Abstract

New technologies are already part of our lives, so they can no longer be seen as simple resources but as fundamental instruments for the exercise of our own humanity. Blended Learning is a possibility of fusion between virtual and face-to-face spaces. In this work we present a critical reflection on curriculum and pedagogical actions in blended learning, with the aim of showing their interrelations and andragogical nature. The method adopted was the theoretical review, with an emphasis on the epistemological dimension. And the main results were: the cyclical nature of pedagogical action, blended learning as a cognitive and not just a technological phenomenon, the displacement of the pedagogical practice from the simple compartmentalization of contents to social representation, and the identification of the virtual environment as a dimension of factual reality and not as a distance in space and / or time.

Keywords: Analysis. Blended. Learning. Curriculum. Pedagogical actions.
Análise Epistemológica do Currículo e das Ações Pedagógicas no Ensino Híbrido

Resumo

As novas tecnologias já fazem parte da nossa vida, de modo que já não podem ser vistas como simples recursos, mas como instrumentos fundamentais para o exercício de nossa própria humanidade. O ensino híbrido é uma possibilidade de fusão entre os espaços virtual e presencial. Neste trabalho, apresentamos uma reflexão crítica sobre currículo e ações pedagógicas no ensino híbrido, com o fito de mostrar suas interrelações e natureza andragógica. O método adotado foi o de revisão teórica, com ênfase na dimensão epistemológica. Os principais resultados foram a natureza cíclica da ação pedagógica, a aprendizagem híbrida como fenômeno cognitivo e não apenas tecnológico, o deslocamento da prática pedagógica da simples compartimentalização de conteúdos para a representação social e a identificação do ambiente virtual como dimensão da realidade factual, e não como distanciamento no espaço e/ou no tempo.


1. Introduction

The advancement of Digital Information and Communication Technologies (TDIC) has imposed the need for us to rethink both the way we teach and how students learn. This is because, even if we do not want to admit, we are all involved in a process of mediatization of communication and information, each presenting diverse contours, which force us to redesign all our didactic-pedagogical practice.

Blended learning is one of these great challenges of contemporaneity, whose main premise is to promote the fusion between face-to-face and virtual environments, bringing together not only the TDIC, but also the presence of all the characters and resources that contribute to the educational process, exponentially.

If, on the one hand, outside the classrooms students are confronted with a world immersed in the digital universe, on the other hand, the information in this universe takes on meanings so very personal that it escapes the usual problematized molds, not only in the way they present themselves, but also in the way they interpret themselves.

The big question, therefore, would be how to bring together the best of these two worlds in a harmonious, natural and productive way, instrumentalizing the student with all the tools for the acquisition of knowledge and its transformation into new knowledge.

Certainly, the answer to this question would be based on a teaching method capable of establishing a harmonic and productive connection between face-to-face experience and virtual experience - which would lead us to consider the blended nature of information, or rather knowledge. In this sense, blended information would be best understood only with the systematic integration of these two learning environments (virtual and face-to-face).

Therefore, it is not possible to reduce blended learning to active methodologies or learning objects or to simple mixtures. It is necessary to organize the curriculum (teaching) in blended information/actions, which requires the resignification of content according to their respective pedagogical potentials.
Thus, our main objective is to show how to think about the curriculum and teaching actions so that they can be translated into actions, interventions and blended interpretations, giving them a distinct epistemological nature, both of face-to-face teaching and of distance learning.

The method adopted in this research was bibliographic review, since, in order to establish a new theoretical paradigm, it is necessary to review the findings of the research esotopresent, reducing conclusions based on circumstantial evidence and promoting a broadening of the horizon about the nature of the phenomenon studied (DEMO, 1995; GIL, 2008).

2. Some fundamentals of blended learning

That teaching is the basis of education, one cannot question; after all, the teaching process takes place both inside and outside the classroom, formally or informally. Libâneo (2006) states that education can occur in a variety of human institutions and activities, thus being a social practice permeated with pedagogical actions, even if intuitive.

On the other hand, Haydt (2011) adds that, although education can happen systematically, or not, formal education needs to be a deliberate and organized action, based on the use of appropriate methods to guide learning.

