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# Roles, functions and necessary competences for teachers' assessment in b-learning contexts

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**Abstract**

Higher Education Institutions are committed to ensure spaces of combined education or b-learning. Associated with this aim, there is a concern about the roles and functions that the teacher performs and how to assess them. This study is located at the intersection of research in educational assessment and b-learning in Higher Education. Under this foresight, this research is developed in a descriptive and propositive manner, adopting a qualitative approach which –through the implementation of grounded theory- encodes and analyzes 105 texts selected to present the characterization of the roles, functions and competences that the teachers must perform at the different stages of the process for developing a course based on b-learning methodology



*Keywords:* B-learning, teacher training, teacher assesment, Higher education, ICT

## Introduction

The XXI century poses new opportunities and great challenges due to the innovations of Information and Communication Technology (ICT). In this sense, the traditional teaching and learning paradigms in higher education are being modified by the integration of ICT in the curriculum. Universities have understood this new scenario of profound changes and are adjusting their curriculum projects for students with different needs and varied learning styles and rhythms (Henao, 1992). Thus, in Colombia, both modest and/or major technological projects have been undertaken, with the need to modify the teachers' attitude and vision toward new modalities of teaching and learning, where interaction and collaborative work become critical factors of success in educational projects supported by online platforms.

The inclusion of media and technologies, especially in higher education, represents challenges and changes in teaching strategies and in the roles to be assumed by the teacher (De Miguel, 2006; Pablos, 2007). Currently, there is a strong interest in b-learning contexts which are defined as a combination of classroom activities and virtual tools of distance education, where the best features of each one of the contexts mentioned by Bonk, C. & Graham, C. (2006) is boosted. In this context, the functions of the teacher have been recently studied, creating an opportunity to deepen and inquiring about them.

Several studies have focused on teacher's performance in e-learning contexts (leaving aside the face-to-face and the combined spaces) and propose that the teacher should act as facilitator of the learning processes and encourage students to take control of them (De Laat, & Lally, 2004),( Goodyear et al., 2001),( Mazzolini, & Maddison, 2003),(McConnell, 2002). They have also suggested various categories of roles to be played by the teacher in higher education e-learning contexts: (i) Mason, R. (2001)

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attributes responsibility to the technical education teachers based on the latter three subcategories: organizational, social and intellectual; (ii) Berge, Z. (1995) defines four roles for teachers: pedagogical, managerial, social and technical; (iii) Goodyear et al., (2001) propose different roles for teachers, including the facilitator, creator of the knowledge generation process, advisor, researcher, technologist, designer and manager.

Also, it is of great importance to deepen the analysis of the roles, functions and performances of the teacher in the b-learning contexts, in order to significantly evaluate this practice later, not only from the referents posed by e-learning, but by the actual spaces and challenges of the mixed context (Bonk, & Cummings, 1998), (De Laat, et al., 2007). From this interesting previous review of literature and research a great need arises to carry out further studies on the theoretical framework in order to identify, classify and describe the roles, functions and performance of the teacher in b-learning contexts, given the innovation of the recent reality in Higher Education

## 2. Research methodology

The research presented is of descriptive and qualitative character and adopts a proactive approach. This means that both the findings and results obtained are the product of an interpretation exercise. From a qualitative perspective, it is necessary to assume that the revised documents correspond to textual discourses that contain conclusions, representations and visions open to interpretations, and identify their meaning and importance against the objectives of this research. As an interpretation exercise, the research is supported on strategies for classifying information which require both the evaluation of previously defined concepts such as identification of new categories suggested by information analysis to allow a better comprehension. The information was encoded using Atlas.ti version 6.2.24 to facilitate analysis and retrieval of classified data. There were three stages involved in the development of this research:

**2.1. Searching and selecting information (Stage 1):** In stages 1 and 2 Grounded Theory was used as methodological perspective to guide, sort and group information into analyzable units. Grounded Theory is a methodology of inductive character which aims to build theory that emerges from the data (Glaser & Strauss, 1967), (Strauss, 2002). The most relevant contribution of Grounded Theory to this research lies in its explanatory power in relation to different human behaviors in a given field. Although the purpose of Grounded Theory is theory building, this documentary review does not intend to arrive at the formulation of theoretical aspects because the research does not require it since it does not have that objective.

