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Original Article

Better Taming Distance in Online Training; Technological Innovation

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Abstract *- The fragmentation of Internet technologies in various areas of life disorients the two spatio-temporal landmarks so much perceived from the fixed parameters. However, the experience of time and space now lived with the emergence of new sociability proves that human relations are formed outside the absolute character of metric distance while freeing themselves from synchronous temporality. Digital progress in distance learning refers to the erasure of distance in favor of proximity. Technological tools have defied the variable of time while they have succeeded in bringing together physically and geographically distant actants. From this nail, the article will briefly visit some of the consequences that have the emblematic questioning of distance to distances and that have laid the first foundations on the constraint of presence, which is often talked about as a factor contributing to the motivation and commitment of learners in a distance learning course. In the same conceptual dimension, the work will also focus on some pedagogical practices that are imbued with the contribution of the social sciences to rethink distance pedagogy better. Undeniably, the technological boom has made the feeling of presence possible through interactive managerial practices such as collaborative work, the creation of a Learning or Practice Community and hybridization. In addition to the different distances, the present work will begin with a simple mapping of distances, since it is a question of distances, then make a brief outline of the concepts, proximity and presence, often in cohabitation with the term of distance. The second part will be dedicated to some research with the ambition of demonstrating the interest of building a remote presence and to what extent it is closely linked to the socio-emotional involvement of learners. What are these distances to be tamed? What terminology arises in the context of distance Learning? To what extent does the new technology contribute to establishing a remote social presence?*

Keywords *- Distance(s), Social presence, Proximity, Tools and Strategies, Taming absence.*

1. Introduction

How can we establish a "remote connection »? A subject strongly embedded in online communication has given rise to a literature review that studies distance and all the terminology that comes with it. From Geneviève Jacquinot's first question, "Taming distance and eliminating absence? in the thematic issues of Distances et savoirs in 2011, distance is of significant interest in these studies, which have paved a fairly fertile ground in teaching. The controversy caused by the distance constitutes a real challenge in the context of FAD and at the epicenter of methodological concerns seeking to take advantage of the new technology.

From the outset, carrying out a "Remote presence between learners and the teacher in e-learning is one of the success figures of educational communication. Although this mode of communication is topical, few scientific and engineering studies have addressed the question of distance point of view. The majority approach distance learning from the point of view of presence and not distance. Thinking about readapting in distance mode in that face-to-face classes are made of pedagogical practices would not be the first obstacle to distance learning. Obviously, a change in teaching modality should generate a new pedagogy that is simultaneous with technological innovation, but the pedagogical reaction to digital integration sees the traditional methods of teaching as inherited or hosted in this new environment. In addition, a better understanding of the conditions and processes for creating a presence despite geographical, physical, socio-cultural, cognitive and technological distances gives rise to theoretical and practical models. «There is nothing more practical than a good theory. " They underlined the scientific and pedagogical issues and challenges of social presence in e-learning, offering an attractive and captivating online learning environment which also allows new learning possibilities to be explored. The (K.Lewin, 1946)media devices (educational audiovisual and multimedia, videoconferences, interactive

digital technologies, virtual realities) work to integrate presence in the distance, in other words, how the teacher succeeds " *psychologically or " mentally* " present while being physically absent.

Online, in the construction of knowledge, collaborative learning only seems possible when the subjects have something in common. This article will begin with a theoretical foundation that identifies the six types of distance, showing how this notion evolves with the terminology that outlines it. Then, two learning models in a virtual course will be visited to explain that learning takes place within a community with the ambition to demonstrate an interest in building a remote presence and to what extent it is closely linked to the socio-emotional involvement of learners. What multiplicity of new distances was discovered? What terminology arises in the context of distance learning? What is the tendency to erase distance in the guise of thinking about presence at a distance? To what extent does the new technology contribute to establishing a remote social presence?

2. Distance in Evolution

2.1. Distance, a Multidimensional Concept

According to Jacquinot, distance is a constant that is quite nestled at the heart of the pedagogical relationship. Indeed, FAD is mainly aimed at offering learning to a public that is not able to attend schools, that is to say, to overcome distance and to bring the " *Know at home* ». By a most stripped-down deduction, distance Learning differs from face-to-face training by the erasure of the spatial presence of the teacher and the learners: " (F.Henri & A.Kaye, 1987)*the teacher and the student are separated* » (*op.cit.*, p. 10). As far as temporal separation is concerned, it is intrinsically linked to the spatial distance from which it derives: " *Teaching and knowledge acquisition activities are separated in time and space* ». This distance couple can still be seen as the foundations of FAD and the implications it entails: " (V.Glikman, 2002) *This definition has fixed the framework of practices as well as that of analysis by retaining only a vision of the organizational modalities of the training provided reduced to work-study programs, either in person or at a distance*. » (D. Peraya, 2011).

