Meaningful Learning and Effectiveness in Virtual Learning Spaces

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Abstract

Contemporary educational practices impose challenges and necessary changes in teaching and learning processes in which cyberspace and virtual contexts become places of learning. Affection, emotion, perception, and imagination compose the construction of meaningful adult knowledge. Such theoretical assumptions become fundamental for teaching and learning processes in virtual contexts in the online or distance modality. We adopted a qualitative analysis of the data of the postings in the forums and individual records of the students of the Course Methods of Studies for Distance Learning. The affectivity in virtual environments is a resource of great relevance to enhance the processes of teaching and learning. The study revealed that affectivity occurs to the extent that the student's needs are met, and he can construct knowledge in a meaningful and conscious way.

Keywords: Affectivity. Significant learning. Distance education.

Introduction

Contemporary educational practices impose changes that are necessary for 21st-century education, especially as regards teaching and learning processes in increasingly virtual contexts, where cyberspace also becomes a "place" for learning. The cyberspace, in a fluid perspective, pointed out by Bauman (2007) is a powerful resource for the expansion of learning to other means, in virtual contexts and online education emerges as a modality with the capacity to promote important transformations in the field of knowledge and teaching and learning processes that occur increasingly in a collaborative way and through digital resources.

Technology-mediated communication gains strength in interactive relationships in educational processes insofar as resources and tools are used with pedagogical intent and allow new configurations for the construction of knowledge and the development of collaborative works.

[. . .] ICTs extend the design and methodology of processes and teaching and learning by creating new work environments, communication, and learning based on a platform, educational resources, and interactive tools, all located on the web, is very flexible and accessible easy. These conditions make distance education more an educational modality than a methodology. (Gonzales, Rosa & Rodriguez, 2015, p. 123, translated by the authors).[1]

In this type of teaching, the set of resources available in the virtual environment, such as didactic materials, videotapes, and mediation activities carried out by the teacher bring the dynamism and interaction necessary for success in the processes of appropriation and cognition of these students. According to Bannell et al. (2016, p. 57), "people take ownership of the world through experiences they have had, not through abstract calculations and generalizations". For him, values are acquired and attributed socially, and the "appropriation of these meanings is the result of the interaction between human beings." (Bannell et al., 2016, p. 58).

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[1] Original: [. . .] las TIC amplían la concepción y la metodología del proceso de enseñanza-aprendizaje al crear nuevos entornos de trabajo, comunicación y aprendizaje basDistance Learningos en una plataforma, recursos educativos e herramientas interactivas, todos ellos ubicados en la Web siendo muy flexibles y de relativo acceso. Estas condiciones hacen ver a la educación a distancia más una modalidade educativa que una metodlogía..

It is worth emphasizing that the act of teaching is configured as a process of help for the construction of knowledge, skills, and attitudes. The author presents cognition as the result of the coordination of information made between subject and object, through cultural, material and symbolic artifacts. Like this,

Every new human being who enters the world is inserted into an environment in which other generations of human beings have created ways of thinking and acting socially. By having their behavior mediated by cultural artifacts (language being the master artifact), human beings, in addition to benefiting from their own sensory experience about the world, also benefit from the experiences of those who preceded it. The social world, which is based on communication, is of crucial importance in this process (Bannell et al., 2016, p. 63).

Learning requires more than accommodation of content and information. It is important that there is a meaning for that knowledge to be potentially constructed. In this sense, affectivity in online communications, with emphasis on written language, is of fundamental relevance for teaching and learning processes in distance or online mode. Hence we can ask some questions: is it possible to be effective in virtual learning environments? Is it necessary to be affective to teach in virtual environments? What is this affectivity and what is its relationship to learning?

Our discussion will be based on some theoretical references that will help us to establish the relationships between the affectivity theme and the adult learning processes. We will present a study about how the effective relationships between teachers and students in a virtual environment of teaching and learning propitiate the movement of awareness and meaning of knowledge built by the adult in an online course.

