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Hybrid learning and Google for Education in higher education: students' perspectives.

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ABSTRACT

This research aimed to analyze the conceptions of students from a municipal university in ABC São Paulo regarding hybrid teaching and the Google for Education platform. The study, which was descriptive in nature and had a mixed approach (quantitative and quantitative), involved the participation of 771 students enrolled in different undergraduate courses at the investigated institution. A Likert scale questionnaire applied via Google Forms® was used, consisting of 22 questions about conceptions about the object of study in addition to those that dealt with sociodemographic data. To process the data, simple statistical calculations were used. The majority of participants are female, single (86.9%), with the most common age group between 25 and 35 years old and white (73%). Regarding the aspects with the highest satisfaction rate, the following stand out: the interface and usability of Google Classroom. More specifically, quick access to material (91%), organization of content (88%), saving time (88%), encouraging learning (69%), encouraging student participation in face-to-face classes (68%), better performance in subjects (73%) and teacher-student interaction (66%). In relation to hybrid teaching, classes are more effective (57%), favoring a better understanding of the content (60%). However, dissatisfaction (54%) among participants was observed in relation to the subjects of the face-to-face courses offered in the distance model (a la carte) both in the quantitative survey and in the Discussion Group. This result is relevant, on the one hand, to guide course coordinators in choosing subjects that will be offered at a distance, as well as to teachers in the methodological procedures for offering subjects at a distance and, on the other, to guide senior management in relation to maintaining Google for Education as an additional resource for teaching, learning and knowledge management processes.

Keywords: hybrid teaching. Blended learning. Google For Education. Higher education.

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EHybrid Learning and Google for Education in Higher Education: as concepções dos estudantes

RESUMO

A presente pesquisa objetivou analisar as concepções de estudantes de uma universidade municipal do ABC paulista acerca do ensino híbrido e da plataforma *Google for Education*. O estudo, de natureza descritiva e abordagem mista (quantitativa e qualitativa), contou com a participação de 771 estudantes matriculados em diferentes cursos de graduação da instituição investigada. Foi utilizado um questionário tipo escala de Likert aplicado via Google Forms®, composto por 22 perguntas de concepções acerca do objeto de estudo, além de questões que trataram de dados sociodemográficos. Para o tratamento dos dados, foram empregados cálculos estatísticos simples. A maioria dos participantes é do sexo feminino, solteira (86,9%), com a faixa etária mais comum entre 25 e 35 anos e branca (73%). Em relação aos aspectos com maior índice de satisfação, destacam-se: a interface e usabilidade do *Google Classroo*m. De modo mais específico, acesso rápido ao material (91%), a organização do conteúdo (88%), a economia de tempo (88%), o estímulo à aprendizagem (69%), o favorecimento à participação dos estudantes nas aulas presenciais (68%), melhor desempenho nas disciplinas (73%) e interação professor-aluno (66%). Em relação ao ensino híbrido, na perspectiva dos participantes, as aulas são mais eficazes (57%) favorecem uma melhor compreensão dos conteúdos (60%). Todavia, observou-se insatisfação (54%) dos participantes em relação às disciplinas dos cursos presenciais ofertadas no modelo a distância (a la carte) tanto no levantamento quantitativo quanto no Grupo de Discussão. Esse resultado é relevante, por um lado, para orientar os coordenadores de curso acerca da escolha de disciplinas que serão ofertadas a distância, assim como aos professores nos procedimentos metodológicos de oferta de disciplinas a distância e, por outro, para orientar a alta administração da Universidade em relação à manutenção do *Google for Education* como recurso adicional aos processos de ensino, aprendizagem e gestão do conhecimento.

Palavras-chave: ensino híbrido. Blended learning. Google For Education. Ensino superior.

Aprendizaje híbrido y Google para la Educación en la educación superior: perspectivas de los estudiantes.

RESUMEN

Esta investigación tuvo como objetivo analizar las concepciones de estudiantes de una universidad municipal de ABC São Paulo sobre la enseñanza híbrida y la plataforma Google for Education.