It seems obvious to think, then, that reality can be translated into systems of interpretation that can bare the various types of phenomena, considering not only the nature of this reality, but also the way it is shown, from the use of appropriate means to understand and transmit it to generations. In this case, the requirement of the method is paramount, since it is the only rational means capable of making understandable the various nuances of the facts that are presented to us. It is in this sense that Werneck (2006, p.187) teaches that “the construction of knowledge as a learning process of the subject depends, on the one hand, on the development of his cognitive structures, and on the other, on the way in which the contents of knowledge are presented to him”.

It seems clear to us that the method adopted in pedagogical practice depends, among others, on how the contents are presented, on the pedagogical resources used and on the nature of knowledge - which is why, whatever it is, the teaching method must perfectly fit the type of learning desired (face-to-face, distance or blended).

It happens that the spaces of learning and teaching migrated from the classroom to cyberspace (virtual space), connecting students and teachers to realities beyond the walls of the school and the academy, causing the need to resignify the materials and methods that, until then, had been used in the educational process.

According to Lévi (1999), the TDIC showed the presence of a cyberculture, that is, a society that manifests itself, relates and knows reality through new technologies. In other words, for this new society, digital information began to live side by side with all other experiences of human life, promoting a true fusion of horizons, where the virtual and the real are almost inseparable.

In view of this scenario, two aspects arise immediately and are inexorable.

Although TDIC can be used both in face-to-face teaching and distance learning, for today’s society, they are not simple technological resources, but are parts that make up the identity of this new generation; therefore, when adopting DIC TDIC in formative processes, we must consider that they should adjust to this new paradigm, under penalty of simple addition of novelties to the old lifestyle. And this aspect can very well be translated through the words of Santos, Zucoloto and Gomes (2010, p.145-146) who under-
stand that if learning is meaningful: “[..] the student builds, modifies, diversifies and coordinates their schemes, thus establishing networks of meanings that enrich their knowledge of the physical and social world and enhance their personal growth.”

In addition, we should also consider that this marriage between the real and the virtual world should reflect the way the student already relates to the reality around him; otherwise, learning will become boring, as it will not represent the current way of life (MORAN, 2017).

For these reasons, Blended learning is the most promising method to overcome this gap between the reality experienced by the student and that projected in his schooling.

2.1 Blended learning in literature: in search of convergences

The literature shows a reasonable number of research papers under the heading of blended Learning. Some, pointing to any mixture between face-to-face and virtual teachings; others, bolder, warning of the use of specific technologies and/or new teaching methodologies. However, all have in common the recognition that new technologies have not only expanded access to education, but also established a new pattern of relationship with reality, reshaping the way we act and work the information that circulates globally.

Souza, Chagas and Anjos (2019) recognize that blended learning is a mixture of face-to-face activities with activities mediated by The TDIC, where the use of active methodologies and computer programs are fundamental resources and practices. In addition, they add that the personalization of education is one of its pillars, since there is the displacement of the teacher to peripheral regions throughout the process, assuming the student the central position. This is because, according to them, in this teaching modality, all teaching practice places emphasis on student learning and not on the fulfillment of content.

It is precisely in this direction that Valente (2014) teaches that the remarkable presence of DICTs in all areas of human activity, including education, has generated the need to (re-)adapt teaching methodologies, requiring the customization of the educational process, since, in the end, it seeks to privilege students with all the knowledge that permeates the current society.

The great diversity of possibilities for blended learning is something very present in the literature, corroborating not only for the variety of personalization of education, but also for the various possibilities of understanding about this type of teaching. In fact, in a recent study by Rosana dos Anjos, Silva and Alexandre dos Anjos (2019), it was possible to find 26 occurrences in CAPES Journals, 28 occurrences in SCIELO and many others in different databases (SCOPUS, IEEE, Google Scholar and ACM Digital Library), totaling 523 studies on blended learning.

