Making Sense in Virtual Teams: Brazilian Learning Experience in International Business Project

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1 INTRODUCTION

The advancement of globalization boosted international business and shaped a new dimension for the attribution of meaning to its participants. Many scholars have dealt with the organizational implications of this phenomenon (see e.g., Leung, Bhagat, Buchan, Erez, & Gibson, 2005) but there is still a gap regarding the educational context. When it comes to the educational perspective, the training and interaction of multicultural teams in a business circumstance remains undeveloped. Although the national culture impacts on entrepreneurial activities, multicultural teams provide a new challenge for understanding business dynamics (Driskell, Radtke, and Salas 2003; Hinds and Mortensen 2005).

The social and cultural dimensions are modified from the use of communication technologies (Dewett and Jones 2001). If once directly negotiated, now the meaning begins to deal with intermediation process and sensemaking arises modified from its old content. Internet-based technology has brought a new context for mediating social interactions in an environment beyond national boundaries (Rafaeli, Ravid, and Cheshin 2012). Many organizations are demanding new requirements for high-level education (Leung et al. 2005).

This paper aims to investigate how participants make sense of a learning experience mediated by technology, specifically in the context of international business learning. We focus on individuals who interact socially in multicultural virtual teams mediated by technology. The objective is threefold: to conceptualize sensemaking of business learning experience; to describe the learning experience process through selected cases; to analyze the constructed subjectivities and how they are mediated in a learning experience.

The so-called Millennials students have already been born in a context of technological and communications development. This generation is already immersed in virtual connections. Professional relationships have been evolved from face-to-face interaction to virtuality and can generate a new sensemaking outlook (Couldry and Hepp 2016). Understanding the characteristics of this generation becomes a relevant issue in international business education.

The Brazilian environment is relevant insofar as that it is part of the group of emerging countries. Developing countries need to gain market and to improve their organizational capabilities rapidly (Borini, Fleury, and Urban 2009). Also, Brazil is a non-English native speaker country. This condition imposes some particularities and difficulties when dealing with sensemaking (Brannen, Piekkari, and Tietze 2017).

Moreover, we claim for a sensemaking reasoning: the virtual environment of interaction is still little debated in sensemaking studies. We need to go further on issues like sensemaking process in an emergence of new technologies and a learning context (Couldry and Hepp 2016). This study is also justified by the empirical difficulty of using it in real contexts.

We begin by doing a theoretical review of the elements of business learning experience and sensemaking. Doing so, we seek an integrative conceptualization of these categories. Then, we present the methodological procedures used. We then set out to analyze and discuss the results obtained. Finally, we present concluding thoughts and some directions for future research.

2 THEORETICAL BACKGROUND

Technological advances in recent decades have led to new opportunities for the development of social life. Tools like the internet have enabled an extraordinary flow of information and have also provided possibilities for immediate connection between people around the world. This context contributes generating new challenges for the education role in society. In short, education can no longer be treated only in a conventional way (Negru 2015).

There are new possibilities for the insertion of novel teaching practices. This is the case of the learning experienced by virtual teams. They are characterized as groups of individuals interacting through technological resources to achieve shared goals (Johnson et al. 2002). The specificities of these mediated relations allow international experiences in global organizations to take place into classrooms. On the other hand, the results produced by working in a virtual team is interesting to organizations whose business concern goes beyond national borders (Chappell and Schermerhorn 1999).

The business environment is becoming a global-level network (Alon and Herath 2014) and recurrent exposure to different cultures worldwide brings huge challenges in social interaction (Chao, Okazaki, and Hong 2011). This reflects on the workplace as organizational activities are conducted by teams. The adoption of virtual teams extends the workplace enabling shared knowledge improvement (Horvath and Tobin 1999).