The use of Grounded Theory sought to take advantage of encoding techniques and analysis strategies characteristic of this theory: open coding and constant comparative method. In open coding a thorough analysis was carried out where the text is broken down and divided into significant units for the study; then these units were assigned a code or concept. The comparative method is precisely the comparison of the data, in this case, meaning units in which the texts were divided in order to identify similarities and differences. This facilitated the identification of patterns in the information and thus, the generation of concepts based on behaviors that are repeated.

The study had recourse to secondary sources of information, particularly theses, essays, articles, book chapters, papers and research reports (Table 1). For selecting information a filter was set to identify only those documents related to the research. Three conditions relevant to the reading and analysis of these documents were established: i) Pertinence in the context of Higher Education; ii) relatedness to b-learning or e-learning approaches; iii) development of roles, functions, powers and/or performances of teachers. The search of documents was done through internet data bases. With the selected basis a data base for consultation and on-line discussion was created (www.pro-blearning.net).

Table 1: Type and amount of analyzed texts

| Type | Articles | Books | Presentations | Book chap. | Res. reports. | Doct. thesis |
|---|---|---|---|---|---|---|
| **Amount** | 76 | 9 | 8 | 7 | 3 | 2 |

Most of the texts analyzed were written at universities and by Spanish research groups, which means that among Spanish speaking countries, Spain is leading the production and circulation of texts in the field of e-learning and b-learning (Table 2). For the initial classification of the documents found, 7 categories and 34 sub-categories were formulated (Table 3). These categories were built from the experience and knowledge that the researches have in the field of study versus the revised texts. The categories correspond to the general themes or aspects that the documentary review attempts to resolve or inquire about. Each category was provided with an operational definition to facilitate the identification of phenomena, situations or events in the documents.

Table 2: Distribution of texts by country

| Country | Spain | Colombia | Argentina | México | Chile | Venezuela | U.S.A. | Cuba | Others |
|---|---|---|---|---|---|---|---|---|---|
| **Texts** | 43 | 17 | 11 | 9 | 5 | 5 | 3 | 2 | 10 |

**2.2. Encoding process (Stage 2)**: Initially at this stage codes created in stage 1 were applied with the purpose of making a preliminary encoding of data that could reduce the documents to analyzable units, that is to say, text fragments with meaning (citations). Subsequently, the open encoding method was applied to group, widen and complement some categories for describing information. To this end, the comparison was made fragment by fragment as well as the allocation of the necessary categories to allow a greater understanding and description of the categories created at the beginning (Table 3).

Table 3: Number of sub categories and type of encoding

| | Categories | ROLES | FUNCTIONS | COMPETENCES | PERFORMANCE | TRAINING | EVALUATION | PERSPECTIVES |
|---|---|---|---|---|---|---|---|---|
| N° of sub categories | Inicial encoding | 8 | 3 | 4 | 1 | 5 | 6 | 8 |
| | Open encoding | 3 | 8 | 11 | 13 | 18 | 11 | 14 |

**2.3. Analysis process (Stage 3):** On different days of analysis the information resulting from the encoding was triangulated with the experience of teachers and researches, thus allowing validation in the real contexts in order to submit a final proposal for the characterization of roles, functions and competences to be ideally performed by teachers in the different stages of the teaching-learning process in b-learning contexts.

## 3. Results

Table 4: Number of citations classified in the main categories

| Roles | N°citations | Functions | N°citations | Competences | N° citations |
|---|---|---|---|---|---|
| **Tutor** | 138 | Guidance | 86 | Technological | 48 |
| **VLE Designer** | 37 | Planning | 46 | Tutorials | 17 |
| **Content Designer** | 19 | Use of ICT tools | 14 | Disciplinary | 10 |
| | | Assessment | 17 | Pedagogic and didatic | 18 |
| | | Interaction | 66 | Socio-Communicative | 28 |
| | | Communication | 11 | VLE Design | 21 |
| | | Preparation of materials | 8 | Self-training and adaptation | 7 |

**3.1. Teaching roles:** The ambivalence of the functions to be assumed by the teacher both in classrooms and in virtual spaces gives rise to the term *roles*, since the teacher no longer performs specific functions, but also acts in conjunction with other professionals and diversifies his pedagogical work. The teacher is not a transmitter, is a facilitator; the teacher no longer has the answers but helps the students to build them, comparing them with different sources of knowledge (Fernández, 2009). The teaching role will then make explicit mention to the set of features and characteristics that describe the work carried out in the educational scenario, involving his professional, social and cultural actions (Fainholc, s.f), (Facundo, 2004).

All the changes promulgated by b-learning are not free, as technological changes imply that the teacher does not exactly have to be the pillar of knowledge, but an accompanying factor in the new practices that are inscribed on student learning (Hoyos, 2006). This fact has an impact on the skills developed by the educator to adjust to the terms of this change, since his action and performance are among the quality factors demanded by a society that today is moving at an accelerated pace of information and knowledge. (Guarneros et al., 2009). According to Salinas, J. (2008) the proper role of teachers shall be basically outlined around the ability to design situations, means and opportunities for the student to consciously approach the knowledge that is offered to him from diverse sources of information. The responsibility is not merely relegated to the teacher but it transcends to the student's meta-cognition (Henao, 1992), since he is the one who becomes the axis around which the teachers perform their lineup based on modulations of their concerns in order to transform them in specific knowledge. The analyzed sources display three main roles:

Tutor role: Under the different perspectives of authors like Morresi, S. & Donnini, N. (2007), Salinas, J. (2008), the role of tutor is conceptualized as "an agent that guides, directs and evaluates learning, providing the best teaching methodology aimed at the student". In contrast, this allows to show the perception of Mendez et al. (2007), who state that the tutor is "the professional teacher who imparts the knowledge dictated by the program in accordance with previously prepared material and interacts directly with the student", leading to inquire about the dichotomy of the professional who sticks to an established material and makes it known by the students, or the extent to which the tutor influences the design and structure of the training course. From the foregoing, and in accordance with Rodríguez C. & Calvo, A. (2011), the professionals who somehow take the role of tutor are exclusively devoted to the guidance and support of students' learning. The course design and the pedagogical and didactic guidance are performed by a professional or group of people with different occupations who jointly carry out the consolidation of the course. However, despite the above description of the role of tutor, two main associated roles were identified: the role of learning facilitator (Henao, 1992), characterized by assuming functions of mediator, companion, motivator and mentor, as well as the role of communication facilitator (Regnet, 2010) concerning the exercise of the moderating action itself.

The role of Virtual Learning Environments designer (VLE): In this respect the teacher intervenes in various places that in a classroom context might not have had much consideration. In this sense, the teacher should generate expertise in areas such as the design of virtual environments, contents, learning related activities and multimedia, among others. It could also happen that the teacher may be the person to convene a body of professionals among whom the designer, technician and programmer can be found and whose goal is to articulate the set of inputs from each one of them around the pedagogy and didactics in the shaping of the course. (Marcelo, 2000)

The role of content designer: In some texts this person is called *contenidista* (Cataldi et al., 2005) (* N.T. A Spanish neologism referring to somebody who develops contents), an expert in the area (Cataldi et al., 2005), or author of contents (Santiago, 2006). The main task in this role is to adjust the knowledge of a discipline to modules, contents, materials, or resources accessible to students so that they can work with them individually. This is achieved through the design and organization of contents and /or knowledge. This role does not refer to related curriculum content. As Santiago, R, (2006) states, the content designer focuses on "Knowledge Management" in which he only intervenes once scientific knowledge has been established and consolidated within a framework of social validation. This role not only links aspects of content organization and structuring but also involves a series of aspects concerning the modeling of activities and strategies accompanied by considerations such as timing, presentation modes and the respective relationships with the topics and training modules.

