

Hybrid Learning Higher Education: The Co-Creation of Value in the Student's View

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Abstract

Interaction (student-teacher relationship) and active participation (student involvement) were enhanced due to digital transformation and as long as the student interacts with the teacher, he changes into co-creator student, as the perception of his role in the process of learning evolves. A context in which it is possible to observe such conjuncture in higher education, is hybrid education where digital technology plays a central role. In higher education with hybrid disciplines, student, teacher and institution are interrelated and, by offering hybrid disciplines, the institution enables the joint value creation, but it remains unclear whether the student will be willing to participate more actively and contribute to such co-creation of value. This study aims to reveal the student's perception of this method which requires a more active participation in his learning process and also aims to examine whether the university should adopt this modality the student's formation process. In order to meet this objective, a qualitative research was conducted, through in-depth interviews with students from a private, community, confessional and philanthropic higher education institution in Brazil. After having processed the data using the content analysis method, it was discovered that although the student values its protagonism with more responsibility in learning, co-creation is a difficult, laborious process. Thus, it is considered positive for the university to adopt the hybrid model, as it allows students to develop discipline that contributes to their autonomy, as well as a shift in their mindset to a different way of learning and teaching.

Keywords: Hybrid Learning, Interaction, Active Participation, Co-Creation of Value, Higher Education

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Introduction

Co-creation, in certain areas, is more than appropriate, it seems inherent to the activity. This is the case of teaching, where the student, the teacher and the institution focus on the result of the service through the development of skills and abilities. The role of creating value for the student cannot be the sole responsibility of the institution offering the service, since it must be carried out together with it, that is, co-created (Brambilla, 2010; Hofstatter, 2010; Carvalho, 2017). The company (higher education institution), does not create, it can only propose value (Prahalad & Ramaswamy (2004).

It is not the case here to market education, let alone diminish its importance. Understanding it as a service, even though there is a discussion about this not being a traditional service provision, it is, in this circumstance, having as a central point the resources that can guarantee the quality of the service it provides to the educational institution, as reflected Brambilla (2010) and Carvalho (2017), whose research was dedicated to the theme of value co-creation in the context of higher education, both in person and at distance, respectively. Even knowing that the topic is controversial, especially among professionals in the field of education, in this study, the student is understood as the recipient of the service, and education as a service whose main objective is not only profit, but mainly the social perspective (Svensson & Wood, 2007; Brambilla, 2010; Carvalho, 2017).

Value co-creation presents itself as a multifaceted phenomenon that challenges and brings new research opportunities, given the economic and social changes. However, Carvalho (2017) stated that the theme of co-creation of value has still been little explored, especially in distance learning. In the case of hybrid education, understood in this research as a synonym for semi-presential education - a modality that unites traditional presence with distance education, making it possible to enjoy the advantages of both (Voigt, 2007; Bacich, Tanzi Neto & Trevisani, 2015) - if a similar reality.

It seems to make sense to provide a dialogue between co-creation of value, private higher education that adopts the hybrid teaching model and the student's experiences. This research seeks to contribute, by proposing to answer the following question: how does the student feel when studying in the hybrid modality that requires a more active participation in his learning process and examining about being positive, for his formation, the university adopts this modality in its course?

A qualitative research was conducted with undergraduate students of different courses distributed in the areas of Social, Exact and Health Sciences who had already attended at least 20% of the credit hours of the course and at least one discipline in the hybrid modality, of a community, confessional and philanthropic private university in Brazil. Data collection was carried out through semi-structured interviews, recorded on audio and using a script as the guide. The collected data were analyzed through content analysis.

The structure of this study presents, first, the co-creation of value in the context of hybrid higher education. After, the relationship between technology and the concept of the co-creative student is explained. The methodology used to achieve the

objectives proposed by this study is presented. The data analysis and the discussion of the results are presented. Finally, the conclusions of the study are made, as well as the possibilities for further research on the subject.

