

# DIAGNOSTIC OF INFORMATION AND COMMUNICATION TECHNOLOGIES' USE IN VOCATIONAL GUIDANCE: ANALYSIS OF AN EXPERIENCE

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## Abstract

*In recent years, parallel to the transformations occurring at all levels, a technological revolution has taken place from which the development and integration of multiple resources in all areas and sectors has been derived.*

*All these changes have implications in Vocational Guidance, noting by its relevance in the present study, the integration and use of technological tools in the development of guidance tasks and the adoption by its technicians, the skills needed to make an effective use of them. Taking as reference the above, the research problem of this work is focused on describing the use that professional counselors make of the Information and Communication Technologies (ICT) in the development of their daily work. With this purpose, we describe this study, in which, through quantitative and qualitative methods, we conclude, in general, the lack of true integration of ICT tools in guidance and a large deficit training in the group of counselors regarding to technological resources, which implies the need to design training activities with a view to remedying this deficiency.*

**Key words:** *information and communication technologies (ICT), technological competences, use of technological resources, vocational guidance.*

## Introduction

In recent years, the current reality differs greatly from that in earlier times and stages, characterized, mainly, among other things, by mutations and transformations in all areas and sectors; the phenomenon of globalization; the emergence and strong impact caused by technological resources, as well as the vital importance for acquiring information and knowledge, the latter aspects that come to be regarded as key elements in the present society.

There are many and varied factors originating in the current social framework, in spite of being particularly relevant the technological revolution brought about in recent times and led the transition from an industrial society to one based on the information. Consequently, there are many existing resources favoring, among other things, storage, dissemination and processing of information at very low cost, causing, at a time its, inclusion and integration in a massive way and widespread in almost all activities that nowadays, are performed irrespective of the sector in which they take place. In other words, it can be said that there has been the inclusion of technological means in different scenarios of the current social framework, which involves changes to all areas, so it requires the adaption to them in society in general and of every citizen in particular.

The mutations all occurred in recent times and have implications and incidents in the field of Vocational Guidance, so that this discipline must take some changes in order to face the new demands, noting, inter alia, the adoption of new resources and instruments, primarily

technological character in order to cope with the demands made by society today. Consequently, these resources are becoming much more prevalent, which means that those professionals working in the sector should undertake a process of change and transformation to adapt to the innovations produced by the technological tools in the guidance process. Therefore, it is claimed to industry players, the ownership and development of new functions, so that the professional development of this group is to train them to acquire the competencies and skills required to meet, get acquainted and to use technological tools in the performance of their work (Cogoi et al., 2005).

However, despite the potential that these resources can provide in this area of intervention, a first approximation to the contexts in which guidance actions are developed, reveals a low use of these tools in the implementation of these tasks.

### **The Technological Tools as a Challenge in Current Society**

The Information technology, telecommunications and imaging and sound technologies can be considered the main Information and Communication Technologies (ICT), although in the combination of these there is a wide range of technological resources, so in a general way, have been integrated in all areas and sectors, offering new possibilities, encouraging the development of a large number of tasks and eventually becoming the key element of the technological culture in which, today, we are immersed today.

Trying to make a conceptual approach, it should be noted that are many and varied constructs existing referring to resources, media and technology tools. With reference to the views offered by different authors, it is considered that “the confluence of terms on Information and Communication Technologies refers to all those that facilitate the development of tasks related to the acquisition, production, storage, processing, recording and presentation of information and communication across different languages (sound, text and / or iconic)” (Sobrado et al., 2010).

The Information and Communication Technologies, as well as in other areas and sectors, gradually have been integrated into the field of Vocational Guidance, which implies that this discipline and the professionals who develop their professional work on it must face new challenges and demands, so must develop new roles and functions must be developed, encouraging, therefore, the acquisition, internalization and development of technological skills that promote an effective use of ICT tools in actually Guidance.

Different authors point out the advantages and limitations of technological tools in Professional Guidance (Repetto & Malik, 1998; Álvarez González, 1999; Marín & Rodríguez Espinar, 2001; Repetto, 2002; Sobrado et al., 2002; Cabero, 2003; Pantoja, 2004; Sobrado, 2004; Ceinos, 2008; Sobrado & Ceinos, 2011, among others), understanding that, as happens with non-technological resources, they should be designed as an element or support-processes in guidance processes. Despite the many possibilities that technology tools offered in Guidance, experience and existing research about the incidence of these the impact of such in this intervention area are slim, because until very recently, the influence and implications derived from these resources in Guidance were barely considered.

Taking as a reference to Repetto et al. (2000), it is being able to affirm the great lack of knowledge about the use that professionals guidance to do of technological tools, as well as the possibilities and potential that they offer, while very few measures and existing training actions and implemented with the aim of promoting, in the group of counselors, the acquisition of competencies and basic skills and essential to implement, through the Information and Communication Technologies, guiding cutting tasks.

Currently, most studies and research in this regard are very recent, partial and cutting theoretical, focusing most of them in describe their capabilities and limitations in this area of

intervention; to identify the necessary competences, by of counselors, to make use of them in developing their professional work; as well as in quality and ethical aspects to consider in the implementation of guidance actions through technological tools. Therefore, the use of that professionals make in these sectors has hardly been taken into consideration.

This aspect, the lack of knowledge about use and use technical guidance that make technology tools in the development of their work is regarded as an important gap in the impact caused by these guidance tools in the field, so that the basic purpose of this study focuses on describing and analyzing the employment that career counselors make of the Information and Communication Technologies in the development of their professional work, in order to obtain more data and therefore expand the existing body of knowledge on this subject.

### **Main Applications of ICT in Guidance Context**

In recent times, Information and Communication Technologies have led to the emergence of many possibilities, all of them with innovative character, becoming, little by little, indispensable resources, and even essential, which has led to question the existence of a new model of intervention guidance, the technology, defended by some theorists and questioned by others.

Authors like Sobrado et al. (2002); Repetto (2002); Cogoi (2002); Santana (2003); Pantoja (2001, 2004); Ceinos (2008); Sobrado & Ceinos (2011); among others, have made their contributions in this area, the applications of technological tools in Guidance. Based on this topic from a personal point of view, it should be noted that, although the main objective to be achieved by the incorporation of Information and Communication Technologies in Guidance consists of maximizing the many advantages that they offer, one of the most important factors that is a consequence of the introduction of ICT in guidance field, is the ability to develop and implement guidance processes at a distance, also known under the name virtual guidance or e-guidance.

However, it should be noted that the areas in which such tools offer greater potential and employment opportunities are as follows: a) Evaluation, diagnostic and self-diagnosis resource b) Support for the counseling, guidance and consultation; c) Information Tool d) Communication resource, e) Training and research tool, and f) Means for the administration and management of processes and guidance actions (Ceinos, 2008).

There are many possibilities that the technological tools will be available for the performance of assessment, diagnosis, information and communication actions, as well as management and administration, in which the use and utilization of these resources has more tradition. Moreover, in recent times, it is becoming more important the development of counseling, guidance and counseling, training and research actions through technological means, so that their use in these intervention areas begins to be normal, due mainly derived from the potential offered by the Internet.

Despite the potential of Information and Communication Technologies offered in Guidance and the limited use made of them in the development of guidance tasks, it should be noted that, progressively, the number of applications developed increases, so that gradually achieve more significant, something that leads us to believe that integration and widespread use of such media at guidance centers and services will be a feature in the near future.

It should also be noted that the use and is made of these tools depends on several issues, among which it is the way they are used, their appropriateness to the objectives, the methodology used, people involved in the process, as well as roles, attitudes and skills that professionals in this field of intervention make available on this subject. For all this, with the eminent need to take full advantage of the potential offered by these tools, and considering the requirements and demands made by society, it is necessary to reconsider the professional guidance profile and contents and models that shape their training processes.

In short, with the application of ICT, not exclusively, but with the support of counselors, there are multiple demands that can be met, while being able to promote the optimization of technical in guidance, because there are more resources at their disposal a view to stimulate the development of their tasks, which implies an increase in the quality of services and a further adjustment of them to users' needs; that is to say, with a more personalized character. However, several factors should not be forgotten that can sometimes hinder the use of such resources as training and ability to use that and counselors subject-oriented held for the use of these technologies; the lack of experience at application of ICT; the difficulty of access, sometimes, to the Information and Communication Technologies and the quality of information obtained on the Internet, so it is considered necessary to establish certain criteria to serve as reference in the use of these tools in the guidance practice.

