

Distance education in Angola: challenges, possibilities , and teaching practices in a public university

Educação a distância em Angola: desafios, possibilidades e práticas docentes em uma universidade pública

Educación a distancia en Angola: desafíos, posibilidades y prácticas docentes en una universidad pública

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Abstract: The growing demand for expanded access to higher education in Angola has motivated this public university to invest in non-presential education, with particular emphasis on Distance Education (EaD). This study aims to understand the challenges, possibilities, and perceptions of faculty members regarding the implementation of Distance Education, Emergency Remote Teaching (ERT), and Hybrid Teaching. A pre-experimental research design with a qualitative approach was adopted, in conjunction with ideographic analysis. The study involved the “Workshop – Transforming Higher Education in Angola: the role of online teaching” and the implementation of “Module 1 – Introduction to Distance Education, Emergency Remote Teaching, and Hybrid Teaching” from the course Teaching in Higher Education: Remote Pedagogical Mediation. The results indicate initial barriers, such as limited infrastructure and a general unfamiliarity with non-presential teaching modalities. However, an evolution in perceptions was also observed, with increased openness to Distance Education and recognition of its role in democratizing and improving the quality of education. The study concludes that forming a critical mass is essential to advancing Distance Education at this public university, thereby expanding educational opportunities in the country.

Keywords: Angola. Distance education. Emergency remote teaching. Hybrid teaching. Online teaching.

Resumo: A crescente demanda por ampliação do acesso ao ensino superior em Angola tem motivado esta universidade pública a investir na educação não presencial, com destaque para a Educação a Distância (EaD). Este estudo tem como objetivo compreender os desafios, possibilidades e concepções dos docentes sobre a implementação do EaD, Ensino Remoto Emergencial (ERE) e Ensino Híbrido. Utilizou-se a pesquisa pré-experimental com a abordagem qualitativa, em conjunto com a análise ideográfica, envolvendo o “Workshop- Transformando o Ensino Superior em Angola: o papel docência online” e a aplicação do “Módulo 1- Introdução ao Ensino a Distância, Ensino Remoto e Ensino Híbrido”, do Curso Docência no Ensino Superior: Mediação Pedagógica Remota. Os resultados indicam barreiras iniciais, como a limitação de infraestrutura e a pouca familiaridade com as modalidades de ensino não presenciais. Observou-se também uma evolução nas percepções, com maior abertura a EaD e reconhecimento de seu papel na democratização e na qualidade do ensino. Conclui-se que a formação de uma massa crítica é essencial para avançar com o EaD nesta universidade pública, ampliando dessa forma as oportunidades no país.

Palavras-Chave: Angola. Docência online. Ensino a distância. Ensino híbrido. Ensino remoto.

Resumen: La creciente demanda por ampliar el acceso a la educación superior en Angola ha motivado a esta universidad pública a invertir en la educación no presencial, con especial énfasis en la Educación a Distancia (EaD). Este estudio tiene

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como objetivo comprender los desafíos, posibilidades y concepciones del profesorado respecto a la implementación de la EaD, la Enseñanza Remota de Emergencia (ERE) y la Enseñanza Híbrida. Se adoptó una investigación preexperimental con enfoque cualitativo, combinada con el análisis ideográfico. La investigación involucró el “Taller – Transformando la Educación Superior en Angola: el papel de la docencia en línea” y la aplicación del “Módulo 1 – Introducción a la Educación a Distancia, Enseñanza Remota de Emergencia y Enseñanza Híbrida”, del curso Docencia en la Educación Superior: Mediación Pedagógica Remota. Los resultados indican barreras iniciales, como la limitación de infraestructura y el escaso conocimiento de las modalidades no presenciales. También se observó una evolución en las percepciones, con mayor apertura hacia la EaD y reconocimiento de su papel en la democratización y mejora de la calidad educativa. Se concluye que la formación de una masa crítica es esencial para avanzar en la EaD en esta universidad pública, ampliando así las oportunidades educativas en el país.

Palabras-clave: Angola. Docencia en Línea. Educación a distancia. Enseñanza híbrida. Enseñanza remota de emergencia.