El estudio, de carácter descriptivo y con enfoque mixto (cuantitativo y cuantitativo), contó con la participación de 771 estudiantes matriculados en diferentes carreras de pregrado de la institución investigada.
Se utilizó un cuestionario escala Likert aplicado a través de Google Forms®, compuesto por 22 preguntas sobre concepciones sobre el objeto de estudio además de aquellas que versaban sobre datos sociodemográficos. Para procesar los datos se utilizaron cálculos estadísticos simples. La mayoría de los participantes son mujeres, solteras (86,9%), siendo el grupo de edad más común entre 25 y 35 años y blancos (73%). Respecto a los aspectos con mayor índice de satisfacción destacan: la interfaz y usabilidad de Google Classroom. Más concretamente, acceso rápido al material (91%), organización de contenidos (88%), ahorro de tiempo (88%), fomento del aprendizaje (69%), fomento de la participación de los estudiantes en clases presenciales (68%), mejor desempeño en las materias (73%) e interacción profesor-alumno (66%). En relación a la enseñanza híbrida, las clases son más efectivas (57%), favoreciendo una mejor comprensión de los contenidos (60%). Sin embargo, se observó insatisfacción (54%) entre los participantes con relación a las materias de los cursos presenciales ofrecidos en el modelo a distancia (a la carta), tanto en la encuesta cuantitativa como en el Grupo de Discusión. Este resultado es relevante, por un lado, para orientar a los coordinadores de cursos en la elección de las materias que se ofrecerán a distancia, así como a los docentes en los procedimientos metodológicos para la oferta de materias a distancia y, por otro, para orientar a la alta dirección. en relación con el mantenimiento de Google for Education como un recurso adicional para los procesos de enseñanza, aprendizaje y gestión del conocimiento.

Palabras clave: enseñanza híbrida. Aprendizaje mixto. Google para la educación. Educación superior.

1. Introduction

Blended learning, or hybrid teaching, is a term that has gained prominence across various academic and corporate sectors in light of the scientific and technological advances observed in recent years, particularly in the second half of the last century. On this topic, Hamad et al. (2015, p. 14) note that "[...] over the last years of the twentieth century and the beginning of the twenty-first, different technologies have been reshaping how people live, communicate, and learn."

In the educational context, blended learning is gradually establishing itself as an extension of the traditional classroom through the integration of face-to-face instruction with online learning (Souza et al., 2019). This teaching model has gained prominence because, among other purposes, it promotes "[...] respect for each student's learning pace and style combined with group-based active methodologies [...], without strict disciplinary boundaries, integrating time, spaces, and digital technologies" (Moran, 2015, p. 29).

Based on these understandings, this article presents the partial results of a study that focused on blended learning and Google for Education within the context of the Municipal University of São Caetano do Sul (USCS)[1]. The decision to investigate blended learning and the use of Google for Education in the learning process aligns with two complementary perspectives.

[1] This research received financial support from CNPq.

First, blended learning is not a teaching modality per se, but a methodology that allows for the integration of different approaches and conceptions of education and learning. "Learning is blended because we are all both learners and teachers, consumers and producers of information and knowledge" (Moran, 2015, p. 28). In this context, students learn by utilizing a variety of resources and media, as the traditional classroom model generally no longer meets their needs. The second perspective concerns a new understanding of the use of the online platform Google for Education. Until the beginning of the COVID-19 pandemic, little was known about the usability of this tool; however, gradually, both students and teachers gained confidence in it and began to explore it more deeply, as evidenced in this study.

However, this paradigm shift was not straightforward; the initial process of adopting Google tools was marked by challenges and uncertainties. With the advent of the COVID-19 pandemic, teachers were "forced" to transition, along with their classes, to remote teaching and, in many cases, without prior knowledge of the tools used in the online model, which required them to improvise in order to conduct their lessons (Okmawati, 2020; Warman, 2021). This created a certain tension, as in this new teaching model, teachers needed to understand that the dynamics of remote classes differed from those of face-to-face instruction, demanding greater flexibility and the ability to capture students' attention to facilitate the appropriation of knowledge.