### **Evaluation of the Use of Information and Communication Technologies by Guidance Agents: An Experience**

#### *Problem of Research*

Taking as reference the aspects discussed in the previous sections, the phenomenon that led to the development of the completed study and is presented in the following report, it is identified through various foci of interest.

On the one hand, in recent years, the Vocational Guidance has been subject to profound transformations, which has contributed, among other factors, to the employment status of counselors which has been modified and must adopt new roles and functions.

Additionally, derived from the technological revolution experienced in recent years at all levels, there are multiple resources and a technological tools available, which have grown to become basic and essential to the development of multiple tasks, regardless of setting in which they are implemented. However, despite the many potentials and possibilities offered in the face to promote the development and implementation of actions and tasks of guidance, a first approach to the contexts in which they implement these actions suggests a reduced use of possibilities that they offer.

Moreover, as it was stated previously, existing studies and research on the use of Information and Communication Technologies in Guidance are limited, so from a personal perspective, it leads us to consider this as a considerable gap in what the impact of these tools in the field guidance is concerned, so the purpose of this study focuses, in general, to obtain information on this aspect, extending therefore the existing knowledge respect to this issue.

View of the above and of the reflections made, it raises the following question, which is our research question: What do career counselor's use of Information and Communication Technologies in the development of the tasks of their daily work? In order to realize this research problem, other issues were made more specific in nature, which favored a precise knowledge of the issues to be addressed.

#### *Objectives*

Taking as reference the main purpose of this study, understand, describe and analyze the degree of use of technological tools (ICT) in professional tasks and actions performed by the group of counselors, as well as the research problem formulated in the preceding paragraph , it should express, more specifically, the guidelines that guided this research. These are:

*Goal:* -Access to the necessary information from the assessment that a group of counselors and experts made through quantitative and qualitative instruments.

- Understand, describe and analyze the use that Guidance professionals do with the

technological tools in development of their professional work.

*Detailed Objectives:* Its purpose is focused on answering the question raised above, as well as support the achievement of priority order established in this study. Therefore, accomplishing the following:

- ✓ Describe the professional profile of counselors into account and know the experience that they have with regard to the use of ICT in their professional reality.
- ✓ Describe the main characteristics of the institutions, centers and / or Vocational Guidance services.
- ✓ Identify ICT tools (hardware and software) that counselors are available at the institution, center and / or service in carrying out their professional work.
- ✓ To verify the existence of policies designed to address the training needs of ICT and technology equipment in the institutions, centers and / or counseling services.
- ✓ To analyze the degree of familiarity that guidance technicians have with the skills required in the management of ICT.
- ✓ Assess the use that guidance counselors do technological resources in the development of their tasks.
- ✓ To know the opinion of practitioners and experts in the field of Guidance and Information and Communication Technologies in relation to a range of issues focusing essentially on the use, skills and training in technological resources by means of the analysis of the information obtained through a qualitative instrument: the interview.

#### *Variables*

The identification of variables to be studied in this work was carried out from the formulation of research problem and the different objectives. On this basis, three distinct blocks of study were established, identifying for each of them, the variables of those studied. These are:

1. *Analysis of personal and professional characteristics of the counselors' group respondent:* gender; age; academic qualifications; specific training in Guidance, specific training in Information Technology and Communication, work experience as a counselor; dedication to the tasks of performed orientation and experience in the habitual use of ICT.

2. *Features of the Service and / or Guidance Center in which the technical sector develop their professional work:* type of organization; services offered; number of recipients served; socio-cultural source of the recipients; types of users; available ICT resources in the institution, center and/or counseling service; and existence of policies that focus on ICT issues to cover training and equipment needs.

3. *Familiarity and use of ICT by technical Guidance in the implementation of tasks of their professional work:* using technology tools in the development of their professional work; degree of familiarity with ICT skills; the employment of technological support in specific Guidance tasks, as well as the interest of practitioners to develop ICT skills and knowledge.

