Teaching Presence in Virtual Scenarios in Higher Education in Arequipa

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Abstract

The evolutionary process of information technologies with didactics in higher education have never been synchronized processes, considering that the accelerated technological transformations left traces followed by pedagogical adaptations, however, the violent outbreak of the COVI19 pandemic made it more evident that distance, generating scenarios of full virtuality, with traditional pedagogical systems; The objective of the research is to assess the presence of the teacher in the virtual auditorium, identifying the motivation and trust relationships of the students in order to reconsider an optimal virtual scenario. The study analyzes the levels of confidence and the motivations generated by the visual perception of the teacher, the participation of 128 students of communication sciences from the specialties of Public Relations and journalism; the temporal perspective is transectional of the descriptive type, with a quantitative approach. Among the relevant findings, a high level of indifference of the students is perceived, in turn, the teacher's response has a pessimistic ingredient, the proportionality of their presence is lower and the trend is limited, so it is proposed to assume strategies to redefine the scenario. virtual, taking into account the levels of student satisfaction.

Keywords: *Didactics, teaching presence, higher education, virtual scenario, trust*

Introduction

The research aims to answer some questions related to the turns that have generated the irruption of the pandemic process in the didactic processes, modifying scenarios, where the virtual is located in the only way to build knowledge, among the literature referring to the teaching action, various pedagogical strategies are perceived, in organization and planning.

In other words, the analysis of the teaching presence in the virtual environment of the teaching-learning process is still deficient, the motivations and trust generated by direct interaction in the process is decisive in the didactic environment, so we refer illustrative this examination from the perspective of higher education students, with the considerations that occur in the teaching-

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learning process (Feinmann, 2012), the interaction where the teacher expresses what he has as knowledge and manifests himself by showing his training and experience, there is the detail of his presence in the transmission and construction of new knowledge in the dynamics with the student.

As is evident, technological transformations in recent years have transformed teaching dynamics, even more so in the case of the recent pandemic, the processes of training and didactic preparation becomes essential, Domínguez and Fernández (2018) They point out that "the continuous training of teachers is absolutely essential. New technologies advance at a pace that does not allow us to stagnate in specific knowledge but must serve as a stimulus to new challenges" (p. 21). And it is that the didactic strategies linked to the use of information and communication technologies have become transcendental elements in vocational training. In turn, the teaching presence is the support of vital importance, for some authors it is perceived as decisive in this process, "The success or failure of online training is in correspondence with the greater or lesser Teaching Presence" (De-Pablo-Gonzales, 2017) p.54). Regardless of its innovative capabilities.

Another vital aspect in vocational training is trust, in almost all didactic theories mention trust as a substantial element in the teaching-learning process, so it is relevant to underline the ways of generating this purpose, "In any process of generating trust in interpersonal relationships, the trusting party decides to do so based on the behavior observed in the trusting party, to reduce vulnerability and the risk of failure" (Zapata et al., 2010 p. 86). In this understanding, the most effective way to achieve trust is through teacher interaction student directly, in time and space, even more so if it is considered that the way to interact is the virtual network.

Within the spaces of analysis in higher education, digital competences are perceived as a fundamental need because they are always in permanent innovation, Romero et al., (2022) Says:

"A university institution that wants to transform itself digitally must give space and time to the teaching staff to design, apply and generalize innovation, in such a way that innovation through technology is promoted not only from the strategic instances of the university (top-down) but, above all, it is carried out from initiatives of the teaching staff and that these are generalized in the institution" (p. 176).

In this perspective of analysis, the institutional culture that promotes academic competitiveness must be taken into account, which allows narrowing social gaps and inequalities as pointed out by Toledo-Ojeda et al., (2023). Ignoring the harmony that must exist between the cultural elements of the vision of society can be insubstantial in the development of new professionals.

In turn, Martínez, from the University of Granada proposes three methodological scenarios based on the pandemic process, the virtual scenario, the blended and the face-to-face, in all three cases the presence and management of teachers is prioritized, even more so in the virtual scenario the teacher-student interaction is privileged despite the distance (Martinez Robledo, 2022), in the

blended scenario maintain the interaction in a physical and virtual way, and in the face-to-face scenario the bond is strengthened in a cognitive and affective way.

Methodology

The proposed quantitative methodological approach is developed in the Professional School of Communication Sciences of the National University of San Agustín, as shown in Table 1, where there is a distribution from the third to the tenth cycles, taking into account the two specialties taught in the institution.

Table I: Sample distribution of research at the Professional School of Communication Sciences UNSA

Speciality	Public relations				Journalism				
Semester	3rd-4th	5th-6th	7to-8T0	9th-10th	3rd-4th	5th-6th	7T-8T0	9th-10th	total
Men	5	9	4	4	9	2	2	1	36
Women	14	13	29	8	12	7	5	3	91
total	19	22	33	12	21	9	7	4	127

The quantitative descriptive research details the motivation and need for the presence of teachers in the teaching-learning process (Bernal, 2016), in another analysis, Castro Maldonado et. to the. (2022), points out that "Applied research draws on the knowledge already achieved in basic research to direct them to the fulfillment of specific objectives" (p.151), so this is circumscribed in this line of applied research, since it promotes the solution of specific problems, although it retains scientific rigor, it is based on materializing concrete answers, operational and practical.

University Didactics

The teaching-learning process has interacted with technological changes, building didactic resources according to the social context, as Gonzales points out. (2016) "The combined use of virtual technologies and information resources in training, favors the conditions to achieve effective learning in university professionals" (p.39), moreover, the effects that transcended by the pandemic COVI19 impulse imaginative alternatives that forced to invent neat solutions in this new scenario, Silvia Coicaud points out, that the (Coicaud et al., 2021) "Didactic and technological knowledge, one must be aware that it is essential to learn to teach differently from how we were taught" (p.102), the socioeconomic environment was disrupted, therefore the didactic inventiveness would also have to be modified.

Sánchez Delgado affirms (2005) that "Didactics is not to prescribe what should be done, nor to apply what others say should be done, but to reflect on what is done and why it is done" (p. 225), especially in special junctures such as the one we have experienced in the last three years, Sandoval maintains (2020).

"The didactic teaching strategy where technological tools are linked allows the educator to

identify their different skills to be used in the classroom" (p. 27), it is necessary to generate synergies where technologies are the binding instrument in the process of generating significant ideas in the management of university knowledge.

A didactic resource is interactive communication, taking into account the virtual classroom as an official channel, however as it emphasizes (Muñoz-Covarrubias et al., 2022) "communication by informal means such as text messaging and e-mail is possible" (p. 36); The interaction between university students is vital for the generation of confidence in the process, which necessarily implies leaving dosed schemes to find viable strategies that contribute to the generation of new knowledge.

Teaching presence in higher education in the virtual scenario

The changes that had been driving the teaching-learning process with emphasis on learning were somehow interrupted by the scenario of the COVI-19 pandemic, the changes from learning by objectives to learning by competencies had a setback in the social context, at least it is what is perceived in higher education in Arequipa, While the new center of the process is the student, as they point out in the Journal of Pedagogy, (Sánchez-Báscones et al., 2011) "It implies focusing fundamentally on offering tools and means so that it is the student who autonomously controls his own learning process and accompanying him in this task to guide him and help him overcome the difficulties he encounters" (p. 61).

It is necessary this resizing of the teacher Pattier and Reyero (Pattier & Reyero, 2022) state that "Educators must be careful not to save significant cognitive workload with technology" (p.237). A study by Giraldo and colleagues shows that (Giraldo et al., 2015) "

It can be said that, to a large extent, the success of the educational process is determined by the verbal and gestural communication of the teacher" (p.45), qualities that can only be shown in a class with its camera on, showing itself as it is; The ideal would be the face-to-face teaching experience, but given the case of the pandemic, the least would be their virtual presence.

In recent research Rojas-Montero and Diaz Better (2018) , They point out that for the effective achievement of the training requires that the teacher manages to establish an early empathic relationship with the students.

"This should be promoted from the cognitive and affective aspects, because in the case studied the dimension of the management of meanings is privileged in a relevant way, which generates few spaces to promote the management corresponding to the affective and social part, factors necessary for the construction of knowledge in the current information society" (p.40)

The presence of teachers is vital in the process of knowledge construction, thus Obando-Correa et al., (2018) point out that "Teaching and learning under a socioconstructivist approach in a virtual learning environment favor the interaction and distribution of teacher presence" (p.40), however it is necessary to take into account the new scenario and the conditioning of the

environment, Aguilar (2020) states, "It is necessary to make an education really situated in which the subjects and their contexts are fully considered" (p. 221).

So it is necessary to diagnose this scenario, in many cases other socioeconomic conditions make it impossible to develop adequately apart from adequate didactic strategies.

Confidence in higher education

An aspect little treated in higher education is the generation of confidence in the didactic process, a recent study indicates that "Trust is a pillar of modern social life, contributes to generate networks and social networks essential for personal fulfillment" (Conejeros S et al., 2009, p.32), making it a crucial element in the learning decision; in the perspective of a successful educational model, as Acuña & Acuña points out "a successful education model, based on "trust" which we must implement to the extent of our reach, starting in homes, and multiplying it in our environment, until reaching Educational Institutions " (Acuña Barrantes & Acuña Porras, 2014 p.199).

If we see from the opposite perspective, without confidence cognitive development would not be possible, there are logical conditioning in the didactic process. Among the many factors why students drop out of college, López-Aguilar et al., (2022) .

The accelerated change to a virtual modality in a university in which teaching has always been taught in person, the lack of peer support, the inability of many teachers to make the transition to the new training scenario" (p.251) among other reasons that contributed to academic abandonment. And it is that there is an increase in the sensitivity of the student regarding to conclude their professional training.

Among the qualitative aspects of the teaching-learning process, is the confidence that is acquired from the personality of the teacher, the openness to dialogue, the interaction is vital in the development of learning, and Zambrano et al., (2021) recognized that in "The personality of the teacher significantly affects the relationships he maintains with his students in the organization of the teaching process" (p.50), which has a significant impact on the final result of the achievement of the competence. In turn, it is necessary to include teacher satisfaction in the analysis, Saiz and other researchers point out that "teacher satisfaction was also conditioned by the satisfaction perceived in their students" (Sáiz-Manzanares et al., 2022 p. 38).

In numerous analyses of university didactics the teacher-student interaction is shown as an indissoluble rational seasoning in the learning process, however that interaction is only possible from the moment a dialogue is generated, a communication between the teacher and student, Flores affirms that "communication allows to generate an eminently relational climate, which must always be proposed by the teacher explicitly or implicitly, and according to the results of the investigations it must be characterized by reflecting a closeness, without fear and with limits; as an element that promotes trust" (Flores-Moran, 2019) p. 199).

That is, without communication the value of trust could not be generated, which would impede the process.The perception of competencies in the socioeconomic scheme implies teamwork, collaborative learning goes beyond the formation of academic work groups, it is sustained in what Cardona and Calderón (2010) point out "trust is associated with the possibility of cooperation and, therefore, with teamwork and the collective construction of knowledge" (p.76), various investigations agree on the need to generate trust as the transcendental pivot in the teaching-learning process; in turn, Cajigal (2021) highlights "The personality variable showed that confidence and attitude are areas of opportunity in most teachers" (p.15), strengthening confidence contributes to the achievement of results in the university teaching-learning process.

Results

To obtain relevant results, the chi-square was applied around the answers of the two specialties, both Public Relations and Journalism, obtaining a result where critical chi-square is greater than the calculated chi-square, therefore, there is no relationship between both variables, as shown in the following table.

Table 2: Chi-square test for the two specialties of Public Relations and Journalism

Calculated	4.61917707
Critical	9.48772904
Probability	0.05
Degree of freedom	4

That is, the motivations and confidence of students of both specialties do not generate differences, since they are perceived indifferent for reasons of specialty.

On the other hand, the test was applied to determine if the answers generate differences around gender, where in the previous way the chi-square was applied, where the following results were obtained.

Table 3: Chi-square test for both genders, men and women

Calculated	6.63954099
Critical	9.48772904
Probability	0.05
Degree of freedom	4

In this case it is perceived that critical chi-square is greater than the calculated chi-square, therefore, there is no relationship between both variables; In this sense, neither of the two segments studied demonstrates a causal or dependency relationship, so that independence can be affirmed around both specialty and gender.

Table 4: Statistical summary of teachers who turn on their camera with number of courses they take

	Courses they take	Teachers who turn on camera
Stocking	5.94488189	2.61417323
Typical error	0.09829638	0.15330678
Median	6	2
Fashion	7	1
Standard deviation	1.10774393	1.72767963
Sample variance	1.22709661	2.98487689
Kurtosis	0.26843954	-0.28730503
Asymmetry coefficient	-0.4236234	0.89692256
Rank	6	6
Minimal	2	1
Maximum	8	7
Sum	755	332
Account	127	127

Considering the 127 students of the two specialties who enrolled in a median of 6 subjects, only two teachers interact by turning on their camera, that is, only a third interact directly with the students in their virtual auditorium, two thirds only their voice is heard, which in terms of trust is limited because it is a basic condition to generate confidence in the didactic process.

As for dispersion indicators, the distance is between 1.10 and 1.72, which means a dissociation that does not affect enough to influence the overall result, it contemplates a non-significant average. However, the basis for building trust is in the teacher-student dialogue, Vergara et al., (2022) concludes that "with respect to teachers that trust, the option for dialogue and participation are still present as a hallmark of pedagogical work even in an adverse scenario such as the pandemic" (p.11);

In this case, verbal exchange in real time is the effective way that dialogue generates trust, a substantial ingredient in the creation and innovation of knowledge. "The construction of trust must accompany the teaching and learning process" (p.38), the authors point out that "Trust is a pillar of modern social life, it contributes to generating networks and social networks indispensable for personal fulfillment" (Conejeros S et al., 2009 (p.32)).

In turn, the teacher present will have the ability to discriminate ineffective strategies, assuming responsibly the generation of the meaningful concept, (Torrego González & Fernández Manjón, 2022) "identify the best practices that have worked in the pandemic to learn from them and be able to generalize them to other environments and future situations" (p.23).

On the other hand, the sociocultural aspect implies a closer relationship with the environment. (Badillo-Mendoza, 2013) point out that "The dynamics of social studies have these incidences, hence a fundamental conclusion is the need to strengthen studies of this type on a sociocultural perspective" (p.200).
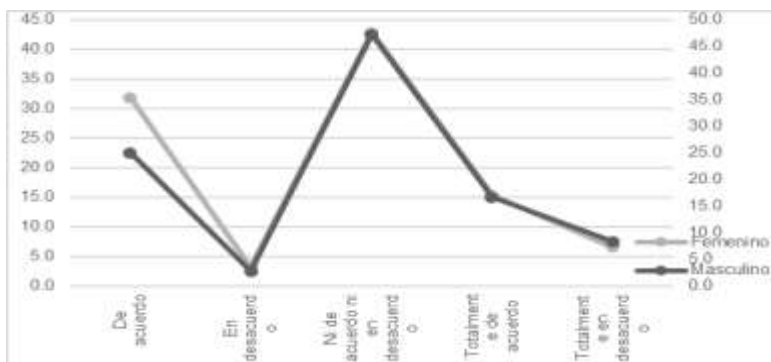
Figure 1: Motivate to attend virtual class

Note. Research results

Without considering other factors only and exclusively the presence of teachers, it is observed that the students, both male and female, have a not very significant focus, only a third of the students agree the majority is indifferent, reaching 45% of those investigated. There are other reasons that are not very relevant, in recent research (Hernández-Sellés et al., 2023) shows that "for this group, tasks focused on teaching performance are more relevant than a "personal" role" (p.51). And it is that the previous phase of trust and interaction end up being the bases of this motivation of assistance.
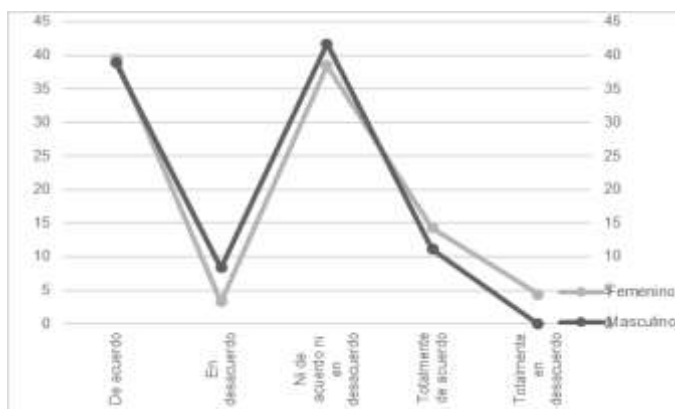

Figure 2: Motivate to participate in virtual class

Note: research results

Regarding the participation of students in virtual classes, 40% is motivated by the presence of teachers, the teaching influence is greater, corroborating that meaningful learning is nourished by the teacher-student interrelation, "The presence of the teacher is also required in the explanation of the operation of the course, in which, clearly, the premises and mechanisms of the course process are determined" (by Aguinaga Vázquez et al., 2009 p.7).
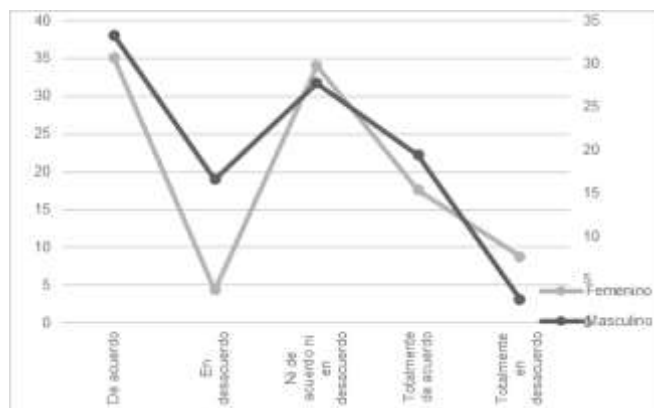
Figure 3: Builds trust regarding subject mastery

Note: result of the investigation

Another aspect that is usually presented, is the mastery of the subject added to the teaching presence in virtual classes, for the female sector it is 35%, for the male, it reaches 38%, the results are not conclusive regarding the teaching presence, however if it is a fundamental ingredient in the didactic process, as shown by the research. In turn, in the virtual scenario, both the participation of the students, the reason for attending and the mastery of the subject consolidate the didactic process in its various processes.

Discussion

Among the most accurate discussions of recent years in pedagogy, the dissociation of technological advances with social and cultural processes is perceived, the former depend on investment in technology, the latter on the traditions and customs of those who exercise pedagogy; it is possible that there are many technological tools, but cultural changes are always slow, apart from some relevant conclusions analyzed by Aguilar Torres & Flores Hernández (2022), point out that "mediate the construction of knowledge, favor the consolidation of learning, influence / co-participate in academic training, as well as in the life of another human being; they are functions expected of him" (p. 453). The implication of the presence of teachers in this process is decisive.

Virtuality has generated this discussion again, where the dictation of synchronous and asynchronous classes have relevance, however the teaching presence must be out of discussion on the premise that new knowledge in the didactic strategy is generated from the teacher-student interaction, De Pablo Gonzales affirms "they ignore the role of the teacher in online teaching since for this model the role of the teacher is face-to-face and the contents serve as support for the development of the entire pedagogical scene"(De-Pablo-Gonzales, 2015) (p.63). It is reiterated that the presence of teachers is not inclusive in the didactic process, but inherent in the teaching-learning process; in turn, "Trust reduces the crisis situation and avoids reaching an

alarming situation" (Juan R. Coca & Juan Luis Pintos, 2009 p.231), considering that the post-pandemic attitude of society in general has dissociable signs generating permanent social crises, at least that is what is perceived in our country.

Another aspect under discussion is the high rate of indifference of students for the presence of teachers, there are two hypotheses, on the one hand, that the fact of the presence of teachers in the teaching-learning process is understood and on the other hand, that students have entered a process of indifference considering the context of social anomie.

Conclusions

In the Professional School of Communication Sciences of the National University of San Agustín, in the virtual scenario assumed in the pandemic process, different didactic forms are presented, both synchronous and asynchronous classes, in all cases the teaching presence is crucial in the affirmation of new knowledge; A third of students in both genders show the need for teacher presence to attend classes, on the other hand 40% consider determinant for participation in class, considering that the affirmation of knowledge is in the student teacher interaction. The other relevant aspect lies in the trust that is generated from the presence of teachers; So we consider that the teaching presence is not a contributor to a better process, but rather is inherent to the process, without the trust generated from the teacher-student interaction, the didactic process would be null.

The research shows that on average, of six subjects taught only in two subjects, teachers show themselves and generate interaction and direct dialogue, which means that only a third show motivation and confidence in the teaching-learning process; It is necessary that in virtual scenarios teachers consider that the valuation of their activities is in the response of students, so it is urged to motivate this greater participation, its mere presence strengthens university pedagogical strategies. Another relevant aspect is the mastery of the subject by the teacher, if it is possible to generate the synergy of the teaching presence and the mastery of the subject, the significant process of generation and innovation of knowledge would consolidate both motivation and the generation of trust, an issue that is still perceived in a third of the student population, It is an unfinished task.

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