However, in its title, "*Taming distance and eliminating absence?* Jacquinot (1993) identifies several forms of distance: geographical, temporal, technological, socio-cultural, socio-economic and pedagogical that occur from this initial break in the pedagogical relationship. The author examines their essential characteristics and the complexity between advantages and limitations. Each distance has a potential value for the quality of the training system. Digital technology is now an integral part of the " *Toolbox* of the communicator. But behind this craze, it seems that there are mechanisms that lack alignment convergence and have counterproductive effects. (E.Brunelle, 2024) Paradoxically, in an FAD, the distances that separate the actors are those that reduce travel costs at the discretion of the learners and trainers. Even then, it was known that " *Managing this temporal distance between the learner's requests and the institution's responses (...) is one of the fundamental factors in the quality of supervision* » (G.Jaquinot, 1993). It is still appropriate to alternate between face-to-face and distance Learning, thus compromising the freedom and flexibility that distance Learning provides. The flexibility and asynchrony on which many projects are based are opposed to the constraints of synchronous groups, considered as a guarantee of effective supervision and as a key to student success.

Consider another case, that of socio-cultural and socio-economic gaps. Following the concept of the Open University, many distance universities, known as "open", have developed educational and social projects focused on teaching second chances to a public excluded from the education system during their initial schooling. However, according to the author, it is difficult to bridge this distance. The gap widens more and more with the pedagogical distance. A distance that, according to Jacquinot, is difficult to tame and arises between those who " *must and wants to learn, and he who knows and wants or must learn* ». (G.Jaquinot, 1993) Michel Serres, the "*A university without distance*", so hoped to reduce "*all the possible distances between the sources of knowledge and knowledge and those who wish to learn and tame them.*». This two-dimensional pedagogical distance affects the two poles (D. Peraya, 2014). *Houssaye educational triangle* (1988): the first dimension of teaching links the teacher to the learner. It constitutes the pedagogical axis, while the second axis of learning is the bridge between the learner and the sources of knowledge, including the teachers themselves. Pedagogical distance alone carries constraining and interconnected double distances (J.Houssay, 1988).

With reference to other typologies of distances, Didier Paquelin (2001) proposes two forms of distance: distance *cognitive* and distance *pragmatics,* which refer to Jacquinot's pedagogical distance. While the former distinguishes the *understanding of content,* the second refers to *the ability to put theories into practice and formalize concrete problems* (D.Paquelin, 2011). The author refers distance to the axis of learning and defines it as cognition and mastery of cognitive processes.

Inspired by the contributions of Rabardel's work, Cédric Fluckiger contributes to the first volume of *Where does the distance go ?* to study instrumental genesis in learners of all categories and discuss the advent of other forms of distances born from the use of technologies in different formal and personal digital environments. Based on empirical results, it is clear that students, although they "*have a range of tools for interpersonal communication and access to training (CREDOC 2009), as well as deeply and durably established habits of use (...) however, if students communicate a lot in*

general, they do so relatively little in an educational environment. » (Despite their excessive use of Web 2.0 to connect to social networks, the observation reveals the limits of integrating Web 2.0 into collaborative and participatory distance learning in higher education. (C.Fluckiger, 2011) Distance is evolving and following fashion. Jacquinot (1993) and Paquelin (2011) classify distance into eight distinct forms, in addition to two other distances: cognitive and pragmatic. It would seem tricky to operationalize these distances to a quantitative degree that by the quantitative approach, "*The difference must not be too large or too small: only a 'good distance', a melting pot of proximity, can maintain the efficiency of the system*». Thus, the feeling of isolation is created independently of the frontal or distanced communicative situation, and any presence is felt as a form of psychological and mental interaction and not as a physical proximity. (D. Peraya, 2014).