We will next address some theoretical assumptions about learning and affectivity that will assist us in our investigation and analysis.

Adult Learning: Emotion, Experience, and Perception

The cognitive view of David Ausebel's Theory of Meaningful Learning, which relies on didactic potential, is considered by us to be important aspects of adult learning perception. This framework seems to us to be very consistent with the problem presented in this study. This is because our investigation is based on the hypothesis that learning happens to the adult when he becomes aware and assigns meaning to what is learned. To do so, he can describe the process he experienced (Dirkx, 2001) when this learning becomes experience (Larrosa, 2014).

Our understanding of affectivity is based on Vygotsky's (1998; 2008) propositions in emphasizing language and mediation in the processes of signification and establishment of meaning. From this, we can identify that the affectivity manifests itself in the adult when it expresses its emotions, as something conscious that allows a self-perception of itself. In this sense, the processes of teaching and learning that favor works with the perception, imagination generate conditions of great relevance in the construction of knowledge.

To understand adult learning experiences when expressing themselves by describing their experience about their learning, Dirkx (2001) states that personal and meaningful learning derives from the emotional and imaginative connection of the adult, i.e. the self and its relationship with the social world. According to the author, adults describe their learning experiences as something "boring," or "fun" or "exciting." In this way, for the author, the images are produced from the experiences, from the emotions and feelings:

These meanings arise through our imaginative connection and engagement with these contexts. Our initial construal of meaning within particular emotional situations is largely an act of fantasy and imagination, guided by our emotional connection with both our inner and outer worlds. They help us understand and make sense of ourselves, our relationships with others, and the world we inhabit (Dirkx, 2001, p. 66).

Therefore, it is worth noting that the emotional and affective experiences of learning, according to the author, contribute to a positive and meaningful educational experience. It is also a question of understanding that experience brings with it something that can not be grasped solely by rational logic. Through the perception of his experience, the subject can become aware of himself as an agent of his transformation and of the appropriation of meanings that become links in the learning processes in contexts of the formation.

The relationships between attentive and engaging teachers, encouraging students' expression, and listening to them, favors the meaningful learning experience of their students. The adult makes use of images to construct the meaning of what he learns since they are capable of establishing relations between the inner, irrational world and consciousness. The images show the emotions and feelings and, therefore, they potentiate the meaning of a learning situation or reality. This fact can help in the more significant integration of curricular contents, making learning more meaningful (Lopes & Vieira, 2017, p. 2401).

The idea of meaningful learning, presented by Moreira (2008), is that the meaning of the new knowledge is acquired through interaction with some prior knowledge and relevance. The author draws attention to the question of interaction between prior knowledge and new knowledge. This interaction takes place through consciousness and a predisposition to learn. That is, for meaningful learning to occur. It is necessary for the student to "want" to learn meaningfully.

In meaningful learning, the learner initially captures accepted meanings for new knowledge, but then internalizes or reconstructs them internally, adding indiosstricrates. New knowledge is incorporated into its cognitive structure, and it has many connotative aspects. (Moreira, 2008, p. 16).

Considering the two conditions that the author scores for meaningful learning to occur we have: prior knowledge and intentionality. Also, the interaction is fundamental, being necessary the insertion of the figure of the mediator, that is, of the teacher who will articulate the knowledge through different languages. For this theory, didactic materials are powerful resources and also need to be organized in a potentially meaningful way.

It is worth mentioning that when working in an online or distance education perspective, we consider that a student of this modality, in theory, meets the prior knowledge conditions presented so far since the public of this modality in Brazil is composed predominantly by adults. The student who is willing to take a course in distance learning should have a certain autonomy and willingness to learn by interacting with a set of didactic materials that make up the pedagogical model of online and distance courses.

The virtual environment or the virtual classroom should provide the student with moments of interaction with teachers and peers. According to Silva et al. (2015, p. 14-15), it is in the interaction with teachers and colleagues that the effectivity of the students becomes apparent, especially in times of forum and chat, where written language is the main resource.

