

Introduction

Guidance and counselling help people develop a vision of their life and enhance education and training goals. In today's world, tailoring services to differing needs is essential. Some people require advising where to get information and how to use it. Some request guidance and support tailored to their unique needs, whereas others need counselling, how to explore, examine and clarify thoughts, feelings, beliefs, values and behaviours, to arrive at plans for action.

With the new education reform taking place in the Algerian schools, students, as well as teachers, find themselves torn between a new paradigm to education and an old-fashioned one (Ministry of Higher Education and Scientific Research, 2007). In such a problematic situation, it is the role of guidance counsellors to intervene as a reassuring agent in this process of change. However, no chain being stronger than its weakest link, guidance and counselling services must, themselves, be readapted to the educational paradigm at hand. The professional and practical demands arising from this understanding of education and of counsellor training make it imperative that the values to which the Algerian Government is committed are informed by fresh research perspectives, particularly, ones that combine empirical knowledge in intricate ways with more qualitative forms of understanding. This creates a wide range of practical dispositions to action.

Therefore, guidance and counselling should not only be theoretical, but should also provide opportunities for people of all ages to develop and practice the skills to respect human rights and citizenship through lifelong learning. This entails that all aspects of school as a living social environment should be given paramount concern. Of late, there has been a continuing shift away from manufacturing industry towards service economy, increase in contractual employment and a lot more part-time, often low-paid, work. These changes and the ever-widening range of career opportunities and new courses have made it impossible for students, parents and teachers to maintain a current information base of options. They are confused by the various reports of encouraging prospects in a few industries and slowed down in others. In this scenario, career counselling and guidance have assumed even greater importance than ever before.

Career development, involving advancement, is determined by numerous factors, or a combination thereof (Allen et al., 1995), having to do with personal interest, knowledge and skills, value systems and, particularly, work or professional ethics. That is why, the present work puts greater emphasis on career development in that the professional life of an individual is not only confined to the period of employment, but incorporates prior phases of decision-making and preparation. The term also incorporates changes in and movement from one professional environment to another. In other words, entrance into a particular profession is not the result of a "blitzkrieg" decision, but the product of an evolutionary process coinciding with the larger part of a person's lifespan.

Moreover, the Algerian society, today, is incorporating more basic and communication skills. The use of Information and Communication Technologies (ICT) has sparkled on stage. Yet, its uses and various advantages are still in their prime infancy. This entails the introduction of proactive measures from the part of stakeholders both at school and at fieldwork level. Only when such technology is best profitable that an advent in practice can be ultimately reached.

Thus, serious academic research in the field of counselling and human rights is a key element for ensuring knowledge in practice. Besides its scientific and inspirational values, this research could add a set of standards, could be quoted or even used as a yard stick in cases of conflicts and disputes involving human rights issues. I would like to state that there is much that every counsellor can do. Individuals do make a difference. The Algerian society has always been the result of an individual process of change. Thus, every one of us must decide for the whole according to our own beliefs, needs and priorities how involved we become. Such steps, however, are not some extracurricular activity, nor some luxury or radical action of an avant-garde group of counsellors. On the contrary, they reflect a major direction for counselling practice as we move further into the twenty-first century.

The argument thus far implies that well-organised career information, guidance and counselling services need to be high on national public-policy agendas. The emphasis on the LMD system and sustaining employability also has implications for how such services need to:

- Be provided in a variety of sectors: not only educational institutions and employment offices, but workplaces and community settings, too,
 - Be provided in a variety of sectors, not only the public sector, but also the private and community sectors,
 - Allocate an important role to informal and non-professional sources of information and guidance such as local employers, community members, parents and peers, as well as to formal professional sources,
 - Achieve a balance between universal access and the targeting public resources to those who most need them,
- And
- Play a proactive role, helping individuals to create new options as well as fitting them into existing jobs and courses.