Background

Value co-creation in the context of higher education

The search for value in education is not a new issue (Brambilla, 2010; Hofstatter, 2010; Carvalho, 2017). In the genesis of teaching there are the essential characteristics of the concept of co-creation of value, that is: interaction (student-teacher relationship) and active participation (student involvement). Studies on co-creation of value in the context of higher education have been on the agenda of many researchers (Tsourela et al, 2015; Ribes-Giner, et al, 2016; Blau & Shamir-Inbal, 2017; Chemi & Krogh, 2017; Ranjbarfard & Sureshjani, 2017). For this, the studies carried out by Prahalad and Ramaswamy (2004) and by Vargo and Lusch (2004, 2006, 2008) served as an initial basis.

Contemporary researchers (Tsourela et al, 2015; Ribes-Giner, Perello-Marín & Díaz, 2016; Blau & Shamir- Inbal, 2017; Chemi & Krogh, 2017; Ranjbarfard & Sureshjani, 2017) believe that it is necessary to bring them into the debate the co-creation of value in the context of higher education to contribute on four fronts of understanding. They are: training students prepared to face the challenges of their academic and professional training, enabling student involvement in different stages of the service offered by higher education institutions, reducing costs and increasing satisfaction, confidence and loyalty. Higher education institutions are reviewing their roles, seeking to follow a more effective path of research, teaching and learning, including other aspects: emotional, sensory, affective and psychological learning (Tsourela et al, 2015).

The concept of co-creation in the context of higher education, indicates that in all educational processes, the participation of students is welcome, in order to try to guarantee the creation of knowledge together with them, that is, to go beyond just taking a course higher education and obtaining a diploma, as well as increasing the competitiveness of higher education (Tsourela et al, 2015). Higher education institutions must then develop and define their vision, guidelines and educational objectives involving students and putting into practice greater motivation in teaching (Bailey, 2000).

The next topic presents digital technology as an enhancer of interaction (relationship between co-creator student and teacher) and active participation (involvement of co-creator student) in the learning process and co-creation of value.

Technology and the co-creator student

The digital transformation, which among other various contributions, expanded access to technologies, including introducing them into education (Castells, 2013), made possible both the interaction (the student's relationship with the teacher) and the active participation (of the student) gain new contours, that is, they were enhanced, and can also occur collectively, in a network and without depending on time and distance

(Díaz-Méndez & Gummesson, 2012). The concept of co-creative student, proposed by Halbesleben and Wheeler (2009) seems to be in line with this technological context.

The contributions of research by Halbesleben and Wheeler (2009) presented four models to identify the profile and the types of roles that the student can play in the teaching-learning relationship. They are: Student as a Consumer, Student as an Employee, Student as a Co-Creator and Student as a Junior Partner and, of these four models, the authors analyzed that the most congruent for the understanding of teaching as a process of co-creation of value was that of the Student as Co-Creator. In this model, it was found the best results of interest, learning and agrees with the idea of bringing to the relationship, the best composition of value for all involved. For Halbesleben and Wheeler (2009), this model has the differential that the student co-produces the results of the service, that is, its qualification.

Active participation (of the student) and interaction (between student and teacher) can be enhanced, supported by digital technologies. At the same time, the ways of teaching and learning are being reconfigured, enabling changes in the design of teaching and learning practices (Díaz-Méndez & Gummesson, 2012; Tsourela et al., 2015).

An example where it is possible to observe such a situation in higher education is hybrid education. In this academic modality, it is understood that digital technology occupies a prominent place, because it is a condition for it to be realized (Haughey, 2006; Tori, 2009; Horn & Staker, 2014; Bacich et al (2015) The next topic presents the concept of hybrid education and its congruence with the value co-creation process.

Hybrid teaching in higher education

For Tori (2009), Horn and Staker (2014) and Bacich et al (2015), in the hybrid model, there is a potential to improve the quality and efficiency of learning. As these researchers evaluated, due to the combination of virtual and face-to-face learning systems, it is feasible to make use of several languages simultaneously, favoring communication and space / time integration, in addition to meeting different learning styles and rhythms, allowing to increase the productivity of both the student and the teacher.