The social world presents itself to the individual as communicative processes. The face-to-face interaction in communication is increasingly being pervaded by mediated interactions (Couldry and Hepp 2016). The intersubjectively negotiated and shared meaning passes through materiality reflected in the most diverse types of media. The interaction does not occur with another individual but instead with a representation of him or her. In this sense, "knowledge of the world does not reflect an objective world, but an understanding of the world as it is experienced" (du Toit, 2003, p.27). The signification process once before directly accomplished can undergo changes when displaced in time, space and data (Couldry and Hepp 2016).

Berger & Luckmann (1966) established the notion that the individual's first contact in his or her existence occurs through communication. Human beings construct their existences in the world from the subjectivity developed by communicative practice. Focusing on communication, the discursive component of social practice is presented as a central element. Since discourse is a part of social practice, there is the possibility of deviations in its construction and its meaning in social interaction, even though the symbolism present in language is considered (Hendry 2000).

Conversation establishes itself as the most important conductor of reality conservation (Berger and Luckmann 1966). Any major change in the environment in which one lives and interprets will require new processes of socialization. Berger & Luckmann (1966) understand that social reality carries elements of subjectivity in the individual's interaction with society. Both individual and social milieu incorporate a dialectical process reflected in three distinct moments—externalization, objectification and interiorization. Such moments do not follow a temporal logic of events: they occur simultaneously through the individual's *internalization* of the *objective* reality that presents itself and the *externalization* of his or her existence in the world. That is, the externalized subjectivity of the others presents itself to the individual in an objective way, which internalizes it through a process of interpretation in an obviously subjective way. "Full congruence between the two subjective meanings, and reciprocal knowledge of that congruence, presupposes signification" (Berger & Luckmann, 1966, pp. 149-150), because the underlying sense is formed even if the meanings of individuals are not in conformity.

Some attributes can be established in this perspective since the meanings of lived experiences change over time (Weick 1995). There may be a dichotomy between the expected values and those actually experienced in the business environment (Hoelscher, Zanin, and Kramer 2016). For instance, re-signification can take place in home office jobs, where there is not any explicitly coercive job control. Team culture changes: members who routinely meet the work day are then called upon to accomplish self-management process – re-signifying new habits and mediated interactions (Maitlis and Christianson 2014). The narrative properties associated with this new interaction pattern lead to the process of meaning construction. The importance in learning standpoint is clear: experiences with work routines and processes allow internships to more realistic business perceptions (Dailey 2016).

Social behaviors reflected in individual habits are part of the intersubjective process of sensemaking. Following the constructivist ontological basis, (Weick 1995) conceptualize sensemaking by seven properties: (i) grounded in identity construction, (ii) retrospective, (iii) enactive of sensible environments, (iv) social, (v) ongoing, (vi) focused on and by extracted cues, (vii) driven by plausibility rather than precision. The meaning is socially negotiated. Behavior and the construction of meaning itself can be modified when there is no face-to-face interaction. The extracted cues have a moderating effect: the possibility of punishment is capable of modifying the meaning given to the ethically divergent conduct even if it does not prove to be true (Weick 1995).

Space is a dimension of the social world, i.e., accommodates the possibilities of social construction in its intersubjective aspect. The abundance of digital medias –especially the internet – allows a new spatiality of the social world (Couldry and Hepp 2016). Interactions before were previously situated in face-to-face circumstances, now possibilities expand beyond physical barriers. Someone can receive and send messages, watch videos and share texts with individuals whose existence is seized only through bits and bytes. The profusion of digital social networks brings people together and shape new behavior. The materiality is represented by the artifacts but does not contain itself the objectivity of social construction. In this sense, the artifacts become carriers of other subjectivities.

Time maybe is the most important dimension in the course of experiences of daily life (Couldry and Hepp 2016). The time-based factor is associated with the spatial dimension, reflecting in the notion of "here and now". The detachment in space and time makes consequences: virtual communication happens in a different way from face-to-face, constructing and reaffirming the current phenomenon (Couldry and Hepp 2016). The ongoing communicative process in the workplace regards silence when time-elongated in a negative way. In this sense, the lack of interaction tends to carry interpretations such as incompetence or absence of commitment and may even lead to relationship ruptures.