In their experiment with integrating tools into distance learning platforms, Philipe Dessus and his colleagues (2011) attempt to provide answers on the new emerging and measurable kinds of distance. Their work was already based on the observation that there is a pedagogical gap between what the teacher knows and what the learner knows, and they describe this gap as a cognitive and/or epistemic distance. *Chore*, *CONSPECT*, and *PolyCafe* (P.Dessus, et al., 2011)are the three applications integrated into the platforms that make it possible to objectify distances: "*Semantic distance*» *intratextual* concerns the phenomenon of incoherence within students' written productions, "*Individual cognitive distance*" found in different productions of the same learner in time or compared with others and "*Social cognitive distance*" studies the students' speech acts in turn in mediated communication devices and which highlights each interaction in the group dynamic and the collaborative process. (D. Peraya, 2014).

Each human activity is determined in a spatio-temporal framework where exchanges are transmitted through verbal or non-verbal language. In physical presence, bodies are the vehicle for verbal and non-verbal communication; communication hosts both languages to give meaning to a task in a specific place and time. As in training, where physical proximity is not without distances, online training of geographical distance and, therefore, of physical separation can be experienced in proximity. As a result, distance and proximity are influenced by the experience of learners and trainers as psychological and social subjects in their interactions with each other. They are not breaking away. The different definitions of distance in training are coexisting. According to Jacquinot (1993), in addition to those related to distance, there are four types of distance presented briefly: "*technological distance*" refers to the ease or difficulty of access to distance learning platforms and associated technological equipment; the "*Socio-cultural distance*" refers to the separation between the world of instituted training and those excluded from the education system; the "*Socio-economic distance*" refers to the difference between the investment in training and the return on this investment; finally, Jacquinot also mentions the "*Pedagogical distance*" which separates the person involved in an apprenticeship and the one who has received an apprenticeship. (G.Jaquinot, 1993)

In addition to these different distances, another form of distance is added to the "*distance cognitive* " the "*Relational distance* mentioned by Kivitsioglou-Vlachou and Moussouri (2010) is specific to the close relationship between the modalities of interactions between the trainer and the learner or learners. This aspect is assimilated to " (Kiyitsioglou-Vlachou & Moussouri, 2010) *The didactic distance* to signify the exchange and dialogue more or less generated by their interactions. The "*distance cognitive »* taken up by Gavelle and Maitre de Pembroke (1999), is introduced by the differences existing between the cognitive capacities of actors. As for Linard, he attributes more to the meaning of (Gavelle & Maitre de Pembroke, 1999) *Intrapsychic* (M.Linard, 2006). Jézégou tends towards distancing rather than distance: " *To this cognitive distance by characterizing it by an absence of mental capacity to distance oneself and therefore to take a step back from one's actions, to become aware of the mechanisms of one's thought; rather than cognitive distance, it would be more appropriate to use the terms 'cognitive distancing' from oneself in this case*. » (A. Jézégou, 2019).

Paquelin (2011) mentions the "*distance proximate*" based on a necessary and optimal distance between the trainer and the learner. To these various forms of distance, Kivitsioglou-Vlachou and Moussouri also refer to that of " (D. Paquelin, 2011) *Sociolinguistic distance* «: it results from the asymmetry between the linguistic code in correlation with the social belonging of the learners and that of the trainers. Added by Bourdet, the " *Language distance* between the acquisition of a foreign language and the knowledge acquired during the daily practice of the native language. According to Esch (1995), the " (Bourdet, 2010)*Interpersonal distance* between the trainer and the learner is intended to be a more or less strong emotional bond. According to Dessus (2008), the " (E.M.Esch, 1995)*Epistemic distance* " that may exist between the knowledge established by the trainer and that in the learner's construction is suggested. In addition to these aspects, the " (P. Dessus,2008). *Social Distancing* " that separates the people present (trainers and pairs) can also be mentioned. This social distance can be explained by the social status and roles of each of them, which is reflected in the nature of their relationships (Fisher, 1999). According to him, the author also refers to the " *Socio-cultural distance* which is manifested by the disparities between their belonging to a social category, an ethnic group or an age group. (N.Fisher, 2015) The " *Educational distance* can also be conceptualized as the gap between two logics: that of the subject in training (his motivations, objectives, strategies, ambitions, etc.) and that of the educational institution (industrialization, mass

