users to access and retrieve information.

According to the above definitions of ICT, it is clear that ICT tools are considered to be of great value in supporting all activities in the teaching and learning process for improving both teachers' and students' abilities to use telecommunications to collaborate, publish and search information, as well as for improving interaction with their peers and with experts in the same field. In this case, all of the above skills are integrated to prepare them for *distance learning*, which is totally dependent on ICT tools. For instance, using ICT tools in the learning process assists both teachers and students in rethinking their old knowledge and understanding. Moreover, they can address the difficulties that they might face in accessing relevant information.

## Background

Communication technology has come to play a very important role in shaping education, not only in developed but also in the developing countries (Al-Showaye 2002). However, in spreading the use of ICT some major difficulties are felt by the policy makers as well as the implementers (Al-Showaye 2002). Teachers' familiarity with information technology is often too limited to give optimum outcomes and results. Al-Agla (2002) notes resistance towards ICT, no or only limited participation in in-service training courses or developmental tasks, resistance to teamwork in the school and perceptions of 'teaching' as one-way communication – i.e. teacher to student.

In early 2000, Crown Prince Abdullah announced the *Watani* project, an ambitious national project to incorporate computers (1 per 10 pupils) and the Internet into school classrooms and lessons (Saudi Press Agency 2000). The *Watani* project also aims to link Saudi Arabia's schools with an integrated network, enabling the Ministry of Education to contact all its schools and education departments around the Kingdom (Saudi Information Resource Centre 2000). The project master plan (Watani 2007) highlights the impact of globalization and the need, in the 'Information Age' for young Saudis to

be equipped for a future that depends heavily on computers, in order to play their role in national development and the international economy.

The project is planned in four phases: phase 1, design of network and trial project in a few schools; phase 2, extension to half the Kingdom's schools; phase 3, completion of linkage; phase 4, follow-up, maintenance and upgrading. When complete, *Watani* is intended to provide students and teachers with educational references, e-books, teachers' guides, syllabuses, series for students with special needs, multimedia, teacher training, school management systems and a Question and Answer bank.

The Ministry of Education in Saudi Arabia, through the *Tatweer* project, aims to improve the teaching and learning environment inside the classroom and in schools more generally. Additionally, it aims to increase the effectiveness of the teaching process, improving output by providing the necessary facilities in the school environment and integrating learners into teaching and learning process (Modhi AIOsami, 2011).

## The present study: context, methods and participants

What follows is based on an interpretive, qualitative study carried out in Riyadh, to explore the teaching of English as a foreign language. One of the issues investigated was availability and use of ICT. An intensive case study was carried out in two state intermediate schools containing 500 students, age 12-15 years, distributed in three years or grades and 20 classes. Class sizes varied from 25 to 28 students. The head teachers, all six English teachers and more than 100 students were interviewed, and 18 classroom observations carried out, covering all three years of study. Visits were also made to three other intermediate schools in the city, and interviews conducted with a further eight English teachers.

## Status and use of ICT facilities

The case study schools each had a Learning Centre (LC) containing eight circular tables and a computer connected to a data projector. For example, with thirteen classes in the first school, and thirty-three lesson periods in the school week, in theory, each class might be able to use the LC twice a week. However, such access would be spread across the full range of academic subjects. In practice, therefore, it would be difficult for English teachers to use the LC regularly. One teacher, for example, reported having to wait two weeks for an opportunity to take a class to the LC.

If a teacher succeeded in booking the LC, in practice, the computer was used as an aid to enhance the communicative approach to language learning. In one

lesson observed, for example, students were asked to listen to conversations between students and teachers in the UK and USA, then asked about vocabulary featured in the conversation, and drilled in pronunciation. A particular focus was on verbs previously studied in class, producing clear linkage between work in the LC and other lessons.

The author's experience in intermediate government-run schools indicates that, while computers and Internet access have been installed, the current focus is on their use in administration, rather than teaching. Schools in Riyadh were observed to be exploiting computer facilities for storing examination and assignment marks, for example; these could then be printed out at the end of the semester or end of year, and sent to parents in the students' reports. Moreover, e-mail has to a great extent replaced paper communication in dealings between the schools and the district or national education authorities, greatly speeding communications.

For teaching purposes, most schools have a Learning Centre (LC), generally equipped with at least 15 computer desks, to which in theory classes can be taken for any subject, although it is necessary to book a slot for use of the room. Competition for access may be great. It should also be pointed out that some schools do not benefit from purpose – built buildings, but are in leased premises – an unsatisfactory solution to the problem of rapid expansion of education – and in such cases, there may no LC, computer laboratory or similar facilities available.

The benefits of using modern technology in teaching English were clearly recognized by one of the English teachers interviewed. He had initiated what he called an "English Lab" in his intermediate school. That lab contained a laptop and over-head projector, which he had paid for himself. In another lesson observed, the teacher, a trainee on teaching practice, brought a laptop, recorder and CDs to enable students to listen to some sentences, but since the LC had only two sets of headphones, students had to take turns to listen. During investigations and observations in the educational area, no government intermediate school was found which had a language laboratory.

In the government schools the potential of ICT has yet to be realized in Saudi Arabia, for a variety of reasons, including teacher resistance and inadequate teacher preparation, and budgetary constraints, as the following sections demonstrate.

### **Teacher resistance**

One factor in the failure to integrate computer technology into subject teaching can be the unwillingness of teachers to depart from traditional methods with which they are familiar. Such attitudes were not surprisingly more

prevalent among the "original teachers" (qualified teachers with five to ten years teaching experience, with permanent positions in the school) than among trainees on their semester practicum, which forms a compulsory part of their pre-service preparation. One experienced teacher, who was noticeably reluctant to use the LC, was observed to follow the "old" textbook-based, grammar translation method of teaching. He wrote vocabulary or grammatical points on the board, asked students to copy them into their exercise books and memorize them, and set assignments to be completed in their workbooks. He rarely used teaching aids, apart from the occasional poster. One of the English teachers in the first case study school expressed a marked reluctance to take students into the LC. He reported that he did not think that kind of activity would lead to any progress in students' performance. He tried to express similar doubts concerning language laboratories.

Further comments by another teacher, with more than 20 years experience and close to retirement, suggested that his view may have been coloured by his feeling of being under pressure. For instance, he said he had no time to use language laboratories, because he had to teach 24 classes per week and this did not leave enough time for language laboratories. He commented, "I haven't got time to take my students to the LC because if I took them there I'd need extra hours. I'm teaching overloaded." When asked what he meant by needing extra time, he went on, "I'd have to bring them in the evening, because I haven't time in the morning." This teacher seemed to view use of the language laboratory as an extra chore that would have to be fitted in, an addition to his normal classroom teaching. Moreover, he argued, "It's not my responsibility to use ICT."

Another reason for teacher resistance appeared to be a concern that any departure from the current methods, particularly in the direction of more student participation, would result in a breakdown of discipline and a failure to take learning seriously. This was related to a general perception, even among those who favoured the use of technology, that the purpose was primarily entertainment – to make the subject more 'fun', rather than to achieve desired learning outcomes. In this respect, they seemed to misperceive not only the potential role of computers but also the attitudes of students, who in discussions with me expressed a strong need for access to computer facilities in order to develop their linguistic ability. For example, one student told me: "Please, professor, if our teacher brings us to the Learning Centre and uses the overhead projector with his laptop to show us some English programs, we will be good at English in the future." When asked to elaborate, he suggested, "We will graduate from Intermediate and go to high school with a very good background in English."

Over and above time constraints and concerns about discipline and learning outcomes, however, a major

reason for teacher resistance to using ICT in subject teaching is that they simply do not want to use it. This may be due to a lack of technical proficiency and confidence in using ICT and/or a lack of pedagogical understanding of how to employ it effectively in EFL. That this may be the case is suggested by the greater willingness to use ICT among trainee teachers, who were familiar with computer technologies through their university preparation. One trainee, whom I was observing on his practicum, for instance, told me, "Professor Yousef, I prefer to use my laptop in the learning centre instead of explaining my lesson in class, because I've heard of the benefit of such lessons from my colleagues." This raises the issue of training, to which I now turn.

### Training

In order to integrate computer technology into their teaching, teachers must have a degree of competence and confidence in using the technology, as well as some understanding of how ICT relates to learning theories, and of its potential in specific subject areas. Teacher preparation in Saudi Arabia, however, does not routinely cover such issues, although the position varies from one university to another; in the English Department at Imam Mohammed Ibn Saud Islamic University students take two compulsory courses, at levels 6 and 7, in using computers in EFL.

In some institutions, however, graduates in Arts and Social Sciences, in particular, may have had little or no exposure to computers, as computer skills are not a requirement of graduation; any computer access or training available tends to be confined to students of Science and Mathematics. Those teachers who have an Education degree may perhaps have attended a lecture on the use of computer technology in teaching, but may have no opportunity to practice integrating computers into their subject teaching, even during the final-term teaching practice placement.

In this situation, in-service training could clearly have an important role to play. In theory, there are various kinds of training available. Special training courses on various topics are provided free of charge at the Training Centre in each educational area all over the Kingdom. The centre sends official letters to specific schools, inviting teachers to attend. There is, however, a problem of take – up of such courses, due to the inconvenient timing and conflict with teachers' other responsibilities. Courses are commonly held in the morning, clashing with teachers' regular teaching duties (they attend from 6.30 – 12.30) and staff shortages make it difficult to arrange cover in order to release teachers for training. One teacher told me, "Even if I had received an invitation from the Ministry of Education to attend a course in ICT, I

couldn't have attended for that reason." However, it appeared that courses held in the evenings would be no more popular, as teachers preferred to keep the evenings free for family, especially as no training allowance is offered as an incentive to attend. It seems, therefore, that careful thought needs to be given to the manner in which training is provided, and to how teachers may be enabled and encouraged to attend.