It is in this relationship with other people in the social group that the subject appropriates socially constructed meanings. As it is not possible to isolate the affectivity of cognition, learning and affection are interwoven and thus the social relations, especially those of teaching-learning marked by manifestations (aversive or pleasant), that will affect in some way the performance of that student.

From the assumptions presented, we understand that affectivity permeates the adult learning relationships in the way the teacher mediation action can offer conditions for the meaningful learning of these students. It is an attention to what is the need of this student and how mediation or available resources may or may not favor this appropriation and awareness of the meaning of what is learned.

We sought to investigate, through the analysis of the written records of an optional distance course called Methods of Studies for Distance Learning, offered to students of the undergraduate courses in the modality Distance Learning, namely: Pedagogy, Philosophy, History, Mathematics, and Letters of a University of Private Education of the state of São Paulo. We start from the initial provocation about the questions we posed at the beginning of this article about the possibility of being effective in virtual environments and if it is necessary to be affective to teach in virtual environments and how this affectivity is expressed in the teacher-student and student- student. How can teacher mediation create conditions for meaningful student learning in virtual learning contexts?

Online Mediation and Pedagogical Intentionality: Affectivity And Meaningful Adult Learning in Distance Learning

The data analyzed in this research were obtained through the records of the activities of the forum, and individual records of learning exchanged between the teacher and the students of the course Methods of Studies for Distance Learning, the optional and introductory course of the 1st. Semester of the five undergraduate courses mentioned above. Mediation occurred on the 1st. Semester of 2017 and the objective of the course is to offer a methodology of studies, based on the specificities of the pedagogical model of the institution and the own characteristics and necessary for studies in the modality Distance Learning.

The course was attended by 17 poles of face-to-face support, located in the Southeast, Midwest and Northeast regions. All students were enrolled in the course, automatically, and were informed that it was an optional course as a resource to support the start of the course in the Distance Learning mode. A total of 189 participants were enrolled and attended the theme 109.

The pedagogical conception of this course is structured from the concepts of meaningful learning, constructing a virtual environment of learning and activities that took into account the creation of conditions so that the information could be anchored insignificant concepts existing in the cognitive structure of the individual. The course lasted eight weeks, counting on a methodological organization that combined didactic materials such as videotapes, complimentary videos, rDistance Learningings, exercises, learning objects and mediation by forums, chat and personal learning records. In this course the mediation is done exclusively by the teacher, not having the figure of the distance tutor. The mediation took place predominantly asynchronously and counted on a synchronous moment, through a chat for evaluation and closure of the course. All these elements were organized into learning paths, to allow the student to have the opportunity to interact with such contents to establish hierarchical cognitive relations of concepts that "become abstractions of the experience of the individual" (Moreira, 2008, p. 8).

A general forum and three thematic forums were held: 1. My impressions of distance learning courses and the virtual student profile. 2. Time Management. 3. Production of academic papers - difficulties in the elaboration of academic papers. In addition to the forums, the students interacted with the teacher through individual learning records sent to the teacher. All tasks and activities carried out received individual feedback from the teacher. For this research, we will analyze the posts made in the general forum and the thematic forum 1 - My impressions about distance courses and some personal learning records.

3.1. The Mediation of The Forum with Pedagogical Intentionality

At the beginning of the course, the mediator tried to establish an empathic environment for communication, creating a general forum in the first week of class so that the students could present themselves as they were geographically distant and also from different courses. For this initial provocation, there were 53 participations. It is possible to perceive relationships of empathy and sharing of personal matters of the life of each one and the experience of proximity and trust even in a virtual environment.