Thus, there are a number of questions that this research endeavour might ask to assess the extent to which career information guidance and counselling services are meeting key public policy objectives. Such questions bear of considerable importance to the study and are as follows:

- What is the extent of access to career information and guidance provision in Algeria?
 - What mechanisms are used for assessing the quality of guidance and counselling provision?
 - To what extent is ICT used to widen access and increase cost-effectiveness?
 - What range of individuals and organisations are involved in service-delivery, and how adequate are arrangements for the training of guidance practitioners?
 - How and to what extent is the diverse provision of services effectively coordinated for a lifelong learning?
- And
- How adequate are arrangements for developing bereavement counselling to ensure a better service-delivery at all levels?

As a matter of fact, the four proposed research outcomes are to:

- Examine the role of socio-emotional climate and its role in enhancing the quality of student learning,
 - Identify and map the technological capacity agenda of a broad learners population,
 - Offer guidance, advice and practical techniques for counsellors to support the client's learning experience at all levels,
- And
- Enhance the students' preparedness for lifelong learning and employability.

However, differences in institutions and traditions both constrain and provide opportunities in different countries. Similarly, Algeria faces choices in the ways that career information, guidance and counselling services can be configured to meet key public goals such as lifelong learning and active labour market policies. One way to elaborate upon these options is to develop a number of hypotheses. These would incorporate a range of dimensions and options within them. Thus, a number of these hypotheses work out the present research and are described hereafter.

This paper attempts to give policy makers clear, practical tools that can be used to address these problems. It encompasses the major policy domains involved in developing a comprehensive framework for lifelong guidance systems: meeting the career guidance needs of young people and of adults, widening access to career guidance, improving career information, staffing and funding guidance and counselling services and improving strategic leadership. Within each of the above hypotheses, this work aims at setting out the key challenges that policy makers face in trying to improve guidance and counselling services in Algeria, providing examples of good practice and of effective responses to these challenges, drawing upon research conducted in the field, listing the questions that need to be asked and responding to them, and, hopefully, providing practical options to improve guidance and counselling policy in Algeria.

1. The inward policy of education in the ‘national’ Higher Education

The responsibilities inherent in education are frequently taken to be familiar, even mundane ones. Yet, this commonplace view obscures what is most crucial, for to succeed well in this undertaking is to accomplish something of measureless significance. Far from being merely commonplace, the responsibilities of education are concerned to enlighten human understanding and to advance humankind’s more worthy aspirations through guidance and counselling.

The uncovering of each student’s individuality and promise, learners’ demands for acknowledgement and encouragement, the quality of their encounters with inheritance of learning and their discoveries of personal achievement and limitation feature rarely enough in the Algerian public discourse on education. Yet they are the realities that confront counsellors most closely in their day-to-day work (Hamoud, 1996). To engage seriously in such realities as a counsellor is to become involved in a caring and a just way in building and sustaining relationships that give imaginative and judicious attention to the experienced quality of the counselling itself. None of this is to displace questions of the learner’s social and economic utility from educational thought or practice. Rather, it is to call attention to those regions that remain largely unvisited among the more familiar concerns of public educational discourse (Official Paper N° 827, 1990). Nowadays, however, the macro issues of economic and social policy are inevitably writ large.

In a Department such as the Algerian Ministry of National Education, with so many elements requiring attention, and a number of external linkages, it is crucial to its efficient functioning that its administrative and support arrangements are of the highest quality. It is very offering to find the Reviews giving such strong endorsement to this aspect of the Department when it states that:

“There is a strong commitment of support within the Department from a dedicated and experienced administrative and technical staff. This is an effective system which is well-managed and works well.”

(Translation of the speech of the Minister of National Education Sir. A. Benbouzid at the Meeting held for Vocational Guidance, Algiers, 27/12/2004).

This view is endorsed by all the evaluations of the personnel who need to liaise with the Administrative Office. Most systems of operation have been evolved over the years with the proactive assistance of the administrative staff and are, at present, effectively implemented (Meeting on Vocational Guidance, Algiers, 2004).

Over the last nine years, the Education Department has taken a variety of initiatives to ensure that it was in a position to make maximum use of ICT in support of its various teacher education courses. Hamoud (1996) gives a strong endorsement to this activity. He states:

“The Department is served especially well in this area in terms of quantity

support, although quality is still lacking. The work in ICT is a very high standard and this demonstrates a clear commitment to methods of teaching and ways of dealing with new technologies.”(My translation; p. 5).

Obviously, this could not be similarly assumed in the field of guidance and counselling. Although a number of Personal Computers (PCs) has been distributed in various schools, their utility is still confined to record registration and storing. In this stance, however, it is high time we review the policy of embodiment of Information and Communication Technologies (ICT).

Similarly, proactive actions should be taken at university level in order to express the values which imbue lifelong learning with appropriate justice and care. Excellence in human development and service to the wider community is bound up with a continuing process of career development and lifelong guidance work through the new reforms of the LMD system.

Education provides the foundation for the development of society. Since the LMD system has been implemented in 2003, the Chief Executive (CE) has mentioned repeatedly, in his policy addresses, that education is a key issue pertaining to the future development of Algeria, and that our educational system should keep pace with time. He has also requested the Education Commission to conduct a thorough review of the teaching-learning process with the aim of enhancing the overall quality of education.

Many educators maintain that the education system should go beyond imparting academic knowledge to our students. Rather, it should aim at the whole-person development of our children, including development, not only in knowledge, but also in personal character, skills, attitudes and physique. In addition to normal academic studies, our students need to learn how to become responsible and caring individuals. This ties in with the overall aims of education proposed by the Education Commission in 2003, and which are:

“...to enable everyone to develop to their full and individual potential in all areas covering ethics, intellect, physique, social skills and aesthetics. It aims at making each individual ready for continuous self-learning, thinking, exploring, innovating and adapting to changes throughout life; filled with self-confidence and team spirit. It, also, attempts to strive incessantly for the prosperity, progress, freedom and democracy of the society, and to contribute to the future well-being of the nation and the world at large”.

(My translation from an article of the Education Commission in the Official Journal, February, 2003).

It is, therefore, clear that guidance and counselling is the cornerstone of the whole person development. On one hand, it emphasises the social and emotional progress of all students and implements a strategy for lifelong learning, on the other.

The Educational Department has not long recognised the importance of student guidance work in secondary schools. However, it became apparently active between the years 1982 and 1986, to provide a total of five additional counsellors to improve the various supportive services to students (Official Paper N° 827/1990). In 1993, the Education Commission, in its Report N°. 93/1. . /245, recommended

the implementation of the Whole School Approach (WSA) to guidance in schools to improve the quality of education. A summary of the Report may be translated as follows:

“The Whole School project to guidance emphasises the united effort of all social personnel who, under the leadership of the school head, work together to create a positive learning environment enriched with care, trust and mutual respect. It stresses the importance of a caring and inviting atmosphere for students to grow with enhanced self-esteem and to realise their potentials. Consequently, the education ideal of the whole-person development in the students could be reached.”

(My translation from the Education Commission Report N°. 245. The Whole School Approach to Guidance, Algiers, 24/12/1992).

Following the implementation of the policy of *“one guidance counsellor for each secondary school”*, it is time we review the objectives set forth as to the significance of counselling and guidance. In principle, there has been a traditional expectation in the Algerian schools that teachers should be encouraged to adopt a guidance role. In practice, the size of classes and the subject-based fragmentation of the secondary school curriculum have militated against this. In recent years, however, increasing attention has been given to the inclusion of guidance elements within the school curriculum, yet, career education and lifelong learning are not able to operate on a stand-alone basis. Thus, the urge of this research endeavour is to highlight the role guidance counsellors can play in promoting a strong base of learning over the lifespan. In the course of this process, broad objectives are set forth in this study and are highlighted under the following heading.

2. The disparities inherent in the old curriculum of guidance and counselling

It is my contention that for guidance to develop effectively in the new millennium, greater clarity should be placed about “fault lines” and about the relationship between career guidance services and guidance as an educational concept. In a context in which education is clearly demarcated from the world of work, the distinction between these two traditions makes sense. Increasingly, however, learning is being viewed as lifelong, taking place not only in educational institutions, but in multiple settings, too. In this sense, the distinction is less credible.

The term “guidance” has proved difficult to market to adults outside educational settings, partly because people do not know what it means and, also, because they associate it with something done unto them at school (Wilson & Jackson, 1999). There is some resistance to the term “career”, too. I believe, however, that the joint concept “career guidance” is likely to be more clearly understood than the unqualified word “guidance”, and that there is a strong case for marketing “careers” as a concept which is now available to all. It represents a new post-industrial sense of individual’s lifelong progression in learning and work. “Lifelong learning” is now a widely heard mantra. The use of career, however, links lifelong learning to work, adds the element of progression and grounds both firmly in the individual. “Career guidance” is then focused on helping individuals not to choose a career but to construct it (Watts, 1999b). The need for both of these forms of guidance in the Algerian context must be clearly understood.

In looking to the future of “stand-alone” Algerian career guidance, much depends on the relationship between three forces: public policy, professionalisation and the market. Hitherto, most guidance provision has been funded by the state, either directly, or as part of its funding of educational provision. It seems unlikely, however, that the Algerian Government will be willing to fund the extent of guidance services needed to support a lifelong model of career development.

Marketing career guidance in our society appears to be problematic for a number of reasons. Guidance is a process not a product, a means not an end. Its heart is not only meeting people’s immediate wants, but also helping them to clarify their longer-term needs (Wilson & Jackson, 1999). On the other hand, the development of a market in guidance and counselling could be a way of meeting the public interest without making inordinate demands of the public purse.

Information and Communication Technologies (ICT) are likely to have a significant impact on these issues. Such technologies already offer massive opportunities for enhancing both access to guidance and its quality. In Algeria, however, they risk a loss of quality controls as well as a form of reductionism, with guidance being understood as access to information. Tait (1999) has argued against such reductionism, pointing out the potential of the new technology, not only to transmit information, but to change what is meant by space, time and physical presence, too. Algeria is, certainly, only at an early stage of understanding the transformative nature of this potential.

It is important, however, not to underestimate the difficulties individuals may experience in moving between career forms. Effective guidance practice also needs a sounder knowledge base about career resilience: how people emotionally cope with setbacks and challenges in their careers. It is odd that the role of emotion in guidance and counselling has received so little attention. Feelings like worry, hurt, anger and enthusiasm are rarely discussed in the literature. In the Algerian context, however, this should be strongly emphasised given the historical background of catastrophes witnessed by the Algerian community. Many guidance practitioners work regularly with clients who are rendered incapable of moving forward by emotional difficulties to do with their work or learning. This again highlights the need for stronger links between the fields of guidance and counselling and for more communication between the two professional groups.

Enhancing the skills of autonomy of the Algerian population, in the context of global economic competition and changing employment opportunities, is a laudable objective. But how far is it achievable? How far will those who are less advantaged socially and educationally be able, even with skilled guidance, to achieve the level of autonomy to manage their own careers? It has been argued that with the shift to mass Higher Education, credential inflation is leading graduate employers in Algeria to adjust their selection criteria, favouring those with particular types of social and cultural capital (Hamoud, 1996). For some sectors of society, it seems unlikely that initiatives to encourage personal responsibility will in themselves have much effect on access to the cultural capital needed to achieve lifelong progression.

For understandable reasons, the literature on the practice and provision of guidance and counselling has tended to be more prescriptive than analytic. I suggest that more debate is needed about the problems and constraints encountered in introducing and implementing guidance intervention. Guidance is a political activity. Many of the guidance concepts and theories developed over the last few decades will have lasting impact well into the twenty-first century. I believe that careers in the future will be different from the past, even though we may not be sure how different or in what ways they will differ. It seems clear that many of the challenges Algeria faces in the field of guidance and counselling are related to meeting the needs of individuals engaged in lifelong learning. It is important to consider which ideas and frameworks are still useful in understanding how careers are enacted and how individuals might best be prepared for them. I hope that my discussion of some of the challenges for policy, practice, theory and research will suggest some ways forward for the Algerian community. Thus, my aims set forth under such headings are to prepare future highly capable counsellors for lifelong learning needs in the present technology era. I also aim at putting the entire counselling and guidance service under supervision. This would, ultimately, create professional development centres which are consistently able to upgrade and update the knowledge, competence and efficiency of trained counsellors in both academic and professional areas. Therefore, this work carries out a strategy to increase the facilities, curriculum and, also, training programmes by introducing the skills in ICT for

every individual who is involved in guidance and counselling in Algeria. Through these efforts, it is hoped that counsellors would be able to perform competently and excellently in this era of globalisation.