hetero-structured training, individualization). According to Jézégou (1998), *educational distance is the most important factor* when these two logics cannot intersect. Within this list of possible distances in training, there is one which, so far, is the most theoretical: the "*Transactional distance*" is perceived as a psychological and communicative environment where interpersonal exchanges take place between the trainer and the student. According to Jézégou (2007) (M.G.Moore, 1993), *Transactional distance* can be applied to any form of training, whether or not it is subject to spatio-temporal separation, resulting in a physical separation between the trainer and the learner. According to Moore (1993), this form of distance depends on two factors: first, the configuration of the training system, and second, the conversation that takes place between the trainer and the student (A. Jézégou, 2017). Such a list shows that the distance in training is not only metric or geographical, contrary to the meaning of this notion, which is generally given. In this way, distance can take different forms, both in situations of physical proximity and in situations of spatio-temporal separation of structures. Thus, distance, which is polysemic, is a concept with variable geometry. This mapping of distances shows that they are not necessarily born of a physical absence. Marking a presence does not necessarily require physical contact, but absence could force the feeling of distancing.

2.2. Distance, Proximity and Presence

A range of meanings are found in FAD, which several researchers often talk about in articles. From *absence to be eliminated* (Jacquinot, 1993), *Generating proximity* (Jézégou, 2012; Paquelin, 2011; Peraya, 2014) and *compensate for geographical distance* (B.Blandin, 1999), all of them orient the pedagogy towards collaborative and tutoring approaches and the diversification of tools. Accessibility to the digital services of the social Web thanks to the multiplication of technological resources, geographical distance is being bridged, and individuals are getting closer, allowing them to experience proximity according to the use they make of the mediatized supports of their social relationships (inter/intrapersonal. Thus, so many distances correspond to the same proximities: pedagogical, educational, didactic, cognitive, relational, linguistic, and social proximities. A double observation is made: "*there are possible distances in physical proximity and possible distances in geographical distance* ». *(*A. Jézégou,2019).

Although distance/proximity forms a couple of oppositions, they are also inseparable and complement each other. The relationship between the two concepts leads to a hierarchy that places proximity at a higher level on the scale of values, "*Thus, proximity conveys an affective force, usually evocative of conviviality, solidarity, authenticity and even rootedness. On the other hand, distance is often considered to be endured, devoid of social relations and affectivity* ». The research carried out by the American anthropologist Hall (1971) on proximity supports the idea of a hierarchy between the two notions, and according to the (A. Jézégou,2019) *"proxemic law"* (E.T.Hall, 1971), it is better to be close than far away, since proximity is generally considered important in relation to distance. This stigma comes from representations, but the value of each is closely linked to the context and varies according to the situation. Thus, distance and proximity, often presented as competing, have different perceptions, and neither is privileged over the other.

E. Morin (1977) rejects a dichotomous perspective of the "distance-proximity" pair, which is based on systematically dissociating what is considered opposite even if it is inseparable and complementary. It is not only about disjunction but also about complementarity and competition, and it is possible to establish coherence between the two notions and to make them coexist in order to constitute a complex unity that takes into account their singularity while preserving their duality (E. Morin, 1986). As for presence, it contributes to reinforcing this complex unity (A. Jézégou 2012). Presence is part of the register of relationships as a fundamental form of human sociability. E-learning favors the reduction of distance and the creation of proximity, even if the people in the relationship are geographically distant within a digital communication space.

Technological advances in the tools and services of the social web, as well as their increasing use in training, reinforce the dialogical conception of the " *distance-proximity* " couple by introducing the intermediate dimension of presence. We can thus summarize the relationships between these three main notions: distance, presence and proximity. The stronger the presence, the shorter the distance and the stronger the proximity. Presence would, therefore, be inscribed and evolve on a continuum whose extremities would be distance and proximity, respectively:

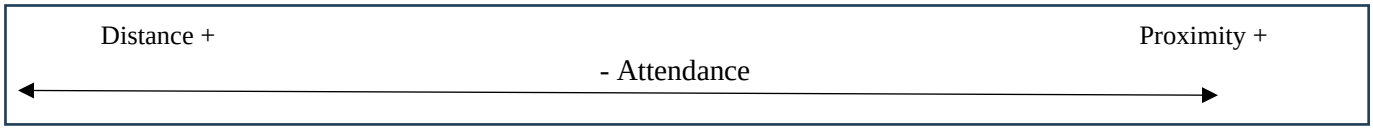

Fig. 1 The continuum of presence in the dialogical couple "distance-proximity"

Jézégou (2018) attributes a double facet to presence, as it has both an imaginary and an objective dimension. The author explains that the student manages to feel the proximity and overcome the geographical distance that separates him from his interlocutors (trainer and peers). It can be felt and experienced despite the spatio-temporal constraints (access, temporality, rhythm and place more or less precise) and technical constraints of online training (connectivity,

technological dependence, instrumented interactions, self-training and/or collective activities). Resulting in (A. Jézégou, 2019) *a felt proximity.* It insists on the degree of creativity and commitment of the trainer among students who are physically separated, which can also create a sense of belonging and a common and collective living of presence. Such teacher engagement leaves learners feeling so close and becoming aware that "the *proximity* is only an imaginary feeling and not effective in the context of distance.

The salient presence of the trainer built by the connivance is linked to emotional forms and very real socio-affective feelings breaks within the three units (space-time-action). Presence as an intermediate parameter of the dialogical couple "*distance-proximity* is different from the imaginary framework and can be reinforced by certain mediatized social forms to reach the objective dimension. As a result, the feeling of presence (imaginary) and the tangible (objective) lived presence coexist in a technically instrumented collaboration strategy. This form of presence is communicative, as is the proximity it induces. (A. Jézégou, 2012)

3. Key Practices for Getting Closer

3.1. Distance, Another Way of Teaching

In e-learning, in the absence of non-verbal interactions related to face-to-face learning, distance often places the learner at the center of the system, and the teacher, in a proactive posture supposed to foresee obstacles. The learner tends to be more autonomous and self-regulating in his learning. Completing homework on the device requires the student to determine the time alone and to show responsibility. The tasks usually prescribed for both actors require great care with distance. In this sense, distance forces the teacher to think about his pedagogical activities asynchronously and to put himself in the shoes of the trainees. « *The distance audience is not a captive audience, and it is a rather heterogeneous audience where each person has their own time constraints. Thus, it is necessary to plan work that takes place over longer time slots than face-to-face sessions. Synchronous activities are possible from time to time, but they must be planned in advance* ». (PONTS, 2020)

Interactions in distance Learning favor written and multimedia communication. Distance increases the attention given to the course material as a captivating and attractive means of rewarding the absent teacher. As much as postures differ, as much as methods are reinvented, from the face-to-face form to the distance form, practices should adapt to distance hybridization or work-study training is a teaching system that complements each other in order to tame distance. As opposed to the work plan, the scenario is more complex since it takes into account all the dimensions of the system. Even if face-to-face training requires the structuring of units, distance implies media coverage by technological means. It requires more advanced formalization because of the trainer's lack of proximity to a diverse audience. He is forced to formalize his approach more than in person by including not only the course outline but also:

- *the training objectives*
- *pedagogical approaches*
-*Synchronous and asynchronous planned activities*
- *the resources available*
- *evaluation methods*

Socialization and the *Informal*: All practices that aim to reduce the psychological distance between team members aim to strengthen social connections with the cognitive aspect. Like any pedagogical relationship, e-learning is part of a socio-cognitive framework governed by the new sociability that is being established through the Internet. The efficiency of communication depends on interactivity, *Intentional* (Man-Man), and *instrumentale* (Human-machine). Designers need to ensure that their team can interact in chat and chat environments to create learning opportunities " (D. Peraya, 1999). *In organizations, socialization is often seen as a loss. We are wasting time and money. But no, it is an investment! When people know each other better, they communicate better. There are fewer conflicts, and they resolve them faster. And they are more effective at finding solutions to lessen the impact of bad processes, for example*. ». (E.Brunelle, 2024)

Distance learning is also about the effectiveness or, at least, the proper use of the toolset. Indeed, while many systems recommend a form of standardization in order to allow a maximum of teachers or learners to benefit from it, it does not necessarily lead to the satisfaction of special needs. Teachers value tools that give them a margin of freedom in order to put their pedagogical skills into practice and create learning situations. Learners judge the "good teacher" to be the one who is available to them at their request and who lends them active listening by varying the methods and opting for techniques of animation of pedagogical communication (gamification, group dynamics, management of emotions) " *The taste for learning is the most important attitude that can be formed*. ». Trainers must ensure that all their students can combine their knowledge with know-how outside of an academic framework. (J.Dewey, 2006)