1 INTRODUÇÃO

This public university has reaffirmed its commitment to excellence in the teaching and learning process, emphasizing a comprehensive curriculum update and the future expansion of its academic offerings through Distance Education (DE). To this end, it is undergoing an institutional restructuring process led by its Distance Education Center, whose mission is to lead and coordinate initiatives in non-face-to-face learning modalities, with a particular focus on enhancing the digital competencies of the academic community.

The need to implement DE at this institution arises from the national context, marked by a low higher education enrollment rate below 10%. This figure highlights a significant unmet demand and reinforces the strategic role of distance education in democratizing access to education. Angola, with an estimated population of approximately 36 million inhabitants, has 106 higher education institutions, of which 31 are public and 75 are private. For the 2024/2025 academic year, 191,752 spots were authorized, of which 85% were allocated to the private sector, underscoring the equity challenge in public access (ANGOLA, 2024).

In recent years, significant investments have been made in technological infrastructure, such as the installation of 184 satellite communication points and the expansion of connectivity through the Conecta Angola project, supported by ANGOSAT-2. These initiatives have contributed to the growth in mobile phone and internet users, reaching a total of 12 million users (ANGOLA, 2025). However,

this progress still lacks targeted application in the education sector to ensure both quality and the effective democratization of higher education.

According to the Director of the National Institute for Evaluation, Accreditation, and Recognition of Higher Education Studies (IN-AAREES), DE in Angola had limited impact for a long time due to the lack of adequate technological infrastructure, the non-validation of DE qualifications until 2020, and institutional difficulties in ensuring minimum quality standards even in face-to-face education. The absence of regulation until 2020 significantly contributed to this scenario. Still, distance education is considered a promising strategy for expanding access, enhancing training, and contributing to the development of human capital in the country. However, its effective implementation faces significant challenges, such as a shortage of specialists, cultural and technological barriers, high initial investments, and the lack of strategic instruments to guide its implementation in higher education institutions (Patrocínio, 2017).

In light of this context, the present study aims to understand the challenges, opportunities, and faculty perceptions regarding Distance Education, Emergency Remote Teaching, and Blended Learning. Based on formative activities such as the workshop “Transforming Distance Education in Angola” and the course module “Teaching in Higher Education: Remote Pedagogical Mediation,” a pre-experimental, qualitative study was conducted using an ideographic analysis approach. The central research problem lies in the absence of a

specific strategic instrument to systematically guide the implementation of DE at this university. This study aims to contribute to the formulation of internal policies and digital transformation strategies for Angolan higher education.

2 LITERATURE REVIEW

2.1 DISTANCE EDUCATION

According to Moore and Kearsley (2013), Distance Education has evolved through five distinct generations: the first, characterized by correspondence-based instruction; the second, marked by the use of radio and television as instructional media; the third, represented by the establishment of open universities; the fourth, by the adoption of teleconferencing through audio, video, and computer networks; and the fifth generation, by the consolidation of online virtual classrooms mediated by web-based platforms.

In Brazil, Distance Education is understood as a tool to combat educational inequality, aligned with the United Nations Sustainable Development Goals (SDGs), particularly SDG 4, which aims to ensure inclusive and equitable quality education (Mello et al., 2024).

Moran (2009) defines Distance Education as an educational paradigm in which teaching and learning activities are mediated by technological means, with educators and learners being geographically and/or temporally separated. Similarly, Angola's Presidential Decree No. 59/20, under provision (b), defines Distance Education as

A mode of education primarily delivered through a technological system of mass and bidirectional communication, which replaces face-to-face classroom interaction between instructors and students as the preferred means of teaching and learning. It is characterized by the systematic and coordinated use of various instructional resources and supported by a tutorial structure, aiming to promote students' autonomous learning (Angola, 2020, p. 20).

According to Moore and Kearsley (2013), the systems approach serves as a foundation for effective practice, offering significant advantages for understanding Distance Education (DE) as a whole, since a systemic DE model encompasses all component processes that become operational during pedagogical activities. The authors emphasize that as these processes evolve, they are shaped by and simultaneously influence various forces in the surrounding environment, including physical, political, economic, and social contexts.

It is therefore understood that the contemporary trajectory of Distance Education demonