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Issues in the Viability of Information and Communication Technology Based Guidance and Counselling Services

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Abstract

The paper introduces what technology and information technology is with a synthesis of its contextual meaning in respect to the present usage. An application of ICT in the field of career information and guidance is also seen with respect to the phases of mainframes, microcomputer and the web. A classification of ICT based guidance resources has been discussed; self and opportunity awareness, decision learning, and transition learning. Hindrances in adopting an e-practitioner standard professional profile has been given like no clear distinction between the practitioners using ICT/providing services through ICT from those who do not, no consistent initial training in ICT of the practitioners; therefore it would be difficult to establish a profile of the e-practitioner etc. Highlight of obstacles preventing the guidance practitioners from gaining e-Guidance skills has been given as lack of accredited programs that focus on specialized ICT training in guidance, lack of other organized ways of developing the ICT skills (knowledge transfer between the practitioners) etc. The expected hindrances preventing practitioners adopting ICT and Identified barriers preventing the institutions to provide training focused on gaining the ICT skills were also highlighted. Conclusions and recommendations has also been given like recognition of prior learning for the guidance personnel with ICT expertise and incentives for them to train their peers and stay in the system and acquire new positions.

Introduction

The term technology nowadays is used in different situations and therefore requires an adequate conceptualization. Firstly, reference is made to information and communication technologies as part of the link between natural and technique science. Also, it designates the analysis of technological processes approaching with it the interpretation of reflection on the technical and thirdly, it is also conceived as a set of technical and / or procedures which objective is the production of objects or the generation of behaviours. The new way in which humanity

interprets what it comes to know mainly through ICT, transforms fully the notion of know to consider at present that we are becoming a knowledge society (Castells, 2001).

Nowadays, training appears as an investment and to achieve the benefits that it can contribute is necessary for the transmission of knowledge suited to ICT, and for this it is necessary to reform the training systems in all their grades and levels.

The technical reason (Habermas, 1989) currently based in ICT and in changing of the production and communication of knowledge calls for the replacement in post-industrial societies to former workers for a new human capital based on knowledge.

On the way to this society, is postulated that through the knowledge is accessed the freedom and critical thinking through a lifelong training that makes knowledge a value of change. In the analysis of this contemporary society, the information first and then the knowledge, this appears obvious for its role as the engine of productivity and its link with ICT. Knowledge appears as a connection with the workplace by expressions such as "knowledge management" or "knowledge economy" (Fernández, Sanz, and Murias, 2009). The new workers in this sector are driven to make a lifelong training to acquire its complete adaptation to a system that request flexibility but question its notion, where the educational system responded to the call of the new "cognitive capitalism" (Pardo, 2009).

The term knowledge society is created in the 1960 and so, in 1969 the sociologist Drucker predicted the emergence of a new social class of workers who are no longer devoted to the industry but also to the knowledge. This is now regarded as the basic factor of production to be applied to what already available services, products, etc. as well as innovation.

Drucker (1993) believes that knowledge is effective information in the action and it is based on the results and the starting point for this is the information and its applicability. Lane

(1966) understand the knowledge society as one in which people are investigating the foundations of their beliefs about humanity, nature and society, are guided by objective standards of verification and deduction in the research, perhaps in a unconscious way; devoted significant resources to research and therefore have a large reservoir of knowledge and accumulate, organize and interpret the knowledge in an ongoing effort to enlighten and perhaps transform their values and objectives as well as to advance in them.

This delineation of the knowledge society is not included because the potential impact of ICT is premature on the generation and processing of it and obviously the huge social changes that took the society in recent years and partially modifying the predictions of Lane (Ballesteros, 2002). According to Bell (2006), the post-industrial society is a society of knowledge because the innovation comes from research and development in an increasing degree and that the economy and the level of employability are in connection with the scope of it.

The knowledge model is scientific which represents the need of an appropriate methodology, results and yields that can be quantified. The term information society is used when emphasizing the technological aspects and their impact on the economy and employment.

Application of ICT in the Field of Career Information and Guidance

Information and communication technologies are transforming career information and guidance services, just as they are transforming service delivery in other sectors (e.g. banking and health services). The evolution of the application of ICT in the field of career information and guidance can be divided into four phases (Watts, 2001).

The first was the *mainframe* phase, from the mid-1960s to the late 1970s. A number of computer-aided guidance systems were developed which demonstrated the potential of ICT. But the costs of direct interaction with the computer meant that the only systems which proved

widely practicable in cost terms were based on batch processing. The static nature of this process and the feedback delays limited the implementation of such systems.

The second was the *microcomputer* phase, from the early 1980s to the mid-1990s. The advent of the microcomputer made interactive usage much more economical, and also made it easier to develop and market limited software packages; its attractiveness grew as more powerful versions of the personal computer were developed. The result was a substantial growth in the number of computer-aided guidance systems, and in the extent of their usage. By the 1990s it was difficult to find a guidance service in any developed country which did not make use of such systems.

The third was the *web* phase, in the late 1990s. The advent of the Internet meant that instead of free-standing systems located in career guidance centres, websites could be developed which individuals could access instantly from a wide variety of sites, including their homes. The ease of developing such websites produced a massive increase in their number; the ease of interconnecting them meant that they no longer needed to be viewed as discrete entities. Rather than perceiving ICT solely as a service from external suppliers, guidance services began to develop their own websites.

The fourth is the *digital* phase, which we are now entering. The hitherto separate “analogue streams” of the computer, the television and the telephone are merging into an integrated “digital river” (Cunningham and Fröschl, 1999). Individuals are now able to access the Internet not only through their personal computers but also through their televisions and mobile phones. Greatly enhanced bandwidth will shortly enhance its speed and its capacity for transmitting video and audio as well as text.

Across these four phases, three key trends can be discerned. The first is increased *accessibility*. Whereas initially ICT-based career guidance and information services were available only at a select number of technically-equipped service locations, they are now available not only in most guidance services but also in a vast range of other locations – homes, workplaces, community locations. The second is increased *interactivity*. In the early stages, resources were developed as separate systems, offering only limited interactivity with users. Now, they are highly interactive not only with users but also with each other and across inter-media boundaries. The third is much more diffused *origination*. Whereas the initial computer-aided guidance systems were developed by large organisations with substantial resources at their disposal, anyone can now develop their own website. This has led to much stronger private-sector activity in this area, which in turn has implications for public policy.

Classification of ICT-Based Resources for Career Information and Guidance

ICT-based resources in the field of career information and guidance have been classified by Offer (1997) in relation to the DOTS model developed by Law and Watts (1977): self awareness; opportunity awareness; decision learning; and transition learning.

Resources concerned with *self awareness* are designed to help users to assess themselves and to develop a profile in terms which can be related to learning and work opportunities. These resources range from simple-self assessment questionnaires to psychometric tests; they also include more open-ended “brainstorming” approaches.

Resources concerned with *opportunity awareness* include databases of learning and/or work opportunities, with a menu of search criteria which enable users to find data relevant to their needs. The databases may cover: education/training institutions or courses; occupations, employers, or job vacancies; voluntary-work opportunities; and information on how to become

self-employed. Some include relevant labour-market information on supply and demand. There are also some examples of work simulations which enable users to explore particular occupational areas in an experiential way.

Resources concerned with *decision learning* include matching systems which enable users to relate their personal profiles to relevant learning or work opportunities. The outcome is a list of the opportunities which match the profile most closely. Also included here are content-free decision-making resources designed to help users to explore options in a systematic way, balancing the desirability of particular options against the perceived probability of achieving them.

Finally, resources concerned with *transition learning* are concerned with helping users to implement their decisions. These may include support in developing action plans, preparing curricula vitae, completing application forms, and preparing for selection interviews; it may also include help in securing funding for learning opportunities or for becoming self-employed.

Hindrances in Adopting an e-Practitioner Standard Professional Profile (National Reports (n.d).

- There is no body charge with the accreditation of all the counsellors in the education field that should take into account the standard professional profile. In these circumstances, the profile could only get an optional status.
- There is not a clear distinction between the practitioners using ICT/providing services through ICT from those who do not.
- There is no consistent initial training in ICT of the practitioners; therefore it would be difficult to establish a profile of the e-practitioner.

- The higher institutions are not very open to include in their initial training offer ICT skills.
- The dynamic of the changes taking place in the education system.
- The risk that the training provision for the practitioners remains behind to the rapid development of the new technology.
- The existent professional association of psychologists could resist the recognition and implementation of a tool that has been produced and experimented by other-than-psychologists, whereas there is a fair share of educators (teachers, social workers, sociologists) working as guidance counsellors though unaffiliated to a professional entity.

Obstacles Preventing the Guidance Practitioners from Gaining e-Guidance Skills

- ✓ Lack of accredited programs that focus on specialized ICT training in guidance.
- ✓ Lack of other organized ways of developing the ICT skills (knowledge transfer between the practitioners).
- ✓ Traditional professional and occupational standards that do not include ICT as a mandatory skill for guidance practitioners.
- ✓ Centralized framework for staff assessment in education (self-assessment tools bare no formal recognition).
- ✓ Very permissive legal framework where there is no compulsory training in ICT. There are no quality standards for using ICT in counselling.
- ✓ In some cases even the lack of equipment (printers, Internet connection or easy access to computer).

The Expected Hindrances Preventing Practitioners Adopting ICT

- Overloading with tools being unnecessary for accreditation.

- Assessing the skills that are only partially needed in counselling.
- No perspective of having the self-assessment resolution and the portfolio recognized by local / central authorities when the holder aims a job/ sector transfer.
- Lack of basic skills in handling the ICT equipment and no immediate training available.
- Inexistence of a link between the counsellor and the client, there is no portal enabling the client to contact a counsellor for an interview, (self) assessment.

Identified Barriers Preventing the Institutions to Provide Training Focused On Gaining the ICT Skills

- Insufficient trained personnel.
- Policy framework and perspectives.
- Capability on location (space design, cost of new equipment, etc.).
- The necessity to accreditate the program at the National Centre for Adult Vocational Training.

Conclusion and Recommendation

The role of ICT in guidance can be seen in three ways: as a *tool*, as an *alternative*, or as an *agent of change* (Watts, 1986). Policy-makers have often tended to view it in the first two guises: either as a supplement to existing services or a potential substitute for such services. But the wider emergence of websites and help-lines as forms of technically mediated service delivery means that the potential of ICT as an agent of change – paralleling the transformations in many other service sectors – is now far greater than before. Therefore, it is recommended that:

- ❖ Recognition of prior learning for the guidance personnel with ICT expertise and incentives for them to train their peers and stay in the system and acquire new positions.
- ❖ Lobby by professional associations, united by what they do and not by their background.

- ❖ Empowering and encouraging the communities to fund-raise and bring together creative energies, giving them a sense of pride and ownership over the results of such kind at the local level.
- ❖ Running a national training program in using ICT as a medium for practitioners supported from the budget.
- ❖ Training with international experts of the national trainers.

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