### Chapter 5

# The Need of a Multidimensional Analysis for the Success of E-Learning Programs

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#### **ABSTRACT**

Many e-education practitioners consider online learning programs to be an effective proposal looking at the instrumental rationality and applying only quantitative tools for the evaluation/research. However, in practice they have shown difficulties in assuring university program quality and solving many problems: dropouts, improvement of learning outcomes, qualified labor occupancy, etc. It is necessary to formulate and practice a multidimensional approach including a strong socio-cultural interpretation of the scenarios and needs of the participants-users, the prevalent philosophy and mentalities of the people and contexts, towards a genuine improvement of the e-learning programs. A qualitative multi-dimensional model establishes more awareness of the program components and gives inputs/recommendations to know more, to adjust/re-design implementation and evaluation processes of the virtual proposals confronted with practice. Those considerations should be studied according the pertinence (or not) of the political decision-making centrality. The existent (or not) professionalization of tutors and evaluators, a sustainable investments in infrastructure, the organizational communication models, and more have to be taken into account. The model has to be discussed and criticized beyond the different results that recent studies have yielded, including the same socio-cultural aspects that several studies have determined lately. This chapter explores this.

#### INTRODUCTION

Many e-education practitioners consider on line learning systems to be an effective educational proposal just looking at the instrumental rationality -a linear approach which only runs by applying quantitative tools for the evaluation and research of different Open and Distance Education (ODE) programs.

On-line (or e-learning) programs are electronic learning mediated by any kind of computers, lap/netbooks, mobile devices (tablets and ipads,

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smart phones, etc) to access the Internet and different networks through platforms in educational institutions/organizations so as to create learning experience with electronics (Horton, 2001).

IT and network equipments and their inclusion in those programs, in spite of their multiple strengths, such as extend minds and skills through personal/group learning interaction with technology, they do not consider social contexts *per se*. Each of the above produces a transformation in the high-order functions of the brain and models information processing, and of course, causes diverse cultural impacts. That is a result, among other reasons, of the selected, combined (or not) and used media, and technological devices. That is to say, technology is not neutral.

On the contrary, programs have shown difficulties to assure university program quality, and to solve many problems such as drop out, lack of interest in improvement of learning processes and outcomes, formation of qualified labor, and so on

E-learning is not a panacea or an opportunity where everyone will benefit, just as not every student benefits from the traditional classroom. E-learning design and management require a lot of prerequisites and a rational management.

An effective e-learning program is one of the main components for successful e-learning, and administrators, managers, and all the team of designers, even students have to participate to achieve that success. So educational technologists, graphic designers, and software technicians, among many, must focus on several central theoretical and practical pillars, in a whole interrelationship.

It is necessary to take into account another methodology to evaluate (and/or complete the conventional methods), and to analyze the programs from an alternative multidimensional perspective. The possibility to run a personal, a group and organizational reflective processes, to make decisions about projects, in an open exchange and participation with freedom, where meeting among students / users of the educational program is the main priority.

These considerations about the formative process, criteria and potentialities are related to action research, through which faculty are confronted with their own practice.

Thus, in the opinion of the writer, there is the need to formulate and practice a multidimensional approach including a strong personal and socio-cultural interpretation of the scenarios and their request, the prevalent philosophy and mentalities of the people and contexts, towards a genuine improvement of e-learning programs, in processes and outcomes, to take them into account towards a systemic-holistic evaluation / analysis towards success and projections of e-learning university programs.

Besides knowing the uncertain and fluid digital times that we are living in, where everything could happen, it is necessary to formulate and practice the multidimensional approach, including the "knowledge's frontier" of many disciplines articulated to a strong socio-cultural interpretation linked to everyday life, beyond formal education institutions.

Among multiple variables for a multidimensional approach for an on line e-learning success, we see that it could involve the study of users' satisfaction with the proposed program by the interaction and communication of/in the technological system, to facilitate a shift from to being a beginner learner to an expert one,- in terms of cognitive psychology. The named satisfaction could show us some facets of the e-learning program effectiveness, which it is working within a structural model depicting the standards and values of the evaluation system quality, etc.

These considerations within a contextualized vision will overcome the suggested linear cause-effect relationships of the common empirical procedures that in general, are used to validate on line programs quantitatively.

A qualitative multi-dimensional model towards a contribution for a consolidation of an authentic formative system establishes, in general, diverse measures and judgments to impulse more aware16 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

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