As for the definition of hybrid education, there are different understandings and, for the purposes of this study, the following was chosen: “any formal educational program in which a student learns, at least in part, through online teaching, with some type of control over time, space, course and / or pace and, at least in part, in a physical, supervised location ”(Horn & Staker, 2014, p.34).

The hybrid teaching modality is governed by six principles that were outlined by researchers (Bertolin & De Marchi, 2014) who studied the topic. Table 1 presents these principles and the aspects of hybrid education, indicating the congruence of this modality with the phenomenon of co-creation of value.

Principles	Features	Essential features of value co-creation
1) Time and space flexibility	activities can be carried out at a time and place more appropriate for the student	Active participation
2) Interaction and collaboration in learning	construction of knowledge is permeated by dialogue, by the exchange of experiences and knowledge between the actors involved	Interaction and Active participation
3) Maximizing the use of technology in education	ICT's (information and communication technologies) are at the service of the teaching and learning process, helping students in building knowledge and appropriating the use of digital tools for the professional field	Interaction and Active participation
4) Autonomous learning	training students who self-regulate their learning and who are responsible for the organization of studies	Active participation
5) Quality materials	phases of planning, insertion and evaluation of the tools to be implemented in the disciplines of each hybrid course	Active participation
6) Pedagogical and technical support	student engagement and encouragement in academic activities	Interaction and Active participation

Table 1. Principles of hybrid education and congruence with the Value Co-creation process

Source: Prepared by the authors from Bertolin and De Marchi (2014).

It appears that hybrid education finds in digital technology a fundamental component for its understanding as a process of co-creation of value. The essential characteristics of value co-creation that are congruent with the principles of hybrid education (Bertolin & De Marchi, 2014), that is, the interaction between student and teacher and the active participation of the student to co-create value (qualification) are found in the technological support, your optimization.

After portraying the concept of hybrid education and its congruence with the process of co-creating value, the next topic presents the methodology adopted by this study.

Methodology

A qualitative research was conducted with sixteen undergraduate students, from courses in the areas of Social, Exact and Health Sciences who had already attended at least 20% of the course credit hours and had taken at least one discipline in the hybrid modality. The interviews were performed between the months of August and

November 2019, and the selection of the respondents started with a recommendation of students pointed out by the institution's DE coordinator.

The research locus was a large, private, community, confessional and philanthropic Brazilian university institution, with more than 50,000 students, which offers courses in different areas of knowledge and in different levels: undergraduate, specialization, master and doctorate. This institution offers in-person, distance and hybrid courses, and for over ten years it has been offering distance learning courses. Data collection was carried out through in-depth interviews, recorded on audio, each lasting approximately one hour and carried out at the university itself, on days and times previously scheduled with students. A semi-structured script was used as a guide, based on the literature on the topic.

Both the transcription and the treatment of the data was done using the content analysis method. The indicators were defined to make inferences of the knowledge related to the production / reception conditions (inferred variables) of the content of the messages (Bardin, 2011). The categorical analysis technique, that is, an analysis developed from a category, where the data are grouped, considering the common part between them (Bardin, 2011) was the choice for this study. A category is defined by a key term that expresses both the concept and its semantic field (Vala, 2007).

Thematic analysis was chosen to establish the characteristics of the message, its informational value, words, arguments and ideas (Vala, 2007). From the reports collected from the students, units of meaning were extracted, according to the defined theme, and then inferences were developed. Next, the data analyzes are presented, where the categories that were initially defined based on the Literature are identified, but were consolidated after the data obtained from the interviews.

Data analysis

The analyzed categories aimed to identify how the student feels when studying in a modality that requires a more active participation in their learning process and to examine whether the university adopts this modality in its course for its formation. 'Co-creation' was the category defined based on Literature, in the light of the studies by Svensson and Wood (2007) and Halbesleben and Wheeler (2009) on the active participation of students, the interaction between students and teachers and the roles that the student can play in the teaching-learning relationship. The category 'Adoption' was defined based on research by Bailey (2000) and Chemi and Krogh (2017) on how educational institutions should motivate teaching, with guidelines that involve teachers in the training of students prepared for new and technological world settings. The consolidation of these two categories of analysis took place after data collection. For a better presentation of the analyzed data, in Table 2, below, the categories considered for the study are identified, as well as their respective descriptions.

Category	Description
Co-creation	Presents the interaction between student and teacher and the active participation of the student as the characteristics to cocreate value (qualification)
Adoption	Examines whether to be positive, for student training, the university adopt this modality in its course

Table 2 - Research analysis categories

Source: Research data.

Co-creation in the student's view

The interaction between student and teacher and the active participation of the student are the essential characteristics to create value (qualification). Such characteristics are congruent with three of the six principles of hybrid teaching defined by Bertolin and De Marchi (2014): a) interaction and collaboration in learning; b) maximizing the use of technology in education; c) pedagogical and technical support.

The interviewed students believe that the interaction with the teacher and having active participation - co-creation - during their university career is something rewarding and they are aspects that should be inherent in their learning process, even understanding how hard this is for them. Students 1 and 6 explained:

I think if you want to grow more, you know, to have some 'bigger prominence', I think you have to have this active participation, it makes perfect sense, right. And I honestly have no problem with that, because I see that it is something, really, natural, it is necessary. So, I have no problem with that, I think it's fair (Student 1).

I feel kind of obliged, you know, because that is what will define the professional that I will be and, like it or not, I will also prove the quality of the college, directly I will be doing this (Student 6).

From these students' understandings, it is indicated that the concept of co-creation is related to the role that he can (or should) play during his learning process, that is, the protagonist, with more responsibility, because his participation is more active and provides partnership with the teacher. The model of the Student Co-creator of Halbesleben and Wheeler (2009), where the student co-produces the results of the service seems to be in line with the findings of the interviews. In the context of higher education, the concept of co-creation indicates that in all educational processes, student participation is welcome, as was also found in the research undertaken by Tsourela et al (2015), involving the co-creation of value and the university teaching service.

It is possible to analyze that a favorable path for the higher education institution would be to take advantage of the students' willingness to participate and interact and present to them the reason for the institutional choice for the semi-presential teaching modality, as well as its format. "In order to have a good perception of their students, institutions must seek this co-creation" (Damacena & Nascimento, 2016, p. 16), for the students, just being able to pay for the service is not enough to qualify.

Adoption of the hybrid modality for better student qualification

The students believe that it is positive for the university to adopt the semi-presential model for their training. For them, the way that makes the most sense to obtain the service of their qualification is that which allows them to develop, do together and participate autonomously in their process. of learning.

It was possible to understand the student's posture in the same way as Svensson and Wood (2007), that is, an entity actively involved in the teaching-learning process. Students 8 and 13 explained that

I believe that participating in the production of something would be much more effective for teaching and learning (Student 8).

What makes the most sense is what I choose, what I want to do (...). Do not impose certain mandatory subjects on me, but what I am interested in participating in (Student 13).

It was analyzed that the reasons given by the students about being positive for their training in the university to offer semi-presential subjects, was the discipline. Students are inclined to understand that when attending semi-presential courses, the university allows them to develop academic discipline, that is, to create a study routine that generates autonomy. Student 15's assessment:

I think that today it is very common for people to work and study, so I think that for people who have less time to attend classes and things like that, it is very positive and I also think it is positive in terms of creating discipline, because it forces you to study every week, which forces you to do things in the correct sequence (Student 15).

For students, it is positive for the university to adopt the semi-presential teaching modality because it consolidates the paradigm shift, after all, they realize that it is a change of mindset, that is, a different way of learning and teaching, even though this is a challenge that some they accept to face more naturally, while others have more resistance.

Students 8 and 11 exemplify this:

when you work with semi-presential subjects (...) It seems that the student has to study more alone, than with a teacher: a consequence. But, the student, he has to get used to new technologies because they are a reality, he tends to bring this idea into his daily life (Student 8).

I think it is positive because it covers a larger audience of students. Sometimes, people have problems with face-to-face, but in semi-face, he gets a bigger scam, but then, on the other hand, there are people who hate semi-face and get beaten up because of him, right. I think there are a couple of sides there, but in my case, for myself, it was quite interesting, a different way of learning, and of teaching also from the teachers that I thought were really cool (Student 11).

Students believe that a higher education institution where it is possible to co-create their qualification is one that prepares students for the reality of the market, bringing the challenges of the profession to academic activities, through classes that connect theory and practice in a way innovative, to consolidate knowledge. It is analyzed that Bailey's study (2000) on involving students and teachers to promote learning in a practical way, is in line with these analyzes. Student 5 consider that

it would be a course that takes the needs of the market, not only now, more by projection, see what is a trend, State of the Art to be able to contemplate in the course, to train excellent professionals for the market (Student 5).

The results of this research point to an affinity with the studies by Svensson and Wood (2007), that is, the relationship between student and university begins, with the principle that it is the provider of knowledge and the student, its receiver. However, at times, the roles are interchangeable between the two entities in this relationship and this means that the student is not seen as a mere consumer, but as a co-creator.

It seems that higher education institutions need to review their roles, defining a more effective research, teaching and learning path. Among its objectives, the one that indicates that it is the most imperative for institutions is to seek to build a curriculum that favors the development of students' skills to manage personal, social and professional challenges in the face of technological configurations in the contemporary world. These analyzes are in line with the study by Chemi and Krogh (2017), whose focus is co-creation in higher education, involving students and teachers, in order to enable them to face the challenges of the future, in a creative and collaborative way.

Conclusion

This study analyzed how the student feels when studying in the hybrid modality that requires a more active participation in his learning process and examining if it is positive for his formation the university to adopt this modality in its course. A qualitative research was carried out, through in-depth interviews, in a large Brazilian higher education institution. After the treatment of the data by the content analysis method, it was possible to reveal the co-creation of value in the student's view, advancing in relation to the already known advantages and presenting new perceptions on this theme.

Students feel that studying in the hybrid modality, assuming that the essential characteristics of the co-creation of value - interaction and active participation - are aspects that should be inherent to the process of their learning. New insights into the co-creation of value are presented in the context of hybrid higher education, that is, interaction and active participation are genuine attributes to the profile of the university student, enabling him to perceive himself contributing to the construction of a legacy with teachers and the institution you chose to qualify for.

The second finding of this research, about the co-creation of value in higher education that adopts the hybrid teaching modality, confirms the model of the Co-Creator Student of Halbesleben and Wheeler (2009) where the student co-produces the results of his training. It proved that the role of protagonist, with more responsibility in his

learning process can and must be played by the student, in order to promote his partnership with the teacher, because his participation can be more active in this modality.

The third contribution that this study presents is particular and concerns the adoption of the hybrid modality for the better qualification of the student. For students, studying in this modality gives them the opportunity to develop the discipline, while encouraging autonomy, thanks to the study routine that this type of semi-presential education requires for pre-class activities. Students confirm that by adopting the semi-presential teaching modality, the university is on a path of paradigm shift, that is, it proposes a different way of learning and teaching that can enable them for the current and technological reality. Although they assume that this is a major challenge that some students have more resistance to face.

The contribution of this study is to demonstrate that in order to consolidate the co-creation of value in the context of hybrid higher education, the involvement of all entities in the teaching-learning process is necessary. The focus of higher education institutions should be on developing a curriculum where students and teachers participate creatively and collaboratively in the learning process. From this study, a future research agenda can emerge on the co-creation of value in hybrid higher education in the view of students from public higher education institutions, in order to broaden the discussion on this current theme, especially considering the significant changes that the pandemic of COVID 19 imposed on the main entities involved in the teaching-learning process.

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