#### *Sample of Research*

In connection with the group participating in this study, it should be noted that the sample consisted by seventy Guidance' Professionals, belonging to the FOREM Advisers Network, Cruz Roja and Red Araña, distributed in different places of the Spanish geography.

Taking the problem posed in this research as well as the stated objectives, the method selected in this study is descriptive, since the main objective focuses on describing one aspect of a concrete reality, in this case, the use that Guidance's technicians make of the technological means in the development and implementation of guidance functions and tasks.

Based on the foregoing, by its adaptation to the problem under study, formulated the objectives, methodology used and the nature of the data that is intended to obtain, the data collection instruments used were the questionnaire and the interview.

The first of these, the questionnaire, consisting of 184 items, is divided into different blocks of content (personal and professional profile of the sample; the main features of Counseling Services; as well as the familiarity and counselors use that the officers make of Information and Communication Technologies in their professional practice). On the other hand, used a semi structured interview is used, in which experts in the field of Guidance and ICT, as well as counselors for the purpose of obtaining information regarding to the use of technological tools, skills and training in Information and Communication Technologies and other aspects of interest.

## **Results of Research**

From the results obtained in the research and from the corresponding analysis on them, the following is included:

- Collective predominantly female (65.5%), aged between 25-45 years (93%), with college of 2<sup>nd</sup> cycle (87%), formed in issues related to Vocational Guidance (84%), with an experience labour between 1 and 6 years in 64% of cases and experienced in the use of ICT, because, in a first approximation, 70% of the sample acknowledged having an experience in regard to the use of such resources in their professional practice equal or higher than four years.
- Virtually, all of the guidance services and / or institutions implement informative, training actions and related with Guidance and counselling, being the group of unemployed, adults, women, refugees and immigrants and young people outside the education system that the primary recipients served.
- The 98.6% of respondent counselors have computer equipment available as support bracket to put into action and implement specific actions to their own profile.
- The existing hardware and software resources in centers and / or counselling services are preferably made available to counselors, greatly decreasing their availability as far as service users are concerned.
- Approximately, half the sample (47.14%) confirms the absence in their workplace of actions to mitigate their training needs in regard to ICT tools.
- There are differences in regard to the degree of familiarity that practitioners have with one and other ICT skills, so it follows the existence of any connection between the level of training needed to acquire the different types of technological skills identified and the degree of familiarity that practitioners have about it, because as it increases the level of preparation required for their acquisition and mastery, it reduced considerably the degree of familiarity about it.
- The degree of familiarity that practitioners have with the different types of technological skills conditions the use of ICT tools as well as the maximum utilization of the potentials and possibilities it offers.
- The phone, supplemented occasionally by email, is the most resource used in the development of guidance functions and actions, regardless of the type of interaction

established. In connection with the other tools tested (digital camera, web camera, video conferencing equipment, Internet browsers, software specific, etc.), the use made of them in these tasks is practically nonexistent.

- The ICT tools are used by practitioners, mostly in the establishment of relationships with other agents targeting in detriment of other users of the service.

## Conclusions

Globally, the results of the study show, despite the many possibilities of Information and Communication Technologies can offer in the field of Guidance, a reduced use of certain technological resources (telephone and e-mail, basically), come to regard, as almost non-existent (in the case of chat, video conferencing, newsgroup, etc., for example), so it's able to state the absence of a genuine and full integration of these tools in this area of intervention, perceiving it, therefore, as a medium of support in the development of specific tasks.

Studies like the one presented in this work show to be of interest and relevance for diagnosing a training deficiency in the collective of counselors as far as concerns in the technological resources that, together with the limited experience regarding to the integration of these media in guidance processes, difficult the acquisition of skills necessary to make an effective use of them, while originating passive and reluctant attitudes with such tools. Therefore it's necessary, from a personal perspective, the design and implementation of training activities, initial and ongoing nature, focused on publicizing the potential that these tools offer, while encouraging the acquisition and development of competences and specific skills necessary to use, in general, in a critical and comprehensive way, the ICT tools as a means and as a resource in the implementation and development of guidance functions and actions.

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