The phenomenological domain of the social construction of reality discussed by Berger & Luckmann (1966) fundamentally considers the time-space relation in the formation of knowledge. However, the increasing use of mediated communications and information technology infrastructures tends to place *data* in the centrality of interactions. As a result, change in social habits takes place (Couldry and Hepp 2016). The ability to create indicators for everyday life has its potential increased and is revealed in notions such as number of virtual friends, likes or trending hashtags – long-lasting or not. In other words, data is facilitated and acquires the status of dimension of the social world: it incorporates both the formation of social structures and the way of acting and relating to others.

Reflections based on materiality expand the notion of significance attributed to tools and artifacts. They are gradually being recognized as a fundamental part of social life and not just a casual aspect (Orlikowski 2007). Within this context, Dameron, Lê, & LeBaron (2015) draw attention to the perception of the material nature of technology. They elucidate understanding around computer mediated communication and internet technology. These

artifacts allowed diverse forms of organizations such as universities and educational institutes to broaden their global field of education, reaching connections through collaboration with different institutions (Liu et al. 2010). The technological devices make possible the contact between multiple people spread around the world.

In this way, technological artifact is relevant according as it permits individuals to reach things or people that could not be conceived before (Leonardi and Barley 2008). It is also an efficient communication tool, recognized as useful by many of its users (Kaplan 2010). Despite their importance in everyday practice, artifacts itself are not significant – actually their relevance only occurs through social interaction (Dameron, Lê, and LeBaron 2015). Artifacts are thus instruments that shape human practices (Miettinen and Virkkunen 2005) as forms of mediation in the signification process.

Phenomenology seeks to understand this reality through the experience of the other's world differing from common sense (Berger and Luckmann 1966). The subjectivity of meanings in common sense contrast with the knowledge to which phenomenology proposes itself to achieve. The core of Berger & Luckmann's (1966) phenomenological analysis lies in the dimensions of space and time of intersubjective experiences and their relation to the objectivity of legitimated logics.

Couldry & Hepp (2016) present a form of materialist phenomenology to examine the construction of measured reality. It is materialist by the technological connections between men and machines and by the institutionalized knowledge of these relations. It is phenomenology by the growing interaction and interdependence between men and machines and by the interpretation and praxis conducted. The notion of praxis to Couldry & Hepp (2016) approaches to the concept considered in the perspective of strategy as practice. The idea goes beyond the conciliation between structure and agency and incorporates cultural elements in mediated practice.

3 METHOD

This is an exploratory investigation departing from empiricism and human knowledge constructed from sensorial and social experiences (Kumar 2011). From this perspective, it is possible to obtain, through the qualitative analysis, validity, reliability as well as being systematic in its conduction (Krippendorff 2004). The particularities and complexities of the interpretative case study, much more than a mere sample survey, provide an opportunity to understand the phenomenon from an in-depth understanding of the cases (Stake 1995). In this sense, we chose the case study to reach complexity. Understanding through the study of the interpretative case involves recursive process and the acknowledgement of its context (Schwandt 1998; Schwandt and Gates 2018).

Specifically, the case is characterized by undergraduate students in Business Management enrolled in Federal University of Paraná (UFPR). They joined a collaboration project inserted in a context of business learning and interaction of multicultural teams in virtual environments. This project brings together more than 5,000 students from 40 countries each semester to solve business problems of partner companies. The purpose is to formulate or design a solution to a given real business problem. For this, the project involves students of different nationalities into teams that interact virtually. Each group can freely establish the way they judge most appropriate to communicate and interact. They prepare a final delivery at the end of the semester, and also perform weekly partial deliveries. Besides, each team member must evaluate the performance of their colleagues weekly.

Furthermore, the case selection focusing on the Brazilian scenario was made due two reasons. First, Brazil is part of the group called BRICSⁱ of emerging countries and there is a

great potential for exploring business learning topics such as proposed here. Second, the country is recognized for having a large population and has a history of multicultural training and ethnic diversity. This aspect lays importance on the understanding of how participants immersed in this culture make sense of a technology-mediated learning experience.