### Budget and resource constraints

In some of the schools visited, difficulty in exploiting ICT in teaching EFL was at least in part due to insufficiency of resources. The *Watani* project, referred to earlier, has not yet been fully implemented. In the absence of adequate resources in the schools, instances were noted of teachers taking their own laptop computers into school, together with CDs of supplementary teaching materials, which they had provided at their own expense. However, not all teachers were able or willing to do this. As one teacher commented, "I don't want to pay money from my pocket to buy a laptop and English programs and bring them to school to teach English. The Ministry of Education is responsible to provide us with ICT facilities."

Another, discussing the shortage of facilities in his school, expressed impatience with the delay involved when facilities were requested by the government. He complained, "We need an English lab, but you know the bureaucratic process in our country."

Both bureaucratic delays and financial constraints were reflected in the experience of the head teacher in one intermediate school in leased premises. He showed me the small library he had created, but regretted the absence of ICT facilities; there was no LC. We discussed the possibility of a room being cleared, in order to set up a small English lab, and on a subsequent unit, I found this had been done. "What do I do now?" asked the head teacher. I gave him contact details for a Sony representative based in the United Arab Emirates, who set up labs in schools across the Gulf countries, and would be able to advise on what equipment could be fitted into the room, as well as a quotation on price, to be forwarded to the Ministry of Education. He submitted a plan for 25 computers with headphones, and the official request was made. More than two months passed without a reply. The head teacher made repeated calls to follow up his request, and was told he would have to wait, as no budget for the project was available. Eventually, at the end of the semester, the Ministry of Education announced its rejection of the project on financial grounds. This disappointing experience is by no means uncommon in schools that request provision of resources, however desirable these may be in educational terms.

## CONCLUSION

This article has highlighted important issues associated with the use of ICT in intermediate schools in Saudi Arabia. Despite the intentions of the recent *Watani* project, ICT equipment was often unavailable and even where available was underused. It seems that the explanation for lack of computer use must be sought in a complex interaction of factors, including bureaucratic confusion, lack of teachers' awareness, perceptions of student roles, the nature of the centrally prescribed curriculum and budget constraints. Nevertheless, in the Saudi context, there is anecdotal evidence from students and teachers who have experienced EFL teaching with ICT that student participation is increased, and motivation and learning enhanced. In my experience, many Saudi teachers, however, are unaware of these success stories.

The growth and application of new ICT in the field of education is fraught with immense difficulties. Projects such as *Watani* will only succeed if adequately funded and accompanied by opportunities for teachers' training and development. Supervisors could play a vital role through disseminating information, liaising with trainers to develop courses that need teachers' needs, enlisting head teachers' support for new educational initiatives and arranging opportunities for teachers to observe examples of good practice. Teacher competence and commitment is crucial for countries, like Saudi Arabia, that are seeking to promote educational improvement through ICT. Most important of all, however, is an environment in which teachers are not simply passive implementers of educational directives, but are encouraged to be dynamic professionals, engaged in career-long learning and actively sharing in the development of policy and practice.

## RECOMMENDATIONS

In the light of this conclusion, the author suggests the following recommendations:

1. There should be more emphasis on developing some teaching skills as classroom management.

2. There should be more emphasis on modern teaching methods in student teaching such as language labs and head-projector. This will help teachers to be well-prepared to face teaching challenges.
3. There must be intensive sessions at universities on preparing teaching aids before the school experience. This will enable teachers to prepare teaching aids more skillfully.
4. Qualified teachers should be chosen according to a group of train-related professional criteria. A scale can be developed for this purpose including qualification, experiences in supervision, teaching and training, willingness of participation in training, familiarity with the training programs in technology, behavior at school and relation to colleagues.

## REFERENCES

- Al-Agla A (2002). *Introducing computer supported co-operative learning to the curriculum of Islamic Studies and Arabic Language institute for Non-Arabic speakers: teachers' perceptions, students responses and administrations' views*. Ph.D. thesis, UK: University of Hull, Institute of Learning.
- Al-Osami M (2011). *Investigation of using ICT as a tool for supporting the teaching and learning process: a Case Study in one secondary school in Saudi Arabia*. Dissertation submitted in part-fulfilment of the requirements for the degree of MA in Education in the University of East Anglia, School of Education and Lifelong Learning.
- Al-Showaye M (2002). *Use of computer-based information technology and the Internet in Saudi Arabian intermediate and secondary schools*. Ph.D. thesis, UK: University of Manchester.
- Anderson J, Weert T (2002). *Information and Communication Technology in Education, A curriculum for schools and programme of teacher development*. France: UNESCO.
- Atkinson T (1998). *WWW, the Internet*. London: CILT.
- Blurton C (1999). *New Directions of ICT-USE in Education*. Hong Kong: University of Hong Kong.
- Eastment D (1999). *The Internet and ELT*. London: The British Council.
- Saudi Information Resource Centre. 2000. [Htt://www.saudiinf.com /main/start/htm](http://www.saudiinf.com/main/start/htm)
- Tinio V, E-ASEAN Task, Force, UNDP Asia Pacific Development Information Programme (2003). *ICT in Education*. New York: e-ASEAN Task Force.
- Watani (2007). <http://www.watani.org.sa>
- Williams B (1999). *The Internet for teachers*. Chicago, IL: IDG Books.