Figure 3.1.1 – General forum interaction[1]

Teacher's provocation
Dear students, be very welcome to discipline study methods for Distance Learning. I am the prof. Maria and I will be with you during this course which is very important for those who decided to study in this modality. At this first moment, I want to ask each of you to introduce yourself, tell us the course you are doing, what kind of pole would you like to tell us about your region? Do you accept the invitation? I'm sure we'll have some great dates! Virtual Hugs! Profa. Maria!
Students' reply
Hello, my name is Daniela, and I'm going to teach pedagogy at the Brás unit. I have always enjoyed studying, and for a long time, I have been focused only on the care and demands of my eldest son who is special. From this experience also comes the desire to learn more about learning disorders and educational methods. I want to improve myself and learn a lot about this passionate subject. I'm a little shy, but I'll be very welcome to meet new people and exchange ideas.
Good Morning! I am Juliana; I am enrolled in the course of Letras - Português do Brasilia unit. I graduated in journalism five years ago and decided to do second graduation to expand opportunities. A curiosity of Brasilia: the weather forecast is crazy. In one day it can rain torrentially and make the sun crack. 🙂

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[1] The names of the teacher and students are fictitious. The emphasis were added by the authors for the analysis proposed in this study. Applies to all Figures.

Hello, my name is Helena, I'm studying History Degree at Higienópolis unit. I live in São Paulo - SP. I am happy to be studying at [. . .] University so well regarded. I hope to make this virtual environment as real as possible. Success to all !!!
Hello! I am Tania, 43 years old, married and with two children, graduated material engineer and post graduate in business administration. [. . .] I believe that the dynamics may be different, that the relationship between teacher and student may be more significant. I come here with a lot of desire to learn, to meet people and their experiences. May it be a great year for all of us !!!.
Hello, teacher and dear friends My name is Luana, I'm 35 years old, I live in Paulínia, SP, and I'm a nursing technician. I have worked with special children for a long time, and I have realized over the years that this work is very painful, and it does not bring me more pleasure, so I was thinking about what to do to change my profession. I never wanted to go to college, but one day I had a crack, and I decided to go back to school, so I chose mathematics because it was the subject I ran most in college. I made a friend here today in the forum, and I am very happy. I hope I can make more friends. A big hug to all and good study!!!
Good afternoon everyone. I'm studying Pedagogy, at the Alphaville campus. I had coursed Language, some ten years ago, but he did not conclude. I always kept Pedagogy in mind, but I did not have a chance to do it before. When I learned that (this institution) would have ODD I got excited and did not think twice. I'm very excited about the course, with the whole Moodle system of the university, with the interaction that we have here, nor expected all this... And that makes all the difference. Good studies at all.
Hello everyone. My name is Ana Paula, and I am studying pedagogy at Unit Alphaville. I must say I'm enjoying studying Distance Learning, it's better than I expected. I feel that gradually I am getting into the rhythm of the rDistance Learningings, the dDistance Learninglines, and the entire virtual environment. I'm 35 years old; this is my second college. Not that I have resolved to change the area, but I believe I want to expand knowledge, after all, I think that the more information we get, the more incredible the world becomes. A hug to everyone and even more 🙂
Good afternoon, Mariana, campus Higienópolis I started the course of letters. I'm having a bit of trouble organizing time, but I think I'll learn in time. Let's go and have a good year for everyone.

Source: Elaborated by the authors.

From the analysis of the students' posts, it is observed that they are at ease in this environment, motivated by the possibility and interaction and enthusiastic to study in this modality in a format that meets the requirements and conditions of learning. We can highlight that, by sharing their life histories and the reasons that led them to seek this modality of teaching, students establish learning relationships based on the experience of each one. Still, the initial movements for rapprochement, friendship, and affection among the participants of the course are perceived. Mediation became intense in the thematic forums, and student participation increased significantly. In the thematic forum 1, My impressions about distance courses and the profile of the virtual student, 239 posts were made. In the following Figure, we present some of the interactions between students and the teacher, and students and their peers, highlighting the manifestations of affectivity, understood as corresponding to the learning needs, especially, for the construction of shared knowledge.