In order to obtain the data, semi-structured interviews were carried out with six undergraduate students that participated in the project during the second half of 2018. The grade received in the teammate's evaluations served as the first selection criterion. In particular, we selected students with high grades due to be more motivated or engaged with the project. In addition, we included: a foreigner student regularly enrolled in Brazil; a student who initially obtained high grades that decreased throughout the journey; a student who joined in the project in 2017 and performed as coachⁱⁱ during the period studied. These individuals were chosen because of their singularities in relation to the others who joined the project.

After the data collection and transcription, the content analysis was conducted. During the examination of materials, we looked for patterns, consistencies and correspondences that together form part of the meaning construction (Stake 1995). In this sense, we worked with coding techniques, which were conducted according to the conditions emerged from the data (Saldaña 2016). Table 1. Composition of sensemaking construct. shows how the properties of sensemaking were considered in the case analysis.

Table 1. Composition of sensemaking construct.

Properties (Weick, 1995, p. 17)	The recipe "how can I know what I think until I see what I say?" can be parsed to show how each of the seven properties of sensemaking are built into it(Weick, 1995, p. 61)	How to achieve the property
Grounded in identity construction	"The recipe is a question about who I am as	Sensemaker as socially situated
	indicated by discovery of how and what I	interpretative individual.
	think."	Formation and modification of self.
Retrospective	"To learn what I think, I look back over what I	Reflection of meaningful past
	said earlier."	experience.
Enactive of sensible environments	"I create the object to be seen and inspected	Prior to event actions performed
	when I say or do something."	by the informant that shape and
		enact their environment.
Social	"What I say and single out and conclude are	Talk, discourse and conversation
	determined by who socialized me and how I	reflecting interaction with others.
	was socialized, as well as by the audience I	Shared understanding.
	anticipate will audit the conclusions I reach."	
Ongoing	"My talking is spread across time, competes	Interruptions and
	for attention with other ongoing projects, and	reconsiderations during the
	is reflected on after it is finished, which means	process.
	my interests may already have changed."	
Focused on and by extracted cues	"The 'what" that I single out and embellish as	Noticing around social context.
	the content of the thought is only a small	Capacity to evoke action.
	portion of the utterance that becomes salient	
	because of context and personal dispositions."	

Driven by plausibility rather than accuracy

"I need to know enough about what I think to get on with my projects, but no more' which means sufficiency and plausibility take precedence over accuracy."

Logic and coherence.

NOTE: ADAPTED FROM WEICK (1995).

Given the qualitative nature of the approach adopted, the validity and reliability (Bartunek, Rynes, and Ireland 2006) can be achieved by focusing on the rigor of the research (Bergh 2003; Morse 2018). Initially the case analysis was performed for one interview to validate the protocol among the researchers and to adjust the definitions of the categories. It enables the alignment of researchers' understanding of the constructs. Afterward, researchers were triangulated, each of us analyzing every single interview individually with the same validated protocol. Finally, we aggregate all individual notes and we reflected together seeking the concordance in relation to research findings.

4 DATA ANALYSIS

The willingness to participate in this type of project is driven by the desire to learn about business through a real experience. Students expect that this involvement supports a differential matter of their curriculum when applying for a job. In addition, the meaning is constructed throughout all interactions and this contributes to the student's formation as individuals. The way of understanding cultures, people and business are thus transformed and reconfigured.

In this context, the multicultural contact enables another look at the individual in relation to the professional reality. After project experience, the search for new career opportunities has been directed by the desire to maintain the relationship with multiple cultures. The difficulties with the project arise during the execution of the tasks, being result of own limitations of the students related to specific knowledge of a certain area unknown by them. The pressure for being sociable is also mentioned, being placed as a global characteristic and part of the nature of the work itself.