Undeniably, the socio-emotional aspect seems to be the catalyst for learning and on which socialization is based. Through it, exchange and cognitive sharing overcome the obstacles. "*In organizations, socialization is often seen as a loss. We are wasting time and money. But no, it is an investment! When people know each other better, they communicate mieux.il there are fewer conflicts, and they resolve them faster. And they are more effective at finding solutions to lessen the impact of bad processes, for example*. ». Indeed, by what means can we create a presence and experience a closeness felt in virtual teaching? (E.Brunelle, 2024) Research does not seem to go in this direction of providing ready-made answers; rather, it opens up avenues reflecting on the question of creating an environment that

challenges learning and experiencing a palpable sense of proximity in distance learning. On the subject of the informal sector that promotes rapprochement: " *You have to learn to provoke it and to trust the teams: they too have ideas to create them. It is fascinating [to hear] the stories when you do the exercise. The original solutions that emerge from there* ! ». (E.Brunelle, 2024)

Among the possibilities that studies talk about is hybridization since it orients the process towards learning by proposing complementary alternatives to each other, highlighting strengths and reducing gaps. Hybridization sets up a wide variety of choices and offers an individualized system that responds in a non-standardized way: "*It offers learners the qualities of a tailor-made product in a world where the tendency is to believe that it is possible to answer multiple questions in a standardized way.*». Suppose the hybrid system succeeds in promoting proximity and responding to different learning styles. In that case, the notion of the community housed in learning models is updated by authors with the increase in e-training. At the theoretical and epistemological level, key concepts are the foundations of these models: (B.De.Lièvre, May 2014) *of learning community, of contradictory collaboration and of collective agency.* (A.Jézégou, 2019).

Far from confusion, the community is different from a formal group or a group of friends. The community is created by the will of a superior member or of the same rank (colleague): "*A community refers to a flexible organization oriented towards a goal shared by its members. ».* (A.Jézégou, 2019). Driven by personal needs, the members of a *community* come together to develop a collective activity, and they give birth to sharing and community building. Consequently, from the constructed *community* comes from a micro-culture considered a set of axiology, attitudes and conversational or behavioural laws. In a broad sense, an online or offline *community is defined as "a group of people, volunteer members with diverse and equal expertise, jointly committed to a collaborative approach to solving a problematic situation. This approach facilitates the individual and collective construction of knowledge* ». (A. Jézégou, 2012) Two models come plugged into one type of « *Learning Community »*: the « *Community of Inquiry »* and the « *Community of Practice »*. Like that of the community of practice reinvested by authors, it " (E. Wenger, 1998/2005) *Refers to a grouping of individuals with different skills and opinions but sharing concerns, problems or interests for common action. They deepen their knowledge and expertise in this field by interacting. »* (C.Papi, 2017).

The community of practice is qualified by the reciprocity of commitment, the progression of negotiation and the shared repertoire as common points of the participants: "*Includes routines, words, tools, procedures, stories, gestures, symbols, styles, actions, or concepts created by the community, adopted throughout its existence, and become an integral part of the practice.*» . Therefore, learning through active participation contributes to the development of (E. Wenger, 1998/2005) « *Community of practice »*. In e-learning, this model offers a "*constructive* since it is based on consultation between the members of the group, the sharing of knowledge and the coordination of their actions to lead to the construction of knowledge.

This model of « *presence in e-learning »* takes up the approach of Co-construction (socioconstructivism), the « *theory of socio-cognitive conflict »*. According to Garrison, Anderson and Archer (2000), another model, that of the Community of Inquiry, seeks to propose a conceptual tool for educational experiences mediated by computerized means of communication. The notion of community here refers to a set of individuals who are committed to learning together by following a scientific approach to problem-solving. Knowledge is built by the interaction of the three forms of presence (R. Garrison, T. Anderson& W. Archer, 2010). *Social*, *cognitive* and *educative*. Participants can project themselves socially and emotionally into the community, including the learner's interest in accompaniment (the Proximal Zone of Development) to achieve a social presence. This model, « *Community of Inquiry »* in *e-learning* fact, also refers to the scientific approach to *problem solving* and supports the construction of knowledge through social confrontation, which leaves learners in connection and need of exchange. Suppose the social presence "Corresponds to the ability of learners to project themselves socially and emotionally into the community". In that case, cognitive presence "*Refers to the process of creating meaning through ongoing dialogue and group work, from defining the problem to exploring relevant content and ideas to developing a solution*. As for the educational (pedagogical) presence, it develops in four phases: first, a triggering medium that arouses curiosity and challenges questioning, leading to discovery through the pooling of information and ideas, then the construction of meaning and, finally, the synthesis and application of new knowledge allowing the problem to be solved (C.Papi, 2017).