1. Career development and lifelong learning: new challenges for guidance and counselling

Today's world is one of rapid change in virtually all dimensions of life. The globalisation of trade means that decisions in one country may have an impact on employment in another where values and priorities are very different. Workers have greater mobility across borders, yet opportunities are not uniform in the different segments of society. There is a greater need for specialised education and training (Avis, 1997), but in some countries, like Algeria, a tendency to cling to traditional priorities results in a shortage of workers in certain specialised fields. There is a widening gap between the rich and the poor, between those who can seize opportunities and those who are marginalized and between those who have received education and those who have not. The days of job stability, which some would argue never existed, are over for many and are being replaced by a context where flexibility, adaptability and transferability of skills are essential (King, 1993).

Yet, within this context of change some familiar features remain. In most countries, women continue to earn less than men. Egalitarian pay for work of equal value is a commonly expressed goal that is seldom put into practice, even in the so-called developed countries (Jackson, 1989). Prestige and status continue to be attached to university education and young people along with their parents seek career paths in "professional" occupations even though employment opportunities are hardly found (Heinz et al., 1998). Technical and Vocational Education and Training (TVET) is often viewed as inferior, or as a second choice after professional education, regardless of the students' interests or abilities (King, 1993). Many people, therefore, dismiss promising and meaningful career paths with greater employment opportunities, simply because of the stigma attached to technical and vocational occupations (Morris, 1996). Education systems continue to be directed primarily towards preparation for university education even though the majority of students move directly into the labour force (Heinz et al., 1998).

There is a clash between the new world priorities and the traditional cultures. In Algeria, for example, people are seen living in dwellers in front of luxury hotels. They are seen washing in rivers in front of houses with satellite dishes. The country imports workers to fill blue-collar jobs while its own young people seek training in professions where there are few or no openings. The investment in training often goes unrealised as young people dropout or do not enter the occupational field for which they have been trained. In other developing countries, lip service is paid to the values of the so-called developed societies, but these values often find little favour with the bulk of the population (Wright, 2000).

There are numerous examples suggesting that countries that are developing or redeveloping their industrial and technological capacities need to carefully think before adopting the policies of well-intentioned neighbours (Borgen and Hiebert, 2002). Trying to understand the technical and vocational education system, Borgen and Hiebert (2002) quote the following examples:

“An intergovernmental aid project in Latin America brought canned soft drinks into small towns where there was no clean drinking water. What an order of priorities! ... In another project in Latin American, local farmers ploughed up their field of maize to grow flowers to sell to the United States of America in order to meet their cash flow targets. This was successful financially, but maize is a staple food in the area (being used to make tortillas) and now an area, once able to produce all the maize it needed, grows flowers for exports

but imports its staple food.”(pp. 14 – 15).

In this respect, I believe that programmes that clearly focus on locally and regionally evolving economic, social and cultural needs ought to be developed. A rush to adopt alternative systems often means that local needs, values and ways of doing business are relegated to second place. Furthermore, informal learning and economies that produce transferable skills sets are overlooked.

In addition to avoiding inadequate training programmes, areas that are in the process of creating a training infrastructure may want to consider alternative ways of conceptualising it (King, 1993). One problem in many areas of the world where TVET has been established is the relatively low status ascribed to it within the context of the broader educational community (Morris, 1996). This can lead young people and their parents to question the legitimacy of education and training offered. This has occurred in contexts where education is considered as a hierarchical structure, often with universities at the top and TVET institutions nearer the bottom (Wright, 2002). Given the need for all types of education and training opportunities in Algeria, now and in the future, it may be more useful to replace the traditional hierarchical structures with one that is more consisting. This new structure would value each type of education and training for its contribution to the educational and vocational fulfilment of individuals. This paradigm would also need to allow movement across and within circles to make the latter clearer and more transparent. Given the orientation towards lifelong learning that is needed in all educational and training settings, this notion is useful in valuing all occupational roles and recognising the contribution they make to society at large.

