

## Percepciones de los docentes acerca de la incorporación de las aulas virtuales en la enseñanza

*Teachers' perceptions about the incorporation of virtual classrooms in teaching*

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### Resumen

Esta presentación se enmarca en el Proyecto de Investigación “MOODLE y Blended-Learning: un análisis de aulas virtuales en contextos universitarios”<sup>1</sup>, orientado a investigar las propuestas de blended-learning de la Facultad de Ciencias de la Salud (en el período 2010- 2011).

Es un estudio descriptivo basado en la observación de tales aulas virtuales, con la finalidad de analizar y categorizar la totalidad de aulas virtuales, de grado y de posgrado, y seleccionar algunos casos significativos, para indagar en profundidad las dimensiones de análisis planteadas en esta investigación. Se propone también realizar encuestas semiestructuradas en línea, a docentes y tutores y a alumno/as de asignaturas/cursos virtuales, y entrevistas cualitativas presenciales y en línea a autoridades y personal del área informática y a docentes de aulas virtuales seleccionadas como casos significativos. A

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<sup>1</sup> Proyecto N° 1865/2, Consejo de Investigación. Universidad Nacional de Salta. Salta. Argentina (2009-2012)

fin de favorecer la validez interna de la investigación se proponen procesos de triangulación de técnicas, de sujetos y de investigadores.

En este trabajo se reflexiona sobre la información recogida a través de un cuestionario en línea a docentes. Los aportes teóricos que se puedan construir en este proyecto, podrán enriquecer la producción de conocimientos en el área y promover una mejor explotación de los espacios virtuales con fines educativos en dicha Facultad, la universidad y otras universidades.

**Palabras Clave:** investigación, blended-learning, contexto universitario, aulas virtuales, percepciones docentes.

### Abstract

This presentation is part of the research project "MOODLE and Blended-Learning: an analysis of virtual classes in university", 1 designed to investigate the proposed blended learning in the Faculty of Health Sciences (in the period 2010 - 2011).

It is a descriptive study based on the observation of such virtual classrooms, in order to analyze and categorize the entire virtual classrooms, undergraduate and graduate, and select some significant cases to investigate in depth the dimensions of analysis in this research raised. It is also proposed semi-structured online surveys, teachers and tutors and student / as subjects / virtual courses, and qualitative interviews and online to officials and staff of the IT area and virtual classroom teachers selected as significant cases. In order to enhance the internal validity of the research process are proposed triangulation techniques, subjects and researchers. This paper reflects on the information gathered through an online questionnaire to teachers. The theoretical contributions can be built in this project may enhance the production of knowledge in the area and promote better use of virtual spaces for education in this faculty, the university and other universities.

**Key words:** blended learning, research, university context, virtual classrooms, teachers perceptions.

**Fecha recepción:** Septiembre 2010

**Fecha aceptación:** Noviembre 2010

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## Introduction

In 2008, a new Network Service, the Moodle Platform, was installed in the Faculty of Health Sciences of the National University of Salta; jointly, a process of technical advice and teacher training in this area was initiated. Currently there are more than forty virtual classrooms corresponding to undergraduate and postgraduate careers and courses.

The incorporation of blended-learning modality in educational practices in the Faculty raises questions that the Research Project "MOODLE and Blended-Learning: an analysis of virtual classrooms in university contexts" set out to investigate and analyze. This project constitutes a descriptive study based on the observation of the virtual classrooms available on the MOODLE platform of the Faculty of Health Sciences, in the period 2010-2011. The specific objectives of the research are:

1. Identify the particular characteristics that the blended-learning modality acquires in the training proposals of the Faculty.
2. Categorize virtual classrooms on the moodle platform, in their technical, organisational-communicational and didactic dimensions.
3. Inquire about the use and activity carried out in virtual classrooms by teachers and students.
4. Explore about the pedagogical and technological interactivity that take place in the virtual environments analyzed.
5. Investigate the perceptions of teachers and students about changes in teaching practices from the incorporation of ICT in face-to-face teaching.
6. Study the pedagogical styles/models that underlie virtual training designs.

7. Analyze the conditions of virtual educational practice in the institutional context studied.

The project aims to analyze and categorize all virtual classrooms, undergraduate and postgraduate, and select some significant cases, to investigate in depth the dimensions of analysis proposed in this research. To this end, semi-structured online surveys will be carried out with teachers and tutors and with students of virtual courses/subjects, and face-to-face and online qualitative interviews with authorities and personnel in the IT area and with teachers of virtual classrooms selected as significant cases. In order to favor the internal validity of the research, triangulation processes of techniques, subjects and researchers are proposed.