**3.2. Functions**: The term function was operationally defined as the activities or tasks incumbent upon teachers in b-learning environments. The following functions were categorized as the ones with the highest number of citations:

Guidance function: This function emphasizes the ability of teachers to facilitate learning rather than directing it. It is associated with the task of resolving students' inquiries, doubts and problems, according to their learning rhythms and styles. The teacher advises and makes known the tools, processes and protocols for monitoring and adjustment of the student. Guidance makes mention of promoting strategies that allow the student to participate in a series of experiences to confront his skills and strengths, not only in terms of knowledge acquisition but in relation to using tools and resources to be effective in a specific context ((Fainholc, s.f). Among the different actions that allow performing the guidance function, the following were characterized: adaptation, inquiry resolution, learning development and follow-up.

Planning functions: Morresi, S., & Donnini, N. (2007) state that this function must be performed by the teacher inasmuch as a research or support is established to be able to deduct the guidelines that define the relevance of training. This function is determined by actions that allow their execution such as: administrative, pedagogical, content structuring, and time and space consolidation.

Functions of use of ICT tools: Much of the effectiveness of the communication function depends on the quality of the use of ICT as a knowledge and suitable resource to develop an interaction in on-line environments which provides an educational context as epicenter of training. To this end, as highlighted by Fernández, R. (2009), the teacher should have knowledge of ICT that facilitate his interaction with the training groups, and on the other hand, to acquire a technical skill to manipulate and develop an efficient communication through the use of a series of tools. Zapata, D. (s.f) states that the use of ICT by teachers involves a study of the media and environments in which they are going to develop their pedagogical work, since depending on this analysis they will have the criteria to choose with certainty the technologies, software, hardware, and adequate resources to establish a proper interactivity and interaction either in the virtual environment or in the classroom. This function groups the tasks teachers perform to handle communication tools and programs involved in a virtual learning environment, e.g., chat, e-mail, video conferences, discussion forum, word-processing programs, spreadsheets, and graphic designers, among others.

Assessment functions: There were three types of functions associated with assessment: i) tasks where the teacher assess the student's learning through monitoring; ii) functions of designing activities and assessment tools, and iii) teaching activities that seek self-assessment of the teachers' actions or educational processes. In the light of what the Society for Technology in Education (2008) stated, this function involves, on the part of the teacher, the design, structuring and monitoring of the assessment made during the course. To this end, the teacher should rely on high quality standards and regulations associated with ICT, including formative and summative evaluations in order to get consensus and feedback about the processes that are carried out by the group of students during their training in a b-learning context.

Interaction functions: Interaction is associated with communication and the establishment of social relations between participants in online course (students and teachers). Three actions emerged from this function: promotion, feedback and motivation.

Communication function: Under this function, the teacher must prepare, organize and ensure effective synchronous and asynchronous communication between students and teacher and between students with each other. This is done through the establishment of communication protocols and rules, moderating debates and training in the management of the platform and available resources. From this study, the communicative function, in relation to the description by Fainholc, B. (s.f) refers to "contact" between the various resources, either human or factual, held for training in the educational process. It is equally clear that communication is a transmission and reception of common signals through codes which are identifiable in a context, allowing an interaction that not only takes place in a face to face manner but through the use of the ICT.

Function of material preparation: In this role the teacher works under two essential components: The first one refers to what Regnet, M. (2010) defines as the design of material or resources that allow the interaction of the student with the course. In order to achieve this, the teacher must translate that content into a material that can be accessible in terms of interactivity through a visual, auditory or written text, according to the needs and guidelines of the subject that is being structured. The second component refers to the materials that are embedded in a process of learning facilitation and guidance, in which the teacher uses practical guides to give specificity to the processes and also a series of reinforcements that are regarded to support the learner in his formative work (Fernández, 2009).

**3.3. Competences**: Marcelo, C. et al. (2006)& Fernández, R. (2009) state that competences are a body of knowledge, skills and qualities related to the discipline and humanistic domain when initiating an interaction in the professional field. Regarding the competences that a Higher Education teacher should assume, there is mention of the ability to perform problem solving skills related to the educational context and the pedagogical work developed in a learning environment. According to the results of the encoding of texts from the category of competences, it is observed that the code of technological competences has a higher frequency, which is shown with greater relevance and importance in the revised documents.