Vocational guidance and counselling is widely accepted as a powerful and effective method of helping to bridge the gap between education and the world of work, as well as between school and society. It is a means of assisting young people to make appropriate and judicious educational choices. These choices will enable them to develop their potential and to have access to work opportunities that are compatible with their interests and abilities. It can, also, help to instil confidence and positive attitudes, to derive fulfilment from their chosen areas of learning and work and, most importantly, to inculcate an eagerness for lifelong learning.

4. The role of information and communication technologies (ICT) in guidance and counselling

Society, as it is currently experienced, has its origins in the growth of consumerism and the increasing mass use of products of technological innovation. Many developments of communication in the latter part of the twentieth century accelerated the process and fuelled a convergence in the different domains of education. The present changes have certainly caused rapid evolution in the guidance and counselling services, however, the extent to which they comprise a revolution can be exaggerated.

Unlike the times of agrarian way of living, all current generations have experiences of change (OECD, 2004). Many old members of the Algerian community, for example, have moved from a time where they generally grew up, lived and died in the same cloistered environment to a more unpredictable world where television beams world news into homes on a “real time” basis. Telephones and e-communication have replaced mail allowing cheap mass air travel into a growing world tourism market. Many people have integrated computers into their work practice. Retirees regularly use remote controls, mobile telephones and the Internet (OECD, 2004), and knowledge and experience of innovations in education are shared across generations (Hargreaves, 2003). Universal e-learning is becoming the norm among developed countries (Horton, 2001) as it is equipping them for a future change.

However, the pace of globalization has left some parties better able to capitalize on what is on offer (OECD, 2004). The gap between “the haves” and “have nots” has increased both within and between countries. In this respect, the ILO World Commission on the Social Dimension of Globalization (ILO, 2004, REF) noted the following remarks:

“The current path of globalization must change. Too few share in its benefits.

Too many have no voice in its design and no influence on its course”.(p. 2)

Change in economic conditions has led to deterioration in employment opportunities. Jobs are no longer congruent with the right demands of the industrial markets and students and workers are no more updated in their vocations of interest. In this respect, I believe that students and workers alike must be taught, not only the skills of negotiating such a precarious environment, but to learn how it can be improved, too. This can only be done through a carefully studied guidance and counselling practice.

From the flow of “knowledge workers” theories (Rost, 1991), most people agree that Information and Communication Technology (ICT) would play an important part in schools of the future. It would undertake a bipolar role in upgrading for students’ needs to develop their skills and understanding, on one hand, and to share in the counsellors’ repertoire to guidance and counselling, on another.

At present time, computer technology has affected virtually all dimensions of life, including the way people communicate ideas, conduct business and provide education (International Journal for the Advancement of Counselling, 2004). In the Algerian schools, the use of ICT is increasing at a rapid rate including more Internet connections, computer labs and libraries (Algerian Ministry of National Education Website, 2007: see website links in bibliography). Online counselling journals and newsletters are now tools that allow a more convenient and accessible assistance regardless of time and space notions. Classrooms and offices of the twenty-first century are no longer tied to resources in a traditional school building but are, on the contrary, open to distance and lifelong learning.

The inherent role of ICT has also manifested itself in virtual environments for counselling (Krommer et al., 1998). The latter are a blend of art and science as they add new dimensions to career and vocational guidance. As a new technology for visualizing data, the application does not only give more emphasis on virtual communication, but the possibilities to add other senses, such as hearing, to the counselling act, too (Lanier, 1992).

That is why, the aim of the present chapter is to investigate the importance of ICT systems in all guidance and counselling services, and to see how and why ICT applications are integrated in everyday life. The discussion is based on preliminary results from different action researches and stretches ICT applications as tools for flexible guidance and counselling in promoting lifelong learners.