Since then, numerous studies have been conducted focusing on emergency remote teaching, but the same cannot be said for the evaluation of technological solutions such as Google for Education, at least in terms of scale, which, despite representing an innovation, may not meet the expectations of some teachers and students (Ramly & Latiff, 2021). A study conducted by Medeiros and Miranda (2022) provided some insights into the benefits of Google for Education; however, this assessment was aligned with emergency remote teaching, and in this case, the analysis focused on the relationship between this tool and blended learning.

2. Blended Learning and Google for Education

Blended learning is one of the most significant trends in twenty-first-century education. Although the term "blended learning" emerged in the United States around the 1960s, in Brazil, the discussion of hybrid learning began only in 2014, following the organization of a series of experiments conducted by the Península Institute and the Lemann Foundation. This group consisted of sixteen teachers from four Brazilian states (Rio Grande do Sul, Minas Gerais, São Paulo, and Rio de Janeiro). In the discussions that guided the group's work, the proposals of this model, based on previous studies, were implemented through challenges that encouraged teachers to reflect on student development (Bacich, Tanzi Neto, & Trevisani, 2015).

In recent years, particularly following the COVID-19 pandemic, numerous questions have arisen regarding blended learning, making it necessary to provide some clarifications on the subject. Conceptually, "hybrid" means mixed or blended (Moran, 2015). In practice, it refers to the combination of face-to-face and online teaching modalities with the use of Information and Communication Digital Technologies (ICDTs), which are already largely integrated into the daily lives of most students, whether in primary, secondary, or higher education.

Nevertheless, blended learning is not the same as distance education (DE). Although there is still some confusion on this matter—especially due to the widespread use of different teaching methods, such as remote or distance learning, in response to the COVID-19 pandemic—it is important to clarify that the terms are not synonymous.

Distance education is a teaching modality in which the didactic-pedagogical mediation of teaching and learning processes takes place through the use of Information and Communication Digital Technologies (ICDTs), with qualified personnel, access policies, and appropriate monitoring and assessment. In this model, students and education professionals engage in educational activities even when they are in different locations and at different times (Brasil, 2017). In other words, it is a specific teaching modality with its own didactic-pedagogical design, encompassing content, activities, assessment, operational procedures, and an overall structure purposefully developed for distance education.

Unlike distance education, blended learning allows for the combination of face-to-face and online instruction, potentially including in-person activities (classes, laboratory sessions, and fieldwork), as well as other asynchronous activities conducted remotely, such as reading texts, watching video lectures, listening to podcasts, among others (Souza et al., 2019; Novais, 2017; Castro et al., 2015). It is therefore evident that "Hybrid is a rich, appropriate, and complex concept. Everything can be mixed and combined, with very different flavors" (Moran, 2015, p. 26).

Regarding Google for Education, it is a collaborative educational platform designed to facilitate interaction between teachers and students both inside and outside the classroom, at any time and from any internet-connected mobile device (Ventayen, 2017; Sudarsana et al., 2019). In other words, it is a platform that encompasses a variety of educational tools for both schools and universities, aiming to enhance teaching and further engage students in the teaching and learning process.

For this and other reasons, Google for Education—particularly Google Classroom, its central teaching and learning platform—represents a powerful tool for the implementation of blended learning in higher education. However, although this solution is among the best-known, at least in Brazil, Google for Education also offers additional resources to support teaching and learning processes, and, consequently, blended learning (Sukmawati & Nensia, 2019). More specifically, Google for Education is centered around three main solutions: Google Apps for Education, Chromebook for Education, and Google Play for Education (Sunaga & Carvalho, 2015).

Google Apps for Education can be understood, in a sense, as the adaptation of Google Play for Business for educational purposes, as it offers the same resources (forms, spreadsheets, text documents, among others). As a result, schools, universities, and teachers have increasingly used these resources in teaching processes and educational information management (Gour, 2018). Google Forms, for example, has become a powerful tool for creating various assessment instruments, particularly since 2020, with the onset of the COVID-19 pandemic, when class activities began to be delivered remotely. Since then, this tool has also been used to collect information and data, especially academic research data for stricto sensu programs.

Chromebook for Education is a laptop integrated with the services of Google Apps for Education. More specifically, this hardware operates with Google's educational software, including Google Classroom, G Suite for Education, and even consumer applications such as Gmail and Google Keep. With these applications and services, students and teachers can work online or offline, synchronizing their work with Google servers. Google Play for Education consists of tablet applications designed for classroom use (Sudarsana et al., 2019). It is, therefore, an app store equipped with a search system that allows teachers and students to select applications according to the curricular component and the student's grade level.

Nevertheless, while Google for Education has come to represent a revolution in the educational field in the twenty-first century, the company has also faced significant criticism for its involvement in education. To illustrate this, a report published in The New York Times (Singer, 2017) highlighted, for the first time, the "Googlization" of public education in the United States. At that time, concerns were primarily focused on the significant penetration of a single technology company (Google) into the online educational services market. However, "Alphabet-Google has not only become the leading provider of classroom software (G Suite for Education) for K–12 levels, but also of hardware (Chromebooks) with integrated intermediary applications (e.g., search, Google ID, Android)" (Kerssens & Dijck, 2021, p. 1). From the perspective of these authors, concerns about "Googlization" reflected broader apprehensions: beyond this specific aspect, there is an ongoing process of privatization and platformization of online education.

Although this study acknowledges this possibility, it was not intended to problematize the "Googlization" of education or the supposed platformization of online learning. It is assumed that in blended learning, technology contributes to the personalization of learning, "[...] transforming mass education into one that allows students to learn at their own pace and according to previously acquired knowledge, which also enables students to progress more quickly" (Sunaga & Carvalho, 2015, p. 144). Thus, we consider that the development of a pedagogical course project (PPC) in higher education that combines face-to-face and online instruction (blended learning) will allow students to learn at their own pace. For those who more easily grasp a concept, the use of these resources enables them to advance in the pursuit of new knowledge; for those who, for any reason, struggle to master a given content, the blended approach provides opportunities to revisit it and address any difficulties.

Google Classroom is available to anyone with Google Apps for Education, a free productivity suite that includes Gmail, Drive, and Docs (Iftakhar, 2016; Sukmawati & Nensia, 2019; Sudarsana et al., 2019). However, the free version is the most basic and does not provide access to all the features offered by Google. Consequently, many primary, secondary, and higher education institutions in Brazil, such as USCS, have opted to acquire a more comprehensive service package that enhances the teaching and learning processes within these institutions. This package, the Teaching and Learning Upgrade, allows for a greater number of users in videoconference sessions (Google Meet) as well as a suite of tools for managing teaching and student learning. In general, Google Classroom is well regarded by teachers. For example, in a study conducted in Indonesia, teachers considered the platform effective in promoting collaborative learning, minimizing problems, organizing student documents, and saving time (Harjanto & Sumarni, 2019). Other studies (Ramly & Latiff, 2021) acknowledge these benefits of Google for Education but also point out potential weaknesses.

However, despite the widespread adoption of Google for Education, it is well known that many teachers have not yet been able to fully utilize all the features of this platform (Azhar & Iqbal, 2018; Ramly & Latiff, 2021). According to these authors, educators often employ only the most commonly used features. This is concerning, as teachers are increasingly expected to incorporate Information and Communication Digital Technologies (ICDTs) both in teaching (classroom) and in the management of educational processes. It is recognized that "The presence of educational technology is growing in the classroom" (Sukmawati & Nensia, 2019, p. 141). Consequently, teachers and educational administrators require training and ongoing professional development focused on the effective use of these technologies in their professional practice. Without diminishing the importance of the teaching profession—since technology alone does not guarantee student learning—it is argued that the use of technology to enhance education can bring benefits for the future, not only in education but across all sectors of society (Sukmawati & Nensia, 2019).