In the research of these authors, it was observed that blended learning is: “1) combination of classroom teaching with distance learning; 2) combination of traditional teaching-learning with online teaching; 3) combination of curriculum and methods” (ANJOS, R.; SILVA, U.S.; ANGELS, A., 2019, p.208). And in addition, they add that:

The first combination (face-to-face and distance teaching) lists the understanding of blended learning […]. However, this perspective of converging the educational modalities situates blended learning only as a link, which makes it possible to connect the face-to-face with distance, sometimes disregarding other practical strategies and other contexts inherent to this educational model. With this, there is a superficiality in understanding blended learning only by this aspect. In the second combination (traditional and online teaching-learning), the importance of digital technologies for blended learning is evidenced, since the com-
bination is made up of the association of classical educational practices with “modern” practices, that is, blending classroom activities with activities that can be carried out in the online universe [...]. The third combination (curriculum and method) considers blended learning by the mixture of educational methods combined with a more flexible curriculum, and, in general, the combination of methods is explained by the aggregation of content and materials online with offline, being these auxiliaries in the teaching processes and also of learning. The curriculum - then - needs to cover this blended reality, with the prediction of pedagogical actions that move between these blended methods (ANJOS, R.; SILVA, U.S.; ANJOS, A., 2019, p.210, omissions of ours).

At first, it is noted that the simple addition of BDD in schooling processes is not enough to characterize teaching as blended, even if, in each environment (virtual and face-to-face) a different teaching and learning method is practiced. Moreover, there is no guarantee that the flexibility of the curriculum, in one way or another, guarantees a solid identity for this new modality of treatment and interpretation of information. In fact, as already emphasized, the inclusion of BDD in the pedagogical processes of formal education should reflect the new culture of our society, such as that produced outside the classroom benches.

In this respect, it is possible to foresee two interesting facts. The first is that nothing prevents face-to-face teaching from being subsidized with TDIC support; the second is that nothing prevents distance education from occurring with face-to-face moments. However, as stated, neither one nor the other is blended in itself, since they do not represent how we appropriate information in contemporary culture; on the contrary, they are only additions to pre-existing methods.

Now, on the previous question, Lévi (1999, p.114) brings us some important clues that can help clarify the case better. For him, if we really want to understand the mutation that permeates the current society, it is necessary to make a return and analyze “the first great transformation in the ecology of media: the passage from oral cultures to the cultures of writing”, where it was observed that, first, the communicators were inserted in the same semantic universe (oral communication), then, in different universes, no longer dividing the same situations , each being in different contexts (written communication). And finally, he concluded that:

However, it is difficult to understand a message outside of its living production context. This is why, on the reception side, the arts of interpretation, translation, a whole linguistic technology (grammars, dictionaries, etc.) were invented. On the emission side, an effort was made to make messages that could circulate everywhere, regardless of their production conditions and that, as far as possible, contain in themselves their interpretation keys, or their “reason” (LÉVI, 1999, p.114).

Therefore, Lévi (1999) informs us that a change in digital ecology, such as this one that permeates our society, implies the need for new interpretation and appropriate technological linguistics to account for all conditions of information/knowledge production. Thus, it is not a question of adding technology to the method of face-to-face teaching or of adding presence to distance learning, because this, in fact, does not represent the way contemporary society relates to the ordinary universe in the day-to-day; he would lack such keys.

In a study by Santos and Brito (2019), it was stated that TDIC have been used as tools to solve learning problems and/or to modernize education, and this definitely does not characterize teaching as blended; at best, as a technologicalized or more flexible teaching, since the way people relate to information is no longer the same as it was from a long time ago; now they live in a blended universe, where the marriage between the face-to-face world and the virtual world is almost indissoluble. Reason because, according to them: “It is necessary that this combination be thought in terms of blended pedagogical actions [...], and
not as a synonym for categorization of curriculum contents by types of actions (face-to-face or distance) or types of didactic resources" (SANTOS; BRITO, 2019, p.320, our omission).

From what we can observe, the discussions about what is and what is not blended, or what typical methodologies of this type of teaching are still in the process of being built. However, in another paper published by Brito (2020), we can observe more insums to clarify this understanding. In fact, this author states that:

The pedagogical models adopted in blended learning are not only different ways of provoking curiosity or making learning more polysemic, on the contrary, the models interpenetrate producing a new epistemological identity to teaching practice since there is not exactly a boundary between one environment and another (BRITO, 2020, p.4).

Brito's central idea (2020) is to draw attention to the fact that blended learning represents a new modality of education, similar to what occurred with distance education and face-to-face education, which makes it necessary to build a new epistemological and pedagogical model, both for the (re)construction of knowledge and for its transmission through teaching practice.