Moreover, most evolutions to date have studied types of career guidance that may be diminishing in relative importance, such as one-to-one or face-to-face counselling. However, few studies have yet been conducted on the impact of service delivery incorporating Information and Communication Technologies (ICT). This paper focuses the need for more sustained research on the interaction between types of treatment and types of outcomes.

1. Lifelong learning in the Algerian context

Lifelong learning has been hard to put into practice in the Algerian context on account of the general problems affecting education and training, as well as the obstacle of the digital divide. In the present section, I will only hint at the most important aspects that characterise ICT use in the Algerian context of lifelong learning. The latter is used with some caution due to the lack of any research work proving its advocacy.

The importance of the concept of lifelong learning for the world of the twenty-first century is forcefully stated in a memorandum published by the European Commission (Commission of the European Communities, 2000). The vision of education and training presented therein features a combination of initial and in-service training, formal and non-formal education and wholly or partly-based ICT distance education. However, this is a hard concept to put into practice in the Algerian context when few employees have access to in-service training either because they are ill-informed or on account of their employer’s reluctance. It is made all the harder by the digital divide, which represents a significant obstacle, as it forms both the subject and the means of lifelong learning (Genre et al., 2004). For most people, ICT skills are basic requirements for the accomplishment of any career-work. They form the means of all proliferating uses of electronic media and broadband online learning services. Consequently, it warrants some clarification on account of its multi-dimensional nature.

According to the ITU Digital Access Index, access to ICTs in Algeria is very low (International telecommunications Union, 2003). The republic of Seychelles is the only African nation in the upper access category and all but a handful of the rest have a low level of ICT use. Before the introduction of international corporations, such as “DJEZZY” and “NEDJMA”, teledensity stood at around 5.2 telephones per hundred inhabitants. The percentage of households with a computer is even lower and very few have access to the Internet (Michel, 2003). International Internet bandwidth is often limited to a few megabits (Mbps), specialised digital links tend to be very slow and Asymmetric Digital Subscriber Line (ADSL) is only available at a handful of institutions (ITU, 2003). Added to that, access subscriptions and telecommunications rates tend to be quite costly. Furthermore, computer-based learning has a linguistic dimension given the near- total absence of translations of main articles into Arabic. Thus, the fact that the bulk of the information available is in English is a drawback for non-English-Speaking people.

Moreover, ICT has also had an impact on education. The new curricula introduced by the Ministry of Education have done a great deal to bring Internet use into schools (Algerian Ministry of Education, 2007). On the other hand, and through the World Links programme, the World Bank has provided computer equipment, promoting school Internet connectivity and training teachers in the use of ICT. It is also contributing to lifelong learning through the short courses on offer at the distance learning centres set up within the framework of its Global Development Learning Network (GDLN, 2007).

The Réseau d'Appui Francophone pour l'Adaptation et le Développement des Technologies de l'Information et de la Communication dans l'Éducation (RESAFAD), a network of French-language support for the adaptation and development of ICTs on education is present in the capital city (RESAFAD web-pages, 2007). There have been two major initiatives in Higher Education: The African Virtual University (AVU) project funded by the World Bank (World Links, 2007) and the French-Language Digital Campuses (CNFs) developed by l'Agence Universitaire de la Francophonie (AUF). Essentially, AVU offers short certificate courses, whereas AUF enables database and Internet access, content creation and face-to-face and online follow-up of distance learning.

Such initiatives are crucial to the development of lifelong learning, for it is fanciful to believe that the latter can materialise in Algeria without ICT facilities. Cybercafés are often put forward as a possible alternative, but they rarely fit the bill due to a frequent lack of the required hardware configurations for distance learning tools. Moreover, their bandwidth is limited and shared by crowds of users, the connection rates are relatively hourly high and, above all, the general atmosphere tends not to be too conducive to learning. In must be said, however, that it is not easy to put lifelong learning via ICT into practice in the Algerian context. But given the advantages it offers for individuals, for businesses and for society as a whole, efforts must be made to encourage its development which will inevitably involve the introduction of special measures.