The main dimensions of analysis proposed, organized in technical, organisational-communicational and didactic dimensions of virtual classrooms, are: potential and real technological interactivity and potential and real pedagogical interactivity; perceptions of teachers and students about ICT in teaching; technical and practical access to technologies; reasons for the inclusion of ICT in teaching; perceptions about changes in teaching practice from the incorporation of ICT; institutional conditions that favor and/or hinder the development of virtual educational practice; the particular characteristics that the blended-learning modality acquires in the training proposals; underlying pedagogical styles/models; among other dimensions that may arise in the research process.

In Phase 1 of the research, dimensions were defined for the analysis based on various bibliographic sources and instruments constructed by different authors/research teams, from the perspective of sociocultural constructivism (Barbera, Mauri, and Onrubia, (2008), Barberá, Badia, and others (2004), Cabero-López Meneses (2009), Salinas (2008), Villar). In Phase 2, 40 virtual classrooms are being observed; three cases were selected, two undergraduate classrooms (Nutrition and Nursing careers) and a postgraduate course (teacher training), in which, through software analysis (observation of virtual classrooms

and analysis of educational documents and resources used in the platform), it was possible to evaluate the potential of the selected dimensions, the emergence of other categories of analysis and the definition of the aspects and indicators for the construction of the instruments for the observation of the other virtual classrooms . In addition, in the selected cases, the communication and interaction dimension in the classroom was investigated in depth and especially the participation of students and teachers in the forums, as a privileged space for interaction, collaborative work and the social construction of knowledge ; This analysis was intended to make contributions to the understanding of the dynamics of communication and information exchange, conceptual discussion and the collective creation of knowledge in virtual classrooms.

This paper presents the first reflections on the information collected through an online questionnaire aimed at investigating the perceptions of teachers about the incorporation of virtual classrooms in their educational practice.

It is expected that the theoretical contributions that can be built within the framework of this research project can enrich the production of knowledge in the area and promote a better exploitation of virtual spaces for educational purposes in said Faculty, the university and other universities.

### Developing

To implement the questionnaire for teachers, which is available in the virtual classroom of the research project, each of them was formally invited (both personally and via email) to collaborate by answering and giving their assessments. The questionnaire was organized based on central information search axes that would allow us to investigate: sociodemographic and academic data, teacher training in the area of computer science and virtual classrooms, and processes related to the incorporation of virtual classrooms in faculty chairs. In this way, with the questionnaire we intend to investigate, among other aspects, the perceptions of teachers about the changes in their practice from the

incorporation of virtual classrooms and the institutional conditions that favor and/or hinder the development of teaching. virtual educational practice. The inquiry was oriented towards socio-demographic aspects of the teachers (age, profession, position, seniority and dedication to teaching); their training in the use of computer resources (perceptions of the teacher on the use and mastery of computer resources and the areas where they were trained in this regard); organizational aspects of the use of the virtual classroom (the difficulties in this regard, their perceptions and suggestions; MOODLE resources and activities that they use and value the most) and pedagogical aspects of the use of the virtual classroom (incidence of work in the virtual classroom in teaching practice, in teaching and learning processes, in communication with students).

Although the process of collecting and processing information has not yet finished, in this paper we present these first advances regarding teacher assessments, which begin to outline an interesting state of affairs that needs to be considered.

The vast majority of teachers who responded are women; ages are distributed between 26 and 60 years. Half have a bachelor's degree and the other half also have a postgraduate degree; only one teacher has an intermediate university degree. Most are teaching assistants, the rest teachers. Half of the teachers have exclusive dedication to teaching and the other half semi-exclusively; only one teaching assistant has simple dedication. Regarding teaching seniority, those between 5 and 10 years predominate; only teachers have more than 30 years of teaching experience.

One of the first aspects investigated refers to the training that teachers have in computer tools. In this aspect, it is highlighted that the domain acquired is basic and, for the most part, is the result of a self-training process or, in some cases, of training offered by the faculty/university or learning among colleagues. Consequently, the majority perceive that training that it has is not enough or is moderately enough to respond to the demands that work in the virtual classroom requires of it; In this sense, the teachers express: "I don't consider it enough, I always have something else to add and learn. I lacked learning to do

questionnaires for example". "I can work with some programs but I don't know how to handle others", "The training doesn't seem complete to me, I think I should receive a more formal one". The only teachers who stated that they consider their training sufficient expressed: "I have a very good use of computer resources, for the tasks that are entrusted to me and those that I propose" and "Because I have no problems when working with the computer until the moment, if I consider that as the demand is greater, I will need more training". A teacher makes the following question: "More technical-computer support would be needed for some things. Sometimes it is exhausting to have to know how to "do" everything when it seems to me that in reality the teacher should have the "assistance" of an expert technician or engineer", which would be saying that this teacher does not consider her training and independence so necessary to develop virtual classrooms.

Similarly, the training that the teachers surveyed have for the management or administration of a virtual classroom is also the result of a self-training process or, in some cases, of the training offered by the college/university. The majority consider that the training they have is not sufficient and to a lesser extent they say that it is moderately sufficient: "It would be necessary to acquire experience and training in the use of the platform", "The training does not seem complete to me, I think it should receive a more formal ", "It was not enough, many times I do not recognize the benefits of the system", "Formal training from a course where you can practice is always important". A single teacher expresses that his training is sufficient: "It is useful for managing the virtual classroom, especially the basic MOODLE course, but then you have to continue since this platform is continuously updated."

Regarding the organizational aspects of the virtual classroom, the answers of the teachers do not show great difficulties in using the computer and the Internet network in the institution. The difficulties mentioned are associated with the conditions of the server and

in a few cases with the fact that there are not enough computers for the teachers. However, almost all teachers (except one) consider it necessary to improve the conditions for the use of virtual classrooms in the institution and make suggestions to improve these conditions; Among them, they mention: computer courses (on Word, Excel, PowerPoint, Access, Front Page), courses on the use of virtual classrooms on the MOODLE platform and increasing the number of computers for teachers and students.

In relation to the pedagogical aspects of the use of the virtual classroom, it was inquired about the reasons why they decide to incorporate this alternative in their practices. The most outstanding reasons refer to the need to incorporate the virtual classroom into educational practice to facilitate access to information and bibliography by students, the possibility of the virtual classroom as a complementary strategy to attendance, the possibility of improving communication with students and the teacher-student relationship. Only one teacher mentions the importance of allowing students to acquire skills in these technologies. In the voices of teachers, these were the reasons:

- The high number of students and little bibliography in the library*
- The massiveness of the student body. The need for permanent updating. Personal motivation since I like it. Request from my superior (head of department) at the initiative of an attached professional who did her final specialty work in teaching on virtual classrooms.*
- It is really a need, for communication and complementary forms of learning Promote the teacher-student, student-student relationship; streamline the presentation and return of practical work and introduce students to the use of this tool.*
- Promote the teacher-student, student-student relationship; streamline the presentation and return of practical work and introduce students to the use of this tool.*
- It is a means to provide information and bibliography to students*

- *Because it seems to us that it is an accessible way for students today, in terms of content and time to access it. In addition, we consider that the students are quite familiar with access to networks and it is also an adequate methodology. For us it continues to be a challenge.*

From the use that the teachers make in their virtual classroom, the MOODLE resources that they value the most are the file and the label; only one teacher uses the book as a resource. Among the MOODLE activities that they value the most, the majority indicated the forum, the questionnaire, and to a lesser extent the consultation and the survey; only two teachers mentioned glossary and homework, and one wiki.

Asked about how much time per week they dedicate to editing and preparing the virtual classroom, half of the teachers say that 1 hour, the rest is distributed between 2-3 hours or more than 5 hours. More than half state that they review the tasks in the virtual classroom once a week; the rest is distributed between 2 times or more than 3 times per week. Those who review more than once a week express that the impact that work in the virtual classroom has on their teaching practice in relation to time dedication is important; some feel exceeded in their possibilities and overloaded with activities: "It greatly exceeds my schedule, since I am the one who supervises the progress of the platform, since the flow of information must be constant, so that students can assess that there is someone from the other side who accompanies them", "It requires more time to analyze the production of students and teachers", "Sometimes it exhausts me because it is a lot of work...", "The demand for teaching hours increases in charge of publishing it, in addition to the fact that this activity is not yet recognized with specific hours of designation". Others, those who review the virtual classrooms only once a week, instead state that the impact of work in the virtual classroom on their teaching practice in relation to time dedication is not important and distribute their time dedication between face-to-face homework and the virtual one so that no major modifications are perceived in the usual

practice: "None (incidence), is within the possibilities of the schedules I keep", "The incidence is the same, since the schedule at the university is shared between the tasks in front of the computer and with the students", "It does not have a great impact because our chair only uses the virtual classroom to place theoretical content, practical work guides, partial notes (several information); We do not use the virtual space for the students to develop activities, they only participated by answering an initial questionnaire designed to know the profile of the students of the subject, and sometimes raising doubts to the teachers through the internal mail". These opposite tendencies are related to the type of didactic proposal that is effectively carried out in the virtual classroom of each chair.

Regarding the incidence of work in the virtual classroom in the teaching and learning processes in the chair, the majority perceive that it makes positive contributions: "Extremely positive. Although this year I began to think that I should "loosen up" a bit for "me" and for the "students". Sometimes it seems to me that I get obsessed", "It is very positive, since it allows virtual consultations, which favors this process, they have a positive impact, the students proposed a frequent participation mainly allowing them to overcome inhibitions to carry them out in the face-to-face class", "I believe that learning is constructive, often creative because students use many network tools that even one does not handle, and that also makes it interesting and interactive. In addition, the students, with a few exceptions, handle the classroom with great respect, which sometimes is also a challenge for the teacher in terms of handling the platform", "Students can have a greater amount of content, It facilitates updating of the information". Only in one case, a teacher expresses that she does not notice an incidence since the use of the classroom in her chair is still very limited: "In the case of my chair, I do not know if I could evaluate the incidence because many times the page is used as " repository" of theorists. The only activities proposed for now are the discussion forums. I think that for the students, at least, it helps them to know that they have that space to make inquiries to the teacher, which for

different reasons they cannot do in the consultation or face-to-face class. Videos, links, etc. are also placed. that the student tells when it comes to broadening her gaze with respect to some subject. But we have not yet implemented the way to evaluate them in the use of the classroom". Even when in her testimony this teacher expresses her reservations to assess the incidence of the virtual classroom, it can be seen that valuable contributions that she makes in the learning processes are implicit.

There is absolute agreement in positively valuing the virtual classroom with respect to communication processes with students, in terms of the fact that it favors the free expression of ideas, speeds up information, gives fluidity to communication between teachers and students and between peers, and provides multiple tools that favor communication processes:

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- *Allows a more fluid relationship with teachers and peers*
- *Communication is good, instantaneous, I notice that it is often simpler and easier for students to leave news or notices*
- *Streamlines communication and information so that everyone has access to it*

- *It seems to me that in the case of my students, they can express their ideas more openly, they ask questions that they may not dare to ask in class*
- *In terms of communications, the virtual environment was unquestionable...*
- *Communication is good, instantaneous, I notice that it is often simpler and easier for students to leave news or notices on the platform, more than by any other means, including oral communication.*

However, two teachers insist that the quality of communication is directly linked to a pertinent and immediate response by the person in charge of the virtual classroom: "Extremely positive, but only if correct and agile responses are given." sometimes, if the platform is not reviewed frequently and it has happened to me for some reason, the concerns are not answered perhaps at the time that the students expect or need".

Most of the teachers maintain that the level of student participation in the virtual classroom is medium and that said participation is mostly linked to consultation about study problems and the search for information. In the case of the two teachers who state that there is a lot of participation, it is also linked to the participation in forums, the collaborative construction of knowledge and the response to diagnostic questionnaires.

According to the teachers, the aspects that stand out as positive of the use of the virtual classroom in the training of students are fundamentally linked to the flexibility of virtual work, in relation to spaces and times, access to information and fluency in communication processes. According to teachers' testimonies: "it helps them organize their work, that is, their own study, in their own time", "Communication according to the time of each student, including Saturdays or Sundays", "Students can have more amount of content", "Facilitates the updating of information", "Favors the teacher-student relationship", "Speeds up the presentation of practical work".

In relation to the aspects that teachers highlight as negative in the use of the virtual classroom in the training of students, the fundamental concern is centered on the real access to these technologies, since not all students have access to a computer and the Internet, or they lack the necessary knowledge: "Not all students have a computer or financial resources necessary to use the virtual classroom", "Possibly there are students who do not have a personal computer, or if they do, they lack internet access to be able to work in the classroom", "The lack of machines available in the faculty", "... the heterogeneity of the use of information technology by the students". To a lesser extent, they point out as a difficulty that students are not aware of the training potential of the virtual space: "The fact that there are still (although there are few) students who do not consider the platform as a tool that favors development", "Lack of habits of students to enter the virtual classroom.

Regarding the positive aspects that the use of the virtual classroom means in their teaching practice, teachers insist on highlighting aspects related to promoting learning and communication, while pointing out the training challenge involved in this use: "I allow me to learn new technologies and adapt to current times. Also facilitate communication with students", "Learn new possibilities for students", "The possibility of sending messages and news", "It is a way to continue learning and (...) quite a challenge since the time that I have from the experience with the use of this resource...". Regarding the negative aspects of the use of the virtual classroom in their teaching practice, the teachers highlight: "The student is not personally known, how he expresses how he truly thinks, the contact is colder", "Sometimes I feel that I have too many effort to develop resources and activities and I feel that there is not a good feedback", "At the beginning we uploaded the PowerPoint of the theoretical classes and the students limited themselves to studying only what was uploaded and it did not favor the search", "It limits the bibliographic consultation ", "I would also add as a negative aspect the probable impossibility of maintaining permanent communication with all the students, since it is a subject with a high enrollment and considering that not all of its teachers are trained in

relation to virtual teaching". Draws attention and invites further investigation of the apparent contradiction of these answers with what was previously expressed by the teachers as outstanding aspects of the use of the virtual classroom, for example with regard to the potentialities of communication and access to information. .

Regarding the changes that teachers perceive in their teaching practice with the incorporation of the virtual classroom, the responses are grouped into two trends:

- - Most of the teachers recognize that if or moderately there were changes in their practice linked to their own view of the teaching and learning processes, with the new role assumed from the work in the virtual classroom and with the processes of communication with students: "I have a broader view of the teaching and learning process", "Changes have occurred in the sense that many identify me as the teacher who answers queries in the virtual classroom and as greater confidence is generated in the hour of teacher-student communication...": "Because it is a different way of interacting with students, in terms of time and space"
- The minority does not perceive major changes in their teaching practice; these answers are associated with the use that the chair makes of the virtual classroom: "There were no major changes in my teaching practice, since, by not proposing virtual learning activities to students in relation to the contents of the subject, the practical works were developed without modifications. The changes have to do only with the incorporation of content and information in the virtual classroom as a complementary means to the one usually used", "it is only a complementary tool to face-to-face learning".

## Conclusions

### **advances and reflections for further investigation**

Most of the teachers surveyed are teaching assistants, with little teaching experience and partial dedication to teaching at the university. These characteristics may influence the decision-making spaces that these teachers have in relation to the incorporation of a virtual classroom in the chair, as a teaching strategy, and in the overload of tasks that said incorporation implies for it. In this sense, the design and implementation of a teaching proposal in a moodle environment is conditioned by the power relations within the work team and by the possibilities that the entire teaching teams could participate in joint training spaces.

Regarding the training of teachers in these new technologies, it is observed that it has focused on self-training, in the postgraduate course that was implemented in the faculty on MOODLE and in peer training. The training that teachers have is perceived as scarce or moderately sufficient and there is agreement regarding the need to continue their training; The training request focuses on the use of basic software (Office programs) and an instrumentation on the use of virtual classroom tools and resources.

The need for training felt in the group of teachers of the faculty has as an underlying assumption the idea of causality that still predominates in the institutional culture and in the training paradigms in the chairs. This assumption suggests the almost direct correspondence between the teacher's knowledge about technological resources and the consequent good use of the virtual classroom. Although there is not a linear relationship between both aspects, we highlight the recognition made by teachers of the centrality that their training processes have for the appropriation of these new teaching strategies. As Cabero says, "Quality in these environments, regardless of the need to have some minimum technological requirements to guarantee their correct functioning, will be determined, among other variables, by the pedagogical model on which it is based, the interactivity that it establishes and allows the system, the quality of the materials, and the

training that teachers have for their use (...) Training that must go beyond mere technical and instrumental training and delve into the educational possibilities of new technologies and the design of training situations with these new tools. And this training is so necessary that its lack will lead us either to the non-incorporation of these new tools, or to their addition to traditional methodologies (Cabero, 2003). And the truth is, I don't know what is worse" (Cabero, 2003:7 and 11).

The lack of training also leads to another relationship that does not favor the appropriation of the use of virtual classrooms: the task of preparing the classroom and the didactic processing of the contents is seen as an extra burden to the usual task of the teacher and in the majority of the cases it is only limited to one person within the teaching teams who has training in MOODLE (who in most cases are teaching assistants). Also for this reason, the incorporation of virtual classrooms in teaching practice is not an experience that is easily transferable to other chairs that have not yet implemented it.

The processes of incorporating virtual classrooms in the departments of the faculty still show incipient uses of the virtual classroom, practically linked to the distribution of tasks, announcements and bibliography in the different departments. An underuse of the resources and activities available on the platform is observed; there is a meager and restricted use of interactive resources, which favor the use of the classroom as a space in which learning is focused and dialogues and debates are generated and maintained that promote academic socialization and the collaborative and shared production of knowledge. (Perazzo, 2010: 84).

As Barberá and Badia say, "The expansion of the teaching space through the use of virtual contexts must suppose the possibility of carrying out different learning activities that, without the use of technology, would not be possible and that have been valued as necessary. In fact, it is not proposed to go from a face-to-face classroom to a virtual classroom for the mere fact of changing the educational practice, but rather, in this framework, the introduction of virtual elements can serve as an excuse to diversify and

broaden the horizons of the face-to-face classroom. in which technology plays a true role as a psychological instrument, which collaborates in the development of human thought and knowledge" (2005: 5)

It is not observed in the responses of the teachers the reference to the potential of virtual classrooms in relation to tutorials, with the teaching action in these spaces, which "aims to offer the student tools and clues that help him to develop their own learning process, while addressing their doubts and needs" (Duart and Sangrá, 2000: 38, cited in Perazzo, 2010: 87). Teachers also do not emphasize the potential technological and pedagogical interactivity that these virtual spaces have as an organization of joint activity, "such as the forms adopted by the interrelated actions of the participants around the contents and learning tasks and in their evolution" (BARBERÀ et al., 2004:5)

Consistent with this situation, it is observed that the vision about virtual space, at present, continues to be instrumental. Added to this, in some cases, is the adherence to the myth that the mere incorporation of the virtual classroom generates changes in the processes of improving the quality of training. Given the difficulties that teachers often face in the use of virtual classrooms, the existence of this myth leads to an inevitable sense of frustration and a negative view of the virtual task.

The answers of the teachers about the implications of the use of the virtual classroom in the teaching and learning processes are limited and in some cases even contradictory, which also makes visible the still initial, introductory stage of the use of this strategy in the institution.

The state of the situation outlined again asks us about the need to work institutionally on the real possibilities of the virtual classroom, insofar as it can become a space that invites new ways of learning in solidarity and without borders. The substantive importance does not lie in the exclusive attention to technological tools in themselves, but in the

educational and training processes in a virtual environment. That is, we must not lose sight of the pedagogical purposes and foundations that guide our educational proposals.

García Aretio (2007) maintains that in any educational space, the teacher continues to be one of the fundamental agents of the process. In the virtual training proposal, the tutor teacher is the fundamental pillar of said process and, considering the situation described, we believe that in this matter, we still have a long way to go.

The fundamental challenge for teachers is to move away from the traditional place of knowledge, from the protagonist of the master class, towards a tutorial profile based fundamentally on the orientation and support of the students' learning processes, encouraging us to think of an alternative teaching model. In this context, the value of the virtual environment prevails as a space to communicate, cooperatively build knowledge between subjects who may or may not share a space and time, even culturally they tend to be very different.

As Gros Salvat and Silva Quiroz express, the teacher's profile should be oriented towards a person capable of creating and orchestrating complex learning environments, involving students in activities and materials. It will also be a teacher "accompanying the process" rather than a purely "distributor of information". It would then be a matter of proposing new competencies and skills related to tutor teachers: "they must be prepared to generate an effective dialogue with the participants and between the participants, in a way that favors active learning, the construction of cooperative and/or collaborative knowledge" (2005: 4)

One more contribution that comes from the resignification of a metaphor: the tutor as "scaffolding". Taking the contributions of Badia (2006), the concept of "educational scaffolding" refers, in this context, to the accompaniment of the learning processes by the tutor teacher; It would be an aid adjusted to the learning needs of the students, to support their cognition, the social interaction between the participants or the interrelation between both processes.

The challenge for the teacher, always and daily, arises when considering the complexity of the teaching and learning processes that are generated in face-to-face and virtual classrooms, reconfigured in the various productions that are built and shared, in the representations that they circulate on the didactic situation, on the others who participate in the experiences and on oneself, in the constant exchanges between the subjects among themselves and between the subjects with the knowledge.

Ultimately, the challenge is to encourage ourselves to learn new ways of knowing and new ways of helping to know, so that we can then feel empowered to invite others to learn.

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