Technological competences: They are characterized as those needed to manage and use all the necessary technological resources for the design and development of b-learning activities. Such competences are divided into three: i) Basic, those that determine the level of mastery by the teacher on word processors, spreadsheets, presentations, and therefore, knowledge of operating systems, networks and browsers that allow paying attention to communications issues with his students in virtual classrooms, such as forums, chats, and e-mails; ii) Intermediate, those that develop the ability to track and use databases; knowledge related to image processing, audio-visual material and even the development and application of layout for structuring of web pages; iii) Advanced: those that enable the management and innovation of ICT; software management related to the knowledge area of the discipline, use of databases at a high level, customized configuration of web spaces, mastery of certain simulation software, processing and production of information from design and content editing.

Trough this study it can be evidenced that this competence becomes more important as claimed by Cañada, M. (2010) since it is currently expected that the professional engaged in training contextualizes this type of resources towards providing a quality education from the potential offered by the ICT, as it is specifically discussed in this document on Higher Education.

Tutorial competences: These skills can be summarized as the capacity and ability of teachers to provide technical assistance, advice and support to students. This type of competences allude to a series of teacher interaction skills with the students, meaning that beyond acquiring pedagogical, didactic and technical skills, in the case of b-learning the teacher should have the ability to meet the needs, concerns and questions of the students, either through the virtual platform or in a classroom setting (Marcelo, 2006). These tutorial competences are equidistant to the attitudes shown by the professional, considering that his personality and the way he behaves in the affective area are part of the faculties of an expert person when given tutorials through different media.

Disciplinary competences: In depth, these competences relate to the disciplinary and conceptual mastery that the teacher has acquired in order to assume the formation process of a group of students. Cataldi, Z. et al (2005) state that the competences that define a good professional practice reflect a thorough knowledge of the discipline in which the teacher operates, where there is evidence of his level of experience, updating of his knowledge and his theoretical and practical command of the subject.

Pedagogical and didactic competences: These skills are specifically characterized as those that are largely based on the knowledge of a number of teaching and learning theories that cannot be applied solely to classroom settings and therefore the ability to adjust them to virtual environments becomes very relevant (Cataldi, Z. et al, 2005). Thus, the teacher must possess theoretical and practical skills focused, not particularly on the teaching itself, but on the learning experiences provided to the student from this type of online scenarios (Marcelo, 2000). In terms of teaching skills, these are strongly associated with the pedagogical adequacy; however, the functions and actions derived from these skills discern several issues, meaning that the teacher must have knowledge and practice in design of VLE as a means to support his teaching work (Fernández, 2009). Therefore, this competence is reflected in the exploration of several resources, searching for educational strategies that support the use of these elements in consideration to the student's education.

Socio-communicative competences: The importance of these competences is emphasized given the social connotations that are part of the relationships that allow for interaction not only with students and teachers but also with various means and agents involved in education. In these interactions, socio-communicative competences, seen from the teacher's perception, are related to the ability to establish means, strategies and ways to engage in dialogues about codes and texts with a character of guidance and stimulation in order to facilitate student's learning. Therefore, an ability involved in this competence will be to understand and implement ways of establishing convergent and divergent communication depending on the purpose to be achieved. (Rodríguez & Calvo, 2011).

Competences for the design of LVE: This ability to design learning environments is closely linked to the technological competence of advanced order, which works towards a management and structuring of technological knowledge through virtual

or mixed learning spaces. This competence refers to the management, administration and analysis of educational situations where the teacher acquires connotations that include team and interdisciplinary work, analysis and inclusion of external factors (family, surroundings and institutions), incidents on the training course, in order to allow relevant decision-making that enable the structuring and planning of a training program focused on the requirements of the community around which the training is emphasized.(Sánchez, 2008).

Competence in the creation of materials: This competence determines the teacher's level of ability for developing materials, either educational, teaching or of other characteristics, with the purpose of articulating them to the contents that are part of the design of a learning environment, thus establishing a link with the context and specific aspects of the teacher's learning (Marcelo, 2000). This competence also includes the teacher's ability for searching external resources and learning objects which are likely to be used under the context presented in the virtual environment.