Even though blended learning can be seen as a set of mixed solutions to enhance students' learning, also favoring the appropriation of BDDs and promoting engagement through collaborative activities (SPINARDI; BOTH, 2018), in this work, we will adopt the conceptual option of Brito (2020, p.6), which defines blended learning as a teaching method based on pedagogical actions that, in order to be completed, need both the virtual and face-to-face environment, in an inseparable way, so that these two environments cannot be separated without any loss of meaning. In this sense, says this author that: “Therefore, the pedagogical action that characterizes blended learning should consider the screening of contents by pedagogical potential (TCPP) and the organization of contents by pedagogical actions (OCAP)”.

The emphasis on the curriculum, therefore, signals a distinction of treatment that falls on the curriculum, making each pedagogical action of the teacher different from the models used both in face-to-face teaching and distance learning.

3. The curriculum and its pedagogical potentials

The curriculum is not just a set of contents to be discussed during the process of school, academic or professional training. On the contrary, the curriculum is knowledge (knowledge), practices (methods) and experiences that summarize all human activity in a given area and/or level of education at a historical moment of societies. And for this reason, we can say it as the map (or compass) that will guide the student in the application of knowledge, resources and methods to understand and transform the reality that surrounds him in the social environment. It is in this sense that Doll Jr. (1997, p.147, our omission) tells us that “[...] the curriculum is not only a vehicle for transmitting knowledge, but it is a vehicle to create and recreate ourselves and our culture.”

Araújo and Cardoso (2016, p.151) recognize that reaching a concept of curriculum that represents unanimity is an extremely arduous task, since it is “[...] a term under which curricular theories do not have consensus. It is a multifaceted term that involves complex and continuous discussions.” And they add that the biggest reason for conflicts on this issue lies in choosing what is and what is not important for learning.

On the other hand, it is noticeable that part of this complexity also lies in the fact of the very complexity of the educational process, which is marked by pedagogical and social variables so distinct that they can only be valued in the context of dialogical interactions between man and society, between knowledge and experiences, finally, between culture and the way it is constructed and reconstructed in the day-to-day life of human experience.
According to Lima (2007), it is up to adults to transmit to the younger all the productions that permeate society, providing knowledge and methods, so that each generation knows and learns to use all the achievements of previous generations, whether in the field of sciences, arts, health or others. In this case, she says, that this commitment of each generation to those that are springs will ensure the perpetuation of the human species, not only because they show the knowledge and practices that helped previous generations, but also because they favor their implementation to solve new problems and overcome the challenges that are shown in the present.

Moreover, this author states that: “A curriculum for human formation always introduces new knowledge, is not limited to knowledge related to the student’s experiences, to regional realities, or based on the so-called knowledge of daily life” (LIMA, 2007, p.20). He adds that, therefore, a curriculum should not be exhausted in the experiences of the moment, whether individual or collective, but should provide the student with other dimensions of human development, expanding both his personal experience and the others that are part of the culture in his time, as a whole.

For Moreira and Candau (2007, p.18) the curriculum sums up all school experiences originated from the social environment, being, therefore, related to the construction of identities and, in this case, the “curriculum is thus associated with the set of pedagogical efforts developed with educational intentions”. Therefore, these authors understand that, in addition to talking about curriculum and school education, the curriculum should be associated mainly with the culture that permeates society.

For this reason, the curriculum is a structured set of knowledge, in degrees of complexity, according to the level of maturity of the students and, in addition, it is also a set of methods that will provide opportunities not only the understanding and interpretation of the various phenomena, but their reproduction and implementation, with the objective of controlling and benefiting reality. Moreover, it should also be considered that the methods adopted in the pedagogical process should expand experiences and deepen them with new means of treatment, in close parallel with the paths already trodden by the student in his experience.

In fact, in a paper on curriculum and evaluation by Fernandes and Freitas (2007), we see that this relationship between curriculum and culture is described differently, however, keeping the central ideas already announced. This is because, for them, if, on the one hand, the evaluation of learning is only led by teachers (measurement of the degree of understanding of the set of knowledge systematized in the curriculum), on the other hand, the evaluation of the school (self-assessment and external evaluation) is the product of the entire school community and, finally, of the entire society represented by the Public Power. In the latter case, we seek to assess the degree of representation of the reality experienced, experienced, and that affects society in its conformation to the methods, contents and school practices adopted in the formative process.

With a more poignant language, Valadares (2011) informs us that culture is the way by which we acquire the concepts/knowledge already built by humanity over the years and, therefore, it is expected that the school will only accelerate this process, in an organized, meaningful and effective way, considering the educational experience designed for the students. Therefore, he says, learning will be meaningful when learning finds immediate meaning in the environment in which the student is inserted. And it concludes by establishing two fundamental requirements for this:

The confrontation of the learner with a potentially significant content, which requires: - that this content has logical meaning, that is, that it is conceptually coherent, plausible, capable of being logically relatable to any appropriate cognitive structure, therefore not arbitrary; it is a characteristic of the content itself; - that there are adequate subsunçors in the learner that allow the significant assimilation of this new content. That the learner has a potentially significant attitude, that is, a psychological predisposition to learn in a significant way (VALADARES, 2011, p.38).
In some respects, it is possible to realize that the main concern of all the authors mentioned in this section is to make the student not only learn what he studies, but also to apply knowledge to understand, interpret and change his own practice in the face of the various phenomena in which he is directly or indirectly involved. Therefore, at the center of the issues discussed are the pedagogical actions adopted by the school in the course of the analysis of contents, practices and forms of interpretation of knowledge to be apprehended.

At the other end of the discussions are face-to-face teaching, distance learning and blended learning, each with its particularities and ways of working on the curriculum. However, since the curriculum does not depend on how knowledge is transmitted, the same cannot be said about the pedagogical actions that should be adopted in their didactic transposition, since there is the possibility of increasing the use of DIC as supplies capable of operationalizing the knowledge that each content represents.

In the opinion of Brito (2020), in blended learning, it is necessary to organize the curriculum in multidimensional pedagogical actions, since, now, it is necessary to adopt in the educational process both the face-to-face environment and the virtual environment. Thus, despite the use of an adequate curriculum, however, its effectiveness on learning will depend on how it is organized to enhance students’ learning in the two available environments.

Therefore, the organization of the curriculum will imply the projection of pedagogical actions necessary so that, making use of virtual and face-to-face environments, students learn more and better all the meanings and implications involved in the knowledge of nature, politics, economics, sciences, arts and others. In this case, even if the intentionality of the curriculum, as well as its construction dedicated to attending a certain formative expedient, is unquestionable, it is important to discuss how it will be instrumentalized in actions, because it will depend on the scope of the desired ends and results.

3.1 Pedagogical actions in blended learning

A pedagogical action, as presumed, is one that aims at an end, to an objective that, from some teaching method, seeks to make the student appropriate certain knowledge and practices, taking for granted that such knowledge is the truth behind the phenomena, objects and facts; and practice, the legitimate means of their apprehension. And that is why Zaslavsky (2017, p.75) tells us that the: “Pedagogical action is not synonymous with teaching action, but the effective articulation of teaching action with student action, through understanding”. In this case, since the relationship between teacher and student is asymmetric, then, the teaching action must be based on teaching resources and resources that minimize this distance between the active and passive pole of this pedagogical relationship, causing the effective interaction between both.

This author also teaches that “The means for understanding are different from the means for the success of an intervention. This is the precise point of this contribution: to resume pedagogical and didactic action in the context of the means of communicative action” (ZASLAVSKY, 2017, p.75). In other words, a pedagogical action needs appropriate means to achieve the student's understanding and also appropriate means to make this understanding become reactions, assuming logical meanings for him, when, then, the teacher's action will become an effective communication.

Similarly, Franco (2016, p.536) brings us the same recognition above, that “a pedagogical practice, in its sense of praxis, is always configured as a conscious and participatory action, which emerges from the multidimensionality that surrounds the educational act”. That is, as a practice, a pedagogical action does not belong only to the teacher, since the cultural traits shared in society will make the action of the teacher affect son on shared social practices, permeated with subjectivities.
This author understands that there is a significant fine line between educational practices and pedagogical practices, which lend more dimensions to school processes than they appear. In fact, she says: “when we talk about educational practices, reference is made to practices that occur for the realization of educational processes, while pedagogical practices refer to social practices that are exercised in order to implement pedagogical processes” (FRANCO, 2016, p.536). Therefore, for her, pedagogical actions sought to organize, understand and transform the educational social practices that give meaning to the educational practices of the school, imposing a filter of meaning to the experiences of everyday life.

The educator Freire (1996) summummed the previous placements saying that it will be up to the student to use the power-duty of using the insums of his learning to experience his experiences outside the classroom, where theories and pedagogical practices will assume concrete identities; then, it is necessary that what he learns makes him able to glimpse the application of the knowledge acquired in the ordinary universe around him. And, therefore, pedagogical experiences must approach and reflect the experiences of the real world, in it finding the true meaning of its magnitude.

On the other hand, in blended learning, the need to use both the virtual environment and the face-to-face environment in pedagogical actions requires that the curriculum be considered in terms of pedagogical potentials, since the limits and possibilities of each learning environment available for this type of teaching are evident. In fact, according to Brito (2020), the presence of two possible environments to support the actions of the teacher imposes the use of filters to make the student's experience more significant, which led this author to speak of Content Screening by Pedagogical Potential (TCPP):

Once the curriculum contents have been structured by themes/sub-jects, selected the teaching materials and the necessary technological resources it is necessary to define that strata/parts of the chosen theme/subject are better managed in the virtual environment and that strata/parts are better for the face-to-face environment, considering some indicator of motivation of students in the face of learning in each environment, the volume of available resources, conditions for better monitoring and interaction, the greater development of autonomy and creativity (BRITO, 2020, p.7).

We can observe, then, that it is not a question of choosing the virtual environment for this or that activity/study and, on the other hand, the face-to-face environment for the others. Otherwise, teaching would not be blended - at most, it would be a face-to-face teaching with TDCI support or a virtual teaching with face-to-face moments. And, therefore, it is not only a question of making the curriculum more flexible and of mediating it, but of making it appropriate to the way we relate to the information in the present era.

The idea brought by Brito (2020) is that the pedagogical action in blended learning, to be completed, will need both environments. That is, for a given theme, it is necessary to divide it into two or more parts, each being better explored, better understood in the selected environment and, and can also make up a cyclical process (virtual - face-to-face - virtual or face-to-face - virtual - face-to-face). In this case, once the teacher's action is established, it is not possible to paralyze the process without loss of knowledge, since the learning cycle would be interrupted. That is exactly what the author cited called singularity. And it also says that the student does not complete the cycle of their learning alone, because pedagogical actions become blended, since the contents will be arranged in potential or degrees of potentialization of learning. However, this author warns that, having done the screening, it is necessary to organize the pedagogical actions to be spent on the curriculum according to these potentials.

In blended learning, the curriculum and actions of the teacher will be organized in such a way as to make this crossing less costly for the student, because, both in one part and in another part of the cycle,
the student will have company, will have greater use, will be able to exercise more and better their creativity and proactivity, even discovering new scenarios where the subject/theme studied may undergo a true fusion of meanings, opening new horizons (BRITO, 2019, 2020).

According to Santos and Mercado (2019), the so-called active methodologies have the power to transform teaching into blended learning, because, in part, the student studies in a face-to-face environment and, in part, in a virtual environment, actively participating in each one, which favors the potentialization of learning. However, they reinforce the need for learning customization, because each one learns in a different way and, therefore, each content must be thought of in terms of this complexity of the process.

In fact, the organization of the curriculum and pedagogical actions to be adopted seems, then, a requirement of this complexity, where the teacher will assume the role of mediator. As they say:

In a blended context, mediation presupposes the mixture of available technologies favorable to the students' informative and formative processes as a means of potentiating the face-to-face experience by transforming the classroom into a learning environment (SANTOS; MARKET, 2019, p.267).

However, we agree in part with these authors (and many others), mainly in recognizing the need for a new look at the curriculum and on the action of the teacher. But although these models are promising, we disagree on the understanding that an active methodology is capable of characterizing teaching as a blended, because, both in face-to-face teaching and distance learning, it is possible to think of active methodologies (where the student actively participates). In addition, the instrumental target to be achieved in blended education is the fusion of educational environments, as occurs on a day-to-day life. That is, someone chatting on Whatsapp can always be learning / knowing, even without thinking about whether or not it is online, because the pleasure of the conversation, as much as it would be in person, does not make you think about the process.