3.2. Collaborative Technology to Bridge the Distance

A study conducted by Thierry Karsenti (1997) examines how a mediatized course creates motivation and distance presence among students enrolled in « *teacher training at the Université du Québec à Hull »*. The collection of data from interviews, email content and real-time conversations (chat) show that the construction of student engagement is closely linked to their participation rate in a "virtual" course, and their involvement translated into emotions, autonomy, competence and belonging. The Web course was designed through a strategic approach that advocated for means and new technologies of collaborative communication that promote the feeling of competence and allow for more learning. Here is a range of collaborative tools offered (T.Karsenti, 1997)

3.2.1. Glossary in hyperlink

To encourage students' computer autonomy and compensate for the absence of a directly accessible teacher. The online glossary is made available to students who are often invited to extract key phrases from a summary. As the chapter or text in question is read, the student develops and automates the lexicon thanks to the frequent consultation of the glossary available in the hyperlink. «*The student thus uses active reading strategies by highlighting the information that seems essential to him or her and by building analogical structures that allow a thorough understanding of the theory*». (T.Karsenti, 1997)

3.2.2. Frequent feedback:

The 1987 Malone and Lepper study on feedback and *"The phenomenal enthusiasm* for video games highlights the distinctive role of feedback *almost instantaneous*. For online courses, the results of the exercises posted, as well as the professor's comments sent by email, were intended to give students immediate feedback. Feedback allows them to measure their successes and identify weak points where there is still room for improvement. (M.Lepper & T.Malone, 1987)

3.2.3. Distance learning

One might expect an online course to be standard, and students may feel isolated and not very attached to their classmates in the group or class. However, this is not true. The sample in question showed that they really lived closely, reflecting their enthusiasm for communicating with their classmates, the technical team and the teacher. Indeed, this course is designed in such a way as to encourage at all costs the exchange of information and ideas, the confrontation and the exchange of opinions.

3.2.4. From chalk to mouse

Through a range of means of communication (telephone, electronic, paper and others), resources are more available to answer students' questions, even if sometimes the answers are not instantaneous. This shape offers unlimited access to the classroom at any time of the day, with no time or space limitations, while maintaining its comfort.

3.2.5. Electronic communication: - *Optimization of exchanges and systems when necessary*

Students would have recourse to consulting directly with the professor about the electronic means of communication to use six different systems*: e-mail, the electronic bulletin board, the discussion group, the CNTR-CHAT (Communication sur le Net en Temps – chat, chatting), the ICQ software, the CuSeeMe software".* (T.Karsenti, 1997)

3.2.6. Joining the whole class with a single "click"

The discussion group seems to have been the most popular means of communication for students, thus reaching the entire class with a single "click". Some students, more reserved, highlighted their low participation in discussions during classes at the university but that they felt involved in the discussions.

3.2.7. Teamwork

This default online course is done through collaborative teamwork. However, this traditional classroom style of work is subject to several obstacles: a large number of people and difficulty in arranging time and space for the meeting. It seems that this problem did not arise in this online course. On the CNTR-chat site of the course, the exchange is flexible. The students living in the region also appreciated this means of communication, which saved them much travel without preventing them from being in contact with their classmates.

4. Conclusion

The article succinctly touches on the conceptual foundations studied by researchers whose objective is to elucidate the question of remote presence and to propose avenues in terms of tools and software that contribute to taming the feeling of physical absence and establishing a social presence. The contribution of this work refers to a set of recommendations advocating the creation of learning communities and the management of the socio-emotional aspect in a virtual environment as a potential to support social presence and compensate for distance.The media coverage of an online course revealed that there is a strong link between the construction of motivation and the use of certain collaborative information and communication technologies in the field of university teaching. This relationship emerges primarily when the mediated course encourages students to feel self-determination, competence, and belonging.

These three factors that influence motivation would be essential for any mediatized course aimed at efficiency. Distance and proximity in e-Training, as a '*fantasized'* feeling, are irreducible, competing but complementary. In a web course where spatio-temporal, pedagogical, sociolinguistic/cultural distances intertwine, cartography emerges from the distance-presence couple as a relational dynamic explaining how the two terms come together in a dialogical thought.

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