3. Methodological Procedures

To achieve the objectives of this study, a mixed-methods approach (combining qualitative and quantitative methods) was adopted, which, according to Booth, Colomb, and Williams (2008), allows for a comprehensive understanding of the topic under investigation and the triangulation of data in the conclusions. Paranhos et al. (2016, p. 391) emphasize that this type of research provides greater analytical possibilities, making it possible to identify aspects that would not be captured through a single method.

As both qualitative and quantitative techniques have strengths and limitations, they are "used for distinct purposes" (Paranhos et al., 2016, p. 289). Therefore, our understanding is that this integration facilitates the collection of specific answers for different objectives. In this study, the quantitative approach aimed to statistically identify undergraduate students' perceptions at USCS regarding blended learning and the use of Google for Education in the teaching and learning process. The qualitative approach, in turn, was employed to gain a deeper understanding of the object of study (Creswell, 2014).

According to Creswell (2014), the qualitative approach is employed when it is necessary to understand a phenomenon due to limited prior research. Furthermore, its purpose is linked to understanding the perceptions of a small target audience, in which case the questions are typically open-ended. Gil (2009), in turn, states that this approach is used when the focus involves aspects that cannot be quantified, which is the case in this study with respect to exploring the particularities of blended learning and the use of Google for Education from the perspective of a group of university students.

Regarding data collection, to achieve the objectives of the study, the following steps were adopted: a) a literature review to strengthen the theoretical framework; b) a survey using a Likert-scale questionnaire to identify and explain university students' perceptions of blended learning and

the use of Google for Education; and c) a Focus Group (FG) with students from different programs who participated in the quantitative phase of the study, in order to qualify and deepen the research findings.

It should be clarified that a Focus Group (FG) "is an artificial group, convened according to the research objectives and controlled by the researcher" (Alonso, 1998, as cited in Godoi, 2015, p. 635). In other words, the purpose of this practice is to seek the active participation of the subjects in the research, allowing them the freedom to express their opinions regarding the object of study or their daily actions.

The quantitative data were analyzed statistically in an exploratory and descriptive manner. There was no intention to test preliminary hypotheses, although some may be formulated retrospectively based on the results obtained in this phase of the study (Marconi & Lakatos, 2008). The student statements obtained from the Focus Group were analyzed using the Prose Analysis (PA) approach, which is a method for investigating the meanings of qualitative data. Therefore, rather than relying on predefined or retrospective categories, as occurs with Content Analysis proposed by Laurence Bardin, the topics and themes were generated from the examination of the data and their contextualization within the study (André, 1983).

4. Presentation of Results and Discussion

4.1 Sample Description

This study involved 771 undergraduate students from USCS enrolled in various programs. Regarding marital status, the majority of participants (86.9%) were single, while 9.5% were married; the remaining participants were separated or widowed. Of this total, 73% of the students identified as White, 17.5% as Mixed-race (Pardo), and only 6.6% as Black, indicating that access to higher education at the institution under study is predominantly among White individuals. Most of the participants (98.3%) were Brazilian nationals, with the remainder being naturalized Brazilians or foreign students.

Regarding prior secondary education, 50.8% of the participants attended public schools, 34.5% attended private schools, and the remaining students attended both public and private institutions during their basic education. Concerning the type of education, 83.5% completed a regular high school program, 12.7% attended a technical high school program integrated with secondary education, 2.6% participated in youth and adult education (EJA), and the remaining students either did not know or chose not to respond.

4.2 Google Classroom and the Teaching and Learning Process

Google Classroom is an online learning platform developed by Google that has gained prominence as a powerful tool in the educational landscape. The platform combines multiple functionalities and features that facilitate communication, collaboration, and organization within the school environment (Sudarsana, 2019; Hassan et al., 2023). Its prominence increased starting in 2020 due to the suspension of in-person educational activities during the COVID-19 pandemic. Based on this investigation, it was found that 47% of participants reported that "No teacher used Google Classroom before the pandemic." However, it is important to note that the university did not have access to the platform prior to this period; therefore, it is likely that this lack of use was not due to the usability of the software itself, but rather because the implementation of Google Classroom at USCS began in early 2020.