The example we have just cited points us to 5 (five) important aspects: action (the conversation), dialogue (interaction, dialogue), a curriculum (set of debatable knowledge), use of technology (cellular) and fusion of environments (personal/face-to-face experience feeds - and feeds - and fully integrates with online information, producing communication with blended information). Moreover, Lévi (1999, p.9, our omission) would call the whole of these aspects of cyberculture, because it involves “[...] the set of techniques (material and intellectual), practices, attitudes, modes of thought and values that develop together with the growth of cyberspace”.

It should be noted that, in blended learning (BRITO, 2020), the use of environments is premised, above all, to ensure the continuity of thought, without abrupt breaks, even if teacher and student are in different places. And, therefore, the use of virtual and face-to-face environments must ensure the continuity of the learning process in a smooth, indissoluble and harmonic way. In addition, it is perceived that, in blended learning, learning environments can be used both inside and outside the classroom, provided that they guarantee the continuity of understanding, because the emphasis is not exactly on the physical separation between teacher and student.

4. Conclusion

It is unquestionable that Digital Communication and Information Technologies (TDCI) are already part of our daily life, much more outside the classroom than within it. It is also unquestionable that, even making large-scale use, both in personal and professional relationships, and in social relationships, however, we do not think about the processes that involve these relationships that we maintain with BDD as if they
were strangers. In fact, we can say that this lack of strangeness that we experience outside the learning environments is due to the fact that they (THE IST) are already part of our culture of relationships (cyberculture) and of our communicative culture (cyberspace), being parts that already make up our own identity.

On the other hand, in educational environments, this same symbiosis between face-to-face and virtual environments can no longer be observed. In this case, technologies become the technologies, the strange machines that we need to support during the educational process. And why is that? The most plausible answer would be because, during learning, the languages used in face-to-face and virtual environments are so distinct from the communicative culture used outside the classroom that they become strange, different from the way our mind usually works information.

What distinguishes blended learning, both from face-to-face teaching and distance learning, is this search for means, forms, resources and discourses that can continue the way people are already accustomed to acting and interacting with BDDs, which makes this relationship between the virtual world and the real a necessity, not flexibility. Indeed, it will be a necessity because the very nature of the information may require both environments (face-to-face and virtual) to make sense for the student (to provoke learning); and it will not be flexibility (flexibility of the curriculum, for example) because it is not only sought to give access to information, but only to make the student learn using the same tools that he already makes use of to relate and live in the ordinary world. Therefore, as long as the classroom world is different from people's worlds, any process will be strange and, consequently, unproductive or, at most, unimpressive.

In this work, we observed that a pedagogical action, in blended learning, is one that seeks to adapt not only to the cognitive state of the student, but also to the way his mind usually appropriates the information, in a significant way. Therefore, the idea of blended does not necessarily mean the inclusion of virtual encounters. On the contrary, blended signals the need for fusion between experience/model/face-to-face method and distance experience/model/method.

The blended nature of teaching should reflect the blended nature of the human mind, and not the distribution of content in different containers (virtual and face-to-face), because pedagogical actions should be thought of in relation to the potential that each content has to provoke learning, in this or in that environment. In fact, the learning experience can be blended in classroom teaching or in its combination with the virtual environment. Therefore, the cycle pointed out in the discussions faced (face-to-face - virtual - face-to-face - virtual) refers to the experience of knowledge, which imposes new meaning to the virtual word, which implies not only physical distance but also method.

In a phenomenal way, recognizing that all teaching is blended, Moran (2017) already pointed to this need not to understand the word virtual only as physical space, but also as a space for constructing meanings.

Finally, the change in the ecology of the media, as Lévi (1999) said in his time, is what, exactly, we are experiencing now, however, in the digital field. Therefore, this second wave of changes needs technological language, reinterpretation of what are pedagogical spaces of learning and what is, and how it occurs, the action of man in the face of events, phenomena and reality, as we point out in each discussion.

References