Figure 3.1.2 – Thematic forum interaction 1

Theacher's provocation
Dear students, will we use this topic to participate together? Our course aims to offer some steps for the use of technological resources, and as we have a large group, my methodological proposal is that everyone put their considerations in this space and everyone responds here so that we do not miss. I invite the other colleagues to answer the two questions I have put to the discussion. And since we speak of discipline and routine of studies, I ask you to see the 1st. should Video of the Distance Learning Study Environment, Study Habits section, which presents some valuable tips on how to study! It's short: 5 minutes, but worth it! I want to continue this debate with you! Thanks!
Students' reply

I was a student in the classroom, and I was demanding about my studies. With DISTANCE LEARNING, my requirement and dedication be greater, considering that I have reasons that may cause a distraction in my study (example: family, including husband, small child, pregnancy in progress, home, etc.). All these reasons are important in my life, but at the time of my studies, attention, and dedication should be exclusive to "studies," because the success of ODL depends on this. Commitment, focus, and dedication to studies always. The consequence? Not just good grades or good performance, but rather the professional quality that I seek for my future. Let's study!! Juliana.

Hello Juliana, nice to meet you! I thought it was cool that he shared a bit about his life and his routine, I believe that his experience with face-to-face teaching is positive, because just as you had dedication in class in class, you will have with Distance Learning. The important thing is not to let the distractions get in the way, but the flexibility in the studies will give you more time to be able to dedicate to the other tasks (not only student but to be wife, mother, besides everything pregnant). Who knows your child in your womb is not born knowing a little of the content? (laughter). I wish you good luck! Hug, Marcos.

Hello guys! The exchange of experiences that we have in forums like this is sensational because from here we can draw ideas that can help us in the organization, in the studies and the accomplishment of the tasks. For the time being, I must confess that I am having a hard time getting used to this type of teaching, because I greatly appreciate the contact with the teacher and my colleagues, but, little by little, I think everything is going to be right; new means that I will have for this. Flávio.

Good evening everyone! I understand that being a student of a distance course will not require different behavior, because all the skills required in the Distance Learning also serve us in the classroom course. I believe that the difference is the non-obligation to be present in a certain place at a certain time. As well as the use of the tools of this modality. [. . .] A study in the best possible way and when problems or doubts arise to heal with our tutors. The platform offers an immense range of forms of learning such as video lesson, rDistance Learninging indication, etc, take advantage of it. Jessica.

Hello teacher! Hi, classmates! Answering the question of 'What is being a distance learning student,' I believe it is a huge way to take responsibility for learning. At Distance Learning if there is no commitment and dedication of the student, nothing will work! I would like to comment on the Study Guide - Study Methods for ODL: I found the subject to be sensational because we think that time passes faster as we get older, I went to the illustrative website that has been linked in the subject, and it all made sense! (LOL). Rosemeire.

I'm feeling kind of lost without knowing where to start or how to organize because I have access to all the content of the material at once and do not know how long it takes to study each one. I'm also trying to get used to the platform. It helped me a lot to have received an email from teacher Maria with the dates of deliveries of activities contributing to my organization in the study of the subject Methods of Study for Distance Learning. But I am optimistic that we are adapting to studying through an online platform and managing to get better organized throughout the course. Hugs to all, Márcia.

Teacher Maria, in this link I expected more guidance. But I found more than that. I have heard, amid the notes and words of delight, his sensitivity, which is one of these beautiful gifts that God has brought, not just to me, but to all the friends in the class. Thanks. A big hug to you Maria, and to all the friends! Thatiane.

Good afternoon everyone. I am deeply grateful for the generosity of your words teacher. I take the opportunity to congratulate and thank you for your dedication and accompaniment at this beginning of the course. You were the first to send messages and have become so present in helping us and contributing to our learning, punctuality, and interaction with the platform as a whole. He commented and added our posts, gave us valuable tips and general tips, this is very gratifying and demonstrates his extreme dedication to discipline, progress and each one of us. It was indeed extremely gratifying and a great differential!

Source: Elaborated by the authors.