Regarding the interface and usability of Google Classroom, it was observed that, from the participants' perspective, the platform provides quick access to materials (91%), the organization of content facilitates the search for materials (88%), and it helps save time (88%), corroborating results found in other studies (Harjanto & Sumarni, 2019; Hassan et al., 2023). Furthermore, it was found that the use of this tool helps stimulate learning (69%) and promotes student participation in in-person classes (68%) (Sudarsana et al., 2019). However, while this result may be considered innovative, it is also important to note that this process of "googlization" can represent a new perspective on teaching practices (Kerssens & van Dijck, 2021), which requires attention, as it appears to be a phenomenon that is here to stay.

The study also shows that, in addition to promoting better performance in courses (73%), Google Classroom contributes to teacher–student interaction (66%). Moreover, the prior availability of content encourages student participation in in-person classes (85%) and the completion of teaching activities in a hybrid format (81%). Another significant finding is that the use of Google Classroom from a hybrid perspective contributes to students' understanding of the content delivered by instructors (68%). Thus, it can be stated that the platform supports personalized learning, allowing students to learn at their own pace (Sunaga & Carvalho, 2015; Ventayen, 2017; Medeiros & Miranda, 2022).

One of the greatest advantages of Google Classroom is its accessibility and flexibility (Sudarsana et al., 2019). Students can access the platform from any internet-enabled device, allowing them to learn at their own pace, anywhere and at any time (Harjanto & Sumarni, 2019). This is particularly important in a world where remote and synchronous learning has become the norm in many situations. This aspect was clearly evidenced in the present study when participants had the opportunity to provide feedback on the platform. The software's design and interface are both interactive and straightforward to use (Witt, 2015 ; Bacich, Tanzi Neto, & Trevisani, 2015; Christensen, Horn, & Staker, 2013).

4.3 Blended Learning: Students' Perceptions

Blended learning is an educational model that combines elements of face-to-face and online instruction, providing students with a more flexible and personalized learning experience. In this model, part of the teaching activities takes place in the classroom, with the physical presence of the instructor and students, while the other part is conducted remotely, typically through online platforms and resources (Bacich, Tanzi Neto, & Trevisani, 2015).

The study identified participants' perceptions of blended learning, in part by comparing it to traditional instruction. The results reveal that classes conducted in a hybrid format (pre-reading followed by in-class activities) are considered more effective than traditional teaching (57%). Participants expressed a preference for lessons that combine face-to-face and online activities (60%), as they reported better comprehension of concepts when they had prior access to study materials (handouts, articles, book chapters, etc.) via Google Classroom (75%). These findings are consistent with international studies (Christensen, Horn, & Staker, 2013; Gour, 2018; Harjanto & Sumarni, 2019), which highlight the advantages of using Google Classroom in teaching and learning processes. However, this understanding is based on the use of the paid version of the platform, not the free version, which does not provide all features for its users. Additionally, not all instructors utilize all the available resources (Ramly & Latif, 2021).

Regarding hybrid learning implementation models and the motivation derived from their use, most participants remained neutral, likely because they did not recognize the cited model in their teaching experience. Concerning the station rotation model, the study shows that 43% of participants remained neutral, while 45% agreed that they feel more motivated when this approach is used in the classroom. As for the rotational lab model, 33% of participants expressed neutrality regarding its use, whereas 56% agreed that it provides benefits for the teaching and learning process.

Regarding the flipped classroom, a strategy that has been widely used, particularly in basic education (Christensen, Horn, & Staker, 2013), 36% of participants were indifferent, while 45% considered the technique beneficial as a teaching resource. This finding aligns, to some extent, with other studies, such as research conducted in Indonesia by Warman (2021), which involved 227 students. However, the study in that country found that 70.8% of participants had a positive view of using Google Classroom, as well as the flipped classroom approach. It can be inferred that the results of the present investigation are linked to the fact that the flipped classroom is a resource that, until now, has been scarcely used by instructors in higher education, and, consequently, participants did not yet have a well-formed opinion on the matter.