The students associate research processes to meet the demands of the project as opportunities for the individual to discover and understand their potentialities. This makes the project be interpreted as a good learning experience that stimulates new skills to rise. The students consequently develop a sense of motivation to continue studying. Special attention is given to the English language learning in that it was the prevailing language of communication in the project and considered by the students as a barrier to be overcome. Learning, therefore, is conditioned by the needs and aspirations of each student.

In the midst of personal successes and failures, the learning process also arises, and mistake is seen as a source of learning events to the individual. Thus, even those team members who have been most skeptical about re-engaging in a similar experience, have shown somewhat learning occurrence. This was the case of a student frustrated due to not being leader of the group. In her words,

I thought it was cool for me to learn more of the process, I had to take a look at things. I think this is pretty cool. It seems like I've learned a lot. I thought I'd be more lost. I did not think I was so lost; I discovered some things that I like to do, and I did not know. I've been working quite a bit in editing the documents, building charts, a bit more design. So, I found out I'm not that bad at it. It's interesting. iii

At the beginning, the students were facing some difficulties in establishing the means of communication to be adopted. Mediation artifacts are not previously defined by the learning platform, and students receive only the e-mail address of their colleagues. Their statements assume the notion of difficultness and include terms such as "barrier", "very difficult for people to talk" and "very difficult to contact". The limitation is established mainly because individuals do not meet each other and do not have the same artifactual references. In this way, the consensus is sought by first communicating by e-mail. Contact is mostly established in textual form, using other artifactual means such as audio or video when needed for clarity and rapidity in communication. Moreover, this was verified only once in a single case.

The sense was constructed by the team through the use of some technological artifacts due to the impossibility of face-to-face contact. We point out the exclusively virtual relationship seems to initially cause confusion and disorganization of the team, inhibiting, for example, the emergence of leadership and pro-activity of the members. The spatial dimension of mediated communication is seen by students as a barrier to creating a greater connection between the team.

We perceived the formation of a judgment that artifacts that reduce this distance as a video call could improve the relationship and interaction among the team members. Brazilian students report attempts to make video contact, while foreign students prefer textual contact instead. Video, in this context, performs as an emulator of face-to-face interaction and permits students to capture more information such as tone of voice, posture, countenance, etc. The frustration for not using the video was noticed given the need to reduce the spatial distance. Here is the point of the belief that if there were no spatial distancing between members communication and relationship would be easier. Team members see that face-to-face interaction in the social environment helps to boost dialogue and the relationship between people.

The idea of video interaction can be a resource for bringing mediated contact closer to face-to-face. It requires everyone to be online at the same time and it stimulates to solve conflicts or doubts (informational aspect) during the meeting. The spatial dimension is then overcome, and the members interact as if they were in person. There is always the prerogative to end the call at any time, but this can be seen as a rude and misunderstood attitude.

Given the global relationships that the platform imposes, the time dimension becomes prominent because of restrictions so that everyone is online at the same time. This is mainly reflected by the time zone since each individual has their daily activities, and their free time may not correspond with that of the others. Therefore, in addition to each one being in a different spatial relation, the interactions occur at a different time for each individual. The contact, then, ceases to be instantaneous, and the interaction extends through long periods of silence, giving scope for understandings and interpretations about silence itself.

On the other hand, the temporal aspect also allows the messages to be more elaborate, so as to avoid noise or talk about undue things. The audio or video call allows team members to explain and discuss subjects more clearly and quickly but had been little used. The textual factor allows the content to extend over time. Registration is permanent and can be accessed at different times, unlike face-to-face interaction that is ephemeral and becomes forgotten over time.

Overall, it was an environment without conflicts and discussions. There was a single conflict in a group between two individuals because of responsibility for a deliverable. The informant was able to report because the application allows the messages sent to the group to be viewed later. It is the temporal dimension of mediated reality, since the informant was not online at the time of the events but managed to feel the tension involved. The student was distanced in time for a period that allowed the situation to begin and end without his intervention.