1. The use of ICT in TVET

Our society is continuously moving towards a knowledge-based economy, in which the application of information replaces capital, raw materials and labour as the main means of production. The synergy of combining ICTs with human skills has dramatically altered job content and skills requirements at the workplace. Jobs have become technologically complex and are demanding sophisticated talents. Consequently, routine and low-level functions are diminishing.

Moreover, the perception of the human interventions role in the economic transaction has also changed leaving space to the potential contribution that individuals make in acquiring and applying knowledge and for improving processes, products and services (Honey et al., 1999). As such, knowledge embodied in a product has become a key element of production. As these fundamental changes take place, corresponding moves are occurring in public expectations of the education and training systems (Council on Learning Technologies, 1998). Consequently, increased demand for initial and lifelong learning and training calls for flexible access programmes, provoking growing interest for employing ICT to replace the “just-in-case” with the “just-in-time” (Council on Learning Technologies, 1998; p. 1). The latter, in turn, would be independent of time, place and space. On the other hand, the use of ICT in TVET can be classified in four main categories, namely:

1. Technical assistance for teaching,
2. Teaching tool,
3. A work tool for students,

And 4. A system control tool or workshop or laboratory tools (Chomienne, 1990).

ICTs are also used to support the education system in such areas as administration, communication and curriculum development (Honey et al., 1999).

While a general consensus is emerging regarding the need to integrate ICT in teaching and learning, there is little empirical evidence to support the decision-making process. In fact, during the past seventy years, over three hundred and fifty conducted research projects failed to establish a significant difference in ICT's effectiveness with traditional methods (Van Baalen & Motratis, 2001). While these findings tend to suggest that technology does not make a considerable improvement to teaching and learning, a fundamental question remains unanswered. "Did researchers assess the effectiveness of ICT, or were they simply assessing instructional products which were less than perfect?" Thus, in spite of considerable progress of instructional materials, practitioners still have difficulty in establishing efficient tools due to the limited knowledge of human learning (Chinien & Hlynka, 1993). Many of their critical assumptions are based on weak learning theories. Therefore, the final product is far from perfect (Geis, Weston & Burt, 1984).

The purpose of formative evaluation is to provide instructional developers with an opportunity to identify and correct errors within a set of materials, while they are in a developmental stage (Bakers & Alkin, 1984). Popham (1975) explains that:

“Formative evaluation attempts to appraise such programmes in order to inform the programme developers how to ameliorate deficiencies in their instructions. The heart of the formative evaluator’s strategy is to gather empirical evidence regarding the efficacy of various components of the instructional sequence and, then, consider the evidence in order to isolate deficits and suggest modifications.” (p. 14).

In this respect, there are two broad questions addressed by formative evaluation activities. The first relates to content and technical quality of the material, and the second pertains to its learnability. The first issue, however, is considered through expert verification and revision, whereas the second is provided through feedback data for a better assessment (Nathenson & Henderson, 1980). Thus, formative evaluation activity must establish standards in terms of utility, feasibility, propriety and accuracy (The Joint Committee on Standards for Educational Evaluation, 1981).

Conclusion

Information and Communication technologies will have to address one significant problem of accessibility. At the same time, it will bring a new set of problems that we are just beginning to perceive. Ethical standards for Internet online counselling need to be addressed immediately. Thus, they have to embrace ICT that preserves clients' humanness and reject the one that intrudes upon it.

Moreover, counselling during the past hundred years has become more comprehensive in the settings where it is provided, the problems that it addresses and the populations that it serves. In parallel, the guidance and counselling theories that evolved during the twentieth century have also grown in

complexity as they have sought to explain personality formation, self-classification mechanisms, motivation and the process of decision-making. Many variables have been used to explain why people do what they do and ignore other actions. Often, the influences of values, genetics, aptitudes, interests, family belief systems and experiences with peer groups are used as the mechanisms to explain why persons have problems in living and, therefore, their need to have access to counsellors.

Related to these concepts, relevant counselling roles, the use of psycho-educational models and preventive approaches in the Algerian social and educational context should be seriously discussed in the discussed in future debates about education. It is only when we cover the majority of the problems inherent to the subject of education, that a coherent consensus may be reached. "It is not enough to do your best; you should know what to do, then do your best to achieve it".