It is noticed that the students address their colleagues and the teacher affectionately and gratefully because they identify that their work contributes to the learning and adaptation to the reality of studies of distance education. In the dialogue between the students, one can also identify aspects related to the own perception and assimilation of this new reality, from previous knowledge, previous experiences and the experience of affection and emotion that give meaning to what they are

experiencing and learning in this course. The reference to teaching materials is also of great relevance, since we consider that the combination of the materials, through the learning paths, allied to a mediation with pedagogical intentionality create the conditions for a meaningful learning in the media in which it helps the student "to assimilate structure of the disciplines and to reorganize their cognitive structure, through the acquisition of new meanings that can generate concepts and principles" (Moreira, 2008, p. 41).

We can also understand, according to some reports, that the structure of the course and the form of meditation offer conditions for this means learning to become an experience for the participants. Another interesting aspect to be observed is presented in the form of language with which the students interact with the teacher, in a close, effective and friendly way. We can understand that the relationship established between the students and the teacher, through mediation made possible the broad participation of the students and, according to the last two participations listed in Figure 3.1.2, the experience of gratitude to the teacher for contributing to the students' learning process.

We will present the analysis of reports that corroborate our work hypothesis.

3.2. Personal Learning Records

The learning records present important aspects for our analysis, once the form of learning is perceived and how the consciousness, the emotion, and experience are present in the following reports.

Figure 3.2.1 – Personnal data sent to the teacher

Data
Thank you for the new opportunity you gave me to send out the missing summaries today. [. . .] What I have to say to you is that although your discipline is not compulsory, it was the fundamental tool for me to achieve the other subjects of the course. I learned to organize my time better and with that to develop all my activities, and I enjoyed learning about the main guidelines for the production of our academic work, in short, this discipline was of paramount importance for my course. Thanks for the motivations and your attention with us. Thanks for all the messages, it has helped us a lot. I'm loving the Distance Learning course; I never imagined that I could learn so much in an Distance Learning course, thanks for the attention Andreia.
I am very fond of all the tips for getting organized in Distance Learning, mainly because I have not been studying for years, and now with home, husband, work, and children, in a scenario quite different from my first graduation, these guidelines are being valuable for me to learn to study better and with greater use. On the first day, his energy and excitement in the profession infected me, increasing my interest and willingness to begin this new path. Virtual hugs with affection and gratitude!!! Tania.
Teacher Maria, thank you very much for all the tips and the content of the classes and the forums. Now is to apply this "such" time management, certainly the biggest challenge for us. A hug!!   Teacher Maria, I have seen your comments on my tasks, and I appreciate the words and the guidelines. Yes, I enjoyed your subject very much, and I learned a lot too. You see yourself in the corridors of the school. A hug! Paulo.
Teacher Maria! Thank you very much for your attention and encouragement. The motivation that passed us, from our first contact, was very important for us to feel embraced by the faculty and not give up on the difficulties that were to come! [. . .] I stopped doing two activities of your subject, but I did all the material and learned, tips and insights very important to the course performance. Thank you for the lessons, for the present countryman and for being so affectionate with the students. Virtual hugs and even integrating meetings! Rachel.
Thank you so much. I will try to improve on what has been pointed out. This discipline helped me a lot in organizing my studies. And of course with your help and your affection were fundamental for that to happen. Virtual Abs. Jussara.

Source: Elaborated by the authors.

It is possible to perceive in the reports the relationship of gratitude and affectivity for the contribution of the teacher's mediation in the learning processes. We emphasize that it is related to the way in which the student understands the gestures of care of the teacher about the possibility of learning of the student.

Final Considerations

From the analysis of the data obtained through the records written in the course Methods for Studies in Distance Learning, we were able to verify how the elements perception, emotion, and imagination are present in the processes of significant learning of the students. In this sense, the theoretical assumptions were appropriate to the hypothesis presented in this study. It was possible to perceive, although, in the perception of the students, the interaction in the virtual environment with a pedagogical mediation makes the learning easier.

They present themselves with more freedom to participate in this space, to ask questions, share difficulties, make suggestions and praise, and collaborate with colleagues. It was also possible to observe how the affectivity was built along the course development and how it was possible to experience this relation in a perspective of attending the needs of the student in his process of knowledge construction.

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