Mediated interactions modify the informational elements, and the use of textual, auditory or visual means modifies the understanding of the situation. In an account of a video call conducted in the coaching session, the informant declares her impression of contact with a colleague from another country: after her colleague experienced many internet connection difficulties, she was shocked with the reality seen as she realized an extreme humble environment. It is not just a distancing of the time-space relationship, but an information element that modifies the understanding of each other. This shapes the comprehension of the situation more broadly.

In general, the contacts were made basically in a textual way, with one or another group making contact by audio or video, but in a very punctual way. The point the image carries is informational leading the students to wonder: Does the guy have a serious or debauched posture? Is the environment professional? How does one dress? All questions lead to the data that impacts the construction of meaning. The textual element brings a lack of informational elements such as the tone of voice, countenance, appearance, personality, the speed of speech, etc.

The data dimension in the mediated construction becomes more sensitive in that face-to-face contact allows more information to be transmitted. The face-to-face interaction may allow greater generation of ideas, which reflects in the quality of the work performed. Although the informant reported no major difficulties in understanding, in one of the statements she notes that "(...) non-native speakers in English were clearer". Such a phenomenon is a characteristic trait of mediated interaction in that, by its nature, can alter data in the communicative process.

The sense is built from the experiences and previous choices. Preferences shape the environment to be faced in the future so that the current choices restrict and configure the situation later. This is the retrospective aspect discussed by Weick (1995) since the choices only make sense when analyzed with a look at the past. Therefore, decisions such as leadership assignment, use of videos or the definition of technical aspects of deliverables have an impact on the enacted environment, changing the sense built at the end of the learning experience.

The evaluation made by team members seems to be conditioned only to their own performance and effort - excluding any nationality character. Nevertheless, the way each member assigns the notes to his/her teammates has the potential to generate annoyances since there is a lack of explanation in relation to each of the evaluated points. This situation alters the sense of overall experience and restricts the student's understanding when assigning grades to his or her colleagues.

Clues are extracted from each interaction and evaluation to create meaning about colleagues. Certain beliefs such as individuals of particular nationalities perform better than others were slowly being modified and re-signified in an ongoing way as clues are collected. Mainly in terms of language, we noted that most of the Brazilian students were afraid to interact in English. This was gradually being modified to the point where they reached the end of the project wishing to continue having international experiences.

The perception of identity is present in the formation of the signification of the students in multicultural teams. Claims about characteristics of specific nationalities are common in their statements. Nevertheless, cultural traits that reveal identity issues are poorly represented in the interaction within the teams. There is a certain uniformity of conduct and the personality trait stands out more strongly than cultural aspects.

The root of the construction of meaning happens through the retrospective analysis of events. In one case, the student reported her frustration with the result achieved by her team in performing the tasks. This sense only happened because she had access to the reports of the other teams as a coaching member. Then she evaluated her own report as inappropriate. In her words, "we thought we were doing it right. I just got the feeling that it was not right when I saw what other people did". The platform does not provide an evaluation of the technical result of

the work performed and this fact makes difficult for the team to understand their own performance.

In a representative statement, the student first understood that her high grade was given due to her good performance in terms of relationship. Then she realized that the score actually reflected her effort to complete the deliverables since the others did not engage. Not having colleagues near to discuss also makes it difficult to understand the motivation for the grade. As Weick (1995) stated, this is how the ongoing sense changes over time, while the retrospective look generates another understanding of the phenomenon.

A meaning to be constructed must be plausible and the idea, for example, that virtual teams formed by different cultures are less conflicting must pass through the plausibility filter. Cultural diversity accommodates different visions and allows a greater openness to the dialogue of ideas. The notion that individuals are from different nationalities offers a comprehensive openness on the team member to interact with divergent views.

The social aspect is present at all times in the construction of the meaning of the learning experience. A consensus is sought by the group, and the fact that there is leadership facilitates this process. In one of the cases where there was no formal leadership attribution, deliverables took place precariously and the team engagement became null. In general, the virtual teams' members discussed the role of each one in the work to be developed. The collective decision came from the very beginning, by the choice of the organization that would be the object of the project. Social harmony guided the choices of the media and the agreement regarding the division of tasks.