Regarding the preference for traditional, lecture-based classes without the use of online activities, there was no agreement among participants. This perspective is understandable, as, similar to other contexts, the participants in the present study also demonstrated a positive acceptance of Google Classroom.

4.4 Blended Learning: "À la Carte" Classes

Blended learning is also implemented through the combination of distance learning classes, without direct interaction with the instructor in on-campus courses (Warman, 2021), which corresponds to the "à la carte" model. In Brazil, courses generally offer a portion of the workload in this format, either with the intention of reducing costs or even lowering tuition fees.

When asked about classes offered in the "à la carte" format, 18.1% of participants disagreed and 28.5% strongly disagreed with their benefits for learning. However, 29.2% considered that this model provides advantages in the student's educational process, while 24.2% were undecided. Participants reported significant difficulty in keeping up with courses (54%) in this format, and they also perceived that it does not promote teacher-student interaction (57%).

Broadly speaking, students expressed complaints regarding courses offered in a distance learning format, citing various reasons, such as: (1) difficulty maintaining focus and lack of confidence in their own learning; (2) base materials, such as handouts and supplementary texts, being extensive and complex; (3) subjects perceived as unrelated to the program that "do not add knowledge" or "do not make sense," leading to concerns about failing the course; (4) online classes generating unresolved doubts, which is why they prefer in-person instruction, believing it to be more effective due to direct contact with the instructor and the interaction it allows; (5) a desire for greater integration between online (distance) and in-person components, so that questions arising from online sessions could be addressed during in-person classes; and (6) support for having one day per week without classes to work on assignments from courses offered in the "à la carte" format.

The complaints are not solely related to the format of course delivery ("à la carte"), but also to the "hectic routine," as most students work and study simultaneously. However, the research also indicates that offering courses in this format has helped students learn to organize themselves and study at home. Although participants disagreed with the delivery of courses in this distance learning model, they considered the instructors qualified; thus, the difficulty lies in the delivery format and, in some cases, the content of specific courses, which is too specialized to be effectively followed asynchronously. Finally, they affirmed that recorded videos are beneficial for reviewing the material.

4.5 Blended Learning in Discussion

In order to deepen our understanding of the topic, a Focus Group was conducted with five students from different programs (Veterinary Medicine, Physical Education, Pedagogy, Information Science, and Architecture). Participation was voluntary, and methodological guidelines for the use of this research technique were followed. The session lasted 1 hour and 10 minutes, was held via Google Meet, recorded, and the participants' statements were transcribed for analysis with their prior consent.

The session was facilitated by the researchers and guided by the following question: **"What is your perception, as an on-campus undergraduate student, of distance learning courses, or 'À La Carte' (100% online)?"**

The participants' statements corroborate the results identified in the quantitative survey regarding students' difficulties in assimilating content when courses are offered in this format.

> "To be honest, there are subjects that I agree can be taught via distance learning (e.g., Mathematics or Administration), but for some content, I really miss the practical, in-person experience. In distance learning, it feels like a lot is missing; we do not have the freedom to speak directly with the instructor if we have questions, and there is little teacher-student interaction. I personally learned almost nothing, and the exam was very easy." (P1)

Next, another participant requested to speak and offered the following comments on the topic:

> "There is no interaction; the content seems 'thrown together,' and students do not take it seriously. When exam time comes, they know nothing, perhaps because there was no contact with the teacher to clarify doubts. Of course, it is possible to ask questions through forums and office hours, but we know this depends greatly on the student's motivation. In the Environmental Education course, I would have liked to have had in-person contact; I think it would have been a different experience." (P2)

Complaints regarding courses offered via distance learning ("À La Carte" model) in on-campus programs are met with resistance not only because of their format but primarily because some students experienced remote and distance learning during the COVID-19 pandemic, an experience that left certain lingering effects. It appears to have been a negative experience, as can be seen in the following statement:

> "I completed my entire high school basically through distance learning, and when I arrived at university, some courses were also offered remotely. We have a scheduled time on Thursdays to read a large amount of material—core texts, videos, exercises—and it accumulates because we arrive tired and still have to do the distance learning tasks. On the other hand, I think it is a matter of organization; in this sense, I managed well with distance learning." (P3 – our addition)

Complaints regarding the offering of courses in this format are linked not only to the model itself but also to the nature of the courses, as highlighted by Participant 1 and reiterated subsequently by Participant 4.