Self-training and adaptation competence: This competence is associated with a set of attitudes that the teacher shows and deals with when interacting in a specific context, as part of his pedagogic work in an educational institution. The teacher must have the ability to understand and adjust to situations that may arise as part of his teaching work. He must also adapt to the various ways of learning of each group of students and accommodate to an education system transformed by the impact of ICT, in case the educator comes from a tradition of a face-to face classroom formative process.

### 3.4. Relations

Table 5. Matrix of relationships between roles- functions-competences

| FUNCTIONS \ ROLES | Tutor: Learning Facilitador | Tutor: Communication Facilitador | Content Designer | VLE Designer |
|---|---|---|---|---|
| Guidance | Pedagogic<br>Tutorial | Socio- comunicative | | |
| Planning | Disciplinary | Socio- comunicative | Self training and adaptación<br>Disciplinary | Pedagogic<br>Disciplinary<br>VLE Design |
| Use of ICT | Technological<br>For the use of ICT | Technological<br>For the use of ICT | For the use of ICT | Didatic<br>For the use of ICT |
| Assessment | Pedagogic<br>Self-training and adaptation | | Self training and adaptación | |
| Interaction | Pedagogic | Socio- comunicative | | Didactic<br>VLE design |
| Comunication | Socio- comunicative | Socio- comunicative<br>For the use of ICT | | Didactic<br>For the use of ICT |
| Preparation of materials | | | Didactic<br>For the use of ICT<br>For the la creation of materials | VLE Design<br>For the creation of materials |

COMPETENCES

B-learning leads the teacher not to suspend his traditional role in the classroom, but to take other roles in the virtual context such online tutoring, content design and layout of VLE. The interaction between these roles is to great extent associated with the educational needs arising from Higher Education institutions bearing in mind that the specific activities and functions of this mixed training model enhance and add a teaching work with more emphasis on guidance and regulation of cognitive maps, in comparison with the type of teaching that he was carrying out in purely face to face classroom environments. (Table 5)

Competences based on the teacher's b-learning skills and abilities have an impact on the classic teaching methods used in the classroom environment since the range of functions and spaces for course development is broaden. Figure 1shows an outline of the sequence that should be carried out, determining the roles assumed by teachers, professionals and/or work teams who develop the process of planning, implementation, development and evaluation of courses that use a b-learning methodology.

Higher Education institutions must focus on training their teachers in relation to their performance in order to reach quality standards and even generate a multi-professional group approach to integrate their knowledge in order to contribute to structuring learning environments suitable for learning acquisition. For this purpose, assessment of teachers' performances becomes necessary initially, partially, and as a result of the global process.

The continuity of the process is very important. It cannot be waited to reach a certain quality level when assessment is carried out at a final stage, or when a new pedagogical perspective is implemented and then other approaches and strategies associated with pedagogical issues unrelated to the ones initially proposed are taken into consideration. In this respect, planning and

administration are fundamental aspects that absorb the mixed educational context, since clarifying and validating the phases that this implies in terms of time, space, resources and qualified staff involves a continuous structuring relevant to the development of learning. In addition, the student and his satisfaction depend on roles and functions clearly defined, under the responsibility assumed by the teacher with the institution of providing training through face to face and virtual means.

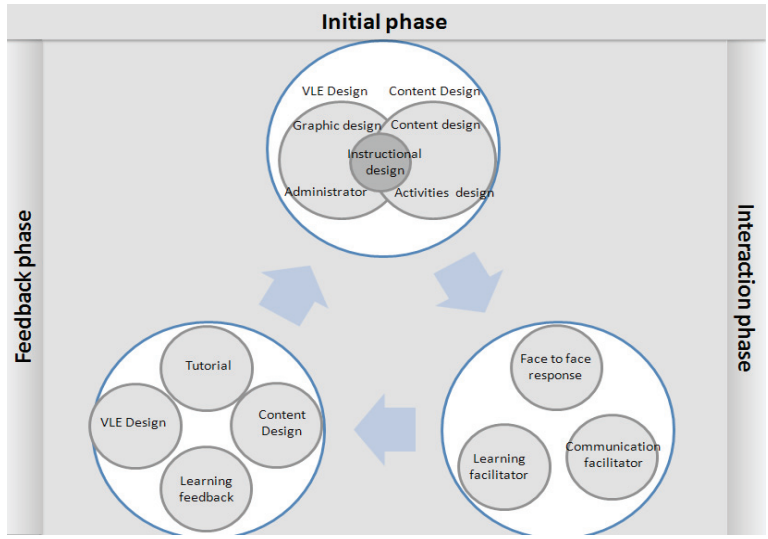


Fig. 1. Cycle for implementation of b-learning and teaching roles

## 4. Conclusions

**Problems:** The analysis of the teacher's work in classroom spaces when it is supported by virtual resources has not been substantiated. In a few lines, actions referring to practice, discussion and advice on problems that might arise in virtual environments are roughly outlined.

The design and implementation of an online course requires not only teachers but also staff with specific assignments. Thus, the institution must concretize the experts on content, pedagogy, didactics and designers of different backgrounds and fields in order to consolidate a learning environment based on minimum specifications for interaction, communication and accessibility. Each professional must work as a member of a team according to the area of his expertise. This collaborative purpose involves a coordinating action in every aspect of the platform in which often the pedagogic centralization is lost for paying more attention to the technical, instructional and aesthetic issues of a virtual campus.

**Difficulties:** Diverse classifications are made about the roles of the teacher as duties he assumes in virtual contexts. Even more extensive are the task classifications that each role entails in the models of learning facilitation. Each topology brings its systemic manner of structuring the subordinations and differences between each role and function. What is directly linked to this fact is that most documents are part of various sectors of Latin America, the United States, Spain and to a lesser degree some allusive to the national context This review brings to light that there are no clear policies and prone to a level of standardization to consolidate a benchmark for functions, roles and competences to be acquired by the teacher to deal with media changes generated by the pedagogic dynamics that the mixed and virtual education reveals.

**Realities:** Struggle continues between the amount of time that should be granted for face to face sessions and for virtual ones. In this discussion, it is not a matter of having some particular preference but of analyzing the time, dedication and space that are feasible to address in a virtual or in a face to face mode.

A transformation in the role of the teacher is presented: from a teacher who teaches directly, he becomes an instructional designer; from being a person who teaches, he becomes a learning facilitator; from being an advisor, he becomes a motivator. He is characterized by being able to adopt a learning model that meets the specific needs of the student and of the institution that welcomes him. This fact has socio-cultural implications that rule new logics, while knowledge society and information radically change the role of teachers, since positive and negative aspects confront their status and pedagogic action with the flexible fact of being energizer and tutor.

Again, two fundamental roles of the teachers are differentiated, namely: the teacher expert in the subject contents who can be associated with the traditional teacher and has extensive knowledge about the curriculum guides and textbooks to address the theme; and the teacher mentor who meets the requirements of the virtual context. This fact would lead to dividing the teaching activity, the roles and functions that he assumes in each environment, or in other circumstances lead to question the value of each profile, inasmuch as the role of tutor or teacher prevails under parameters of adjustment or self-education to deal with the assigned work.

The learning facilitator is a prominent role set as a figure that guides and directs the students' learning processes. However, different texts refer to these functions by mentioning that they should be carried out by an instructor or assistant who supports the teaching on issues such as giving feedback and responding to inquiries of a technical or discipline-related nature, with the purpose of promptly replying to concerns or irregularities that may arise in the interaction of virtual environments, thus confusing the functions of learning facilitation and communication facilitation.

There is a strong emphasis on the importance of not carrying out an external evaluation solely by the students, since it does not show a good level of reliability to assess to a large scale the performance of the teacher throughout the process. Furthermore, most documents mention various ways of doing this assessment such as reports from auditors, peers, work team, and correlations of different assessment methods of diagnostic, formative order and based on learning results, level of responsibility and commitment to the educational duties assigned.

Pedagogical communication, technical and technological skills and continuous professionalization are the main factors for knowledge acquisition and student's satisfaction in the b-learning training process. It is therefore very important to develop training processes in the fields mentioned prior to the inclusion of systems and models of teacher performance evaluation.

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