The social dimension of meaning is reflected most of the time in issues of leadership legitimacy and group acceptance. This aspect was found in all groups. Even in the case where one of the informants reported her frustration at not being the group's leader, the acceptance of the others also stimulated her own acquiescence. In all cases, the candidacy for leadership role occurred on a voluntary basis. The individual who volunteered for the role was accepted and attended as a leader legitimized by the group. The role of the leader included motivating everyone and ensuring that they met the deadline.

Just in one case the team did not assign a formal leader, and there was no conflict due to lack of engagement. This may have happened because of the distance between the subjects. The interaction is compromised to the extent that everyone accepts any idea that someone suggests. Lack of disagreement can also lead to a loss of deliverables quality. This is the opposite of the brainstorming process in which ideas and innovation are sought. In fact, this issue of lack of interaction within the group frustrated the student. It is not a question of enactment because groups are not chosen by students. Still, the constructed sense permeates the sociability of all members.

There is a pressure to be sociable in the work environment, even if it is virtual, and this is a much more a global characteristic than motivated by a given culture. Placed another way, we can say that it is in the work nature to have a sociability behavior. Still, the issue of social media is also open on the platform - there is no stimulus for this type of interaction. Although some informants reported that they added teammates, they did not have conversations with them. Brazilian students reported with some frustration that their foreign colleagues did not interact through these media - much of them even have no profile.

In contrast, the informant who participated in the coaching session reports that the professional relationship turned to friendship. Coaching provides another way of interacting because not maintained by pression for discipline grades. There is motivation to participate and, in this context, the engagement is concrete.

5 CONCLUSION

This paper aimed to advance the discussions about the process of sensemaking, directing the focus to the way present in the construction of meaning in virtual environments of interaction. The development of technology in the last decades presents a new scenario for the mediation of social interactions, surpassing the national borders. In this research, we investigated how the participants make sense of a technology-mediated experience, specifically in the context of international business learning.

The results of this study contribute to the understanding that meaning is modified and redefined over time through the interactions that take place between team members and also with the platform itself. Clues are drawn from each interaction and the individual's access to information from the past also affects how the meaning is assigned in that relationship. The distance in space and time makes the contact stop being instantaneous, thus exerting a strong barrier in the creation of bonds between the team members. On the other hand, participants identify in face-to-face interaction a way of strengthening relationships between people.

The social dimension is also present in the construction of the meaning of the learning experience. The figure of the leader directly guarantees the motivation of the teammates and the fulfillment of the deadlines, besides facilitating the process of consensus among the group. The cultural diversity itself also helps the good relationship and agreement among the team members, as it promotes a greater openness to the debate and the dialogue of divergent ideas and visions. Finally, the desire for connection to a real professional exercise leads individuals to a technology-mediated experience in which learning operates by developing new skills that were not even known to these individuals.

As recommendations for future studies, we suggest further research investigating how participants of different nationalities construct meaning using technology-mediated experience. In addition, the focus can also be oriented to the materiality seeking to understand how the artifactual elements are articulated and used by the individuals of multiple nationalities in the technologically mediated experience. Finally, future research may consider the analysis of others collaborative business learning projects, in that several aspects differs while maintaining the same technology-mediated logic.

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ⁱ BRICS is the acronym that represent the association of five emerging economies: Brazil, Russia, India, China and South Africa, respectively.

ii The coach act as a supervisor supporting the project staff mainly by answering students doubts about the deliverables.

iii Eu achei que foi bacana pra eu aprender mais do processo, eu tive que dar uma pesquisada nas coisas. Eu acho que isso é bem legal. Parece que eu aprendi bastante. Eu achei que eu ia ficar mais perdida. Não achei que eu fiquei tão perdida, eu descobri algumas coisas que eu gosto de fazer e eu não sabia. Eu fiquei trabalhando bastante na parte de edição do documento, fazendo gráfico, uma parte mais de design. Assim, eu descobri que não sou tão ruim nisso. É interessante.