> Some courses, such as "Mathematics for Everyday Life," would take the place of others in the curriculum if offered in person; other courses that are more essential to the program, in this sense, are better suited for online delivery. For me, this particular course did not contribute to my academic development, as it was not closely related to the program. It is important to differentiate what is truly a priority for the curriculum from what is more beneficial as practical experience for students—courses that would be better delivered in person (e.g., imaging diagnostics, nutrition). There should be a distinction between what is genuinely beneficial for the program and what is mandated by general requirements (e.g., mathematics, reading comprehension, environmental education, etc.). Student–teacher

> (or tutor) interaction needs improvement; many students do not even know how to use the platform. This semester, for example, we had a professor who had to rely on emails to communicate with students because he was unable to respond using the platform properly and often posted materials out of order. The tutor himself made himself available via email, explaining that he was still learning to use the platform, as he was new to the university. Additionally, the content covered in exams often differs from what is taught throughout the courses. (P4)

OIt is noteworthy that this participant is critical regarding the topic, makes proposals for change, and considers that some courses are not suitable to be offered online, as they require greater interaction with the professor, which is not facilitated in distance education. Furthermore, he highlights the tutor's difficulties, understanding that interaction could be improved if the tutor had greater ease in mediating the content with the students. Finally, he criticizes the gap between the content delivered in class and what is assessed—a concern echoed by another participant, who made the following remarks.

> The content assessed in the exam was the opposite of what had been taught throughout the course. In the reading comprehension exam, for example, the focus was on laws rather than on interpretation per se. Some students in my class failed the course; they will now have to make up for it. I myself was affected, receiving a grade of N3, but I was able to recover. Moreover, I believe that some courses are not connected to our program; their existence sometimes does not make sense to me (P5).

Blended learning promotes student autonomy (Bacich; Tanzi Neto; Trevisani, 2015), as students need to manage their time and set priorities to complete online tasks (Moran, 2015). This model enables the development of valuable self-regulation skills. However, this may vary depending on the chosen implementation model. The flipped classroom, for example, can support self-regulated learning (Warman, 2021), whereas courses offered in the "a la carte" format do not—at least, this was the finding of the present study.

5. Final Considerations

This research was conducted with the purpose of identifying and analyzing university students' perceptions of blended learning. The results show that most participants perceive that the organization of content in Google Classroom facilitated the retrieval of materials as well as time management. Furthermore, the study indicates that Google Classroom stimulates learning and promotes student engagement in face-to-face classes. However, regarding the offering of courses entirely online, a significant portion of students consider that this model does not support their learning, as many face difficulties in navigating it. Additionally, a considerable number of participants perceive that courses offered asynchronously hinder teacher-student interaction. In summary, the findings highlight the potential of Google Classroom in the teaching and learning process, while also pointing to the limitations of offering online courses within traditional on-campus programs.

Regarding the Focus Group, it was observed that participants expressed complaints about courses offered entirely online, perceiving them as "disconnected subjects, with insufficient time to complete activities that primarily involve core texts, supplementary readings, and video lectures." Additionally, some criticisms regarding fully online courses corroborate the findings from the quantitative survey, such as the perception that activities and/or assessments address peripheral or "insignificant" topics compared to the central subject matter of the course.

On the other hand, the same group evaluated Google Classroom positively, emphasizing the platform's importance and utility in facilitating better teacher-student communication, which they described as "more effective and direct, in addition to providing accessibility and interaction with class materials." It became evident that this tool also functions as a content repository, allowing students to access materials at any time, whether to review or to be introduced to a new topic. The students compared the platform with others they had previously used, pointing out difficulties in access due to the functional and adaptive complexity of some platforms, as well as issues such as instability in online meetings or a lack of tools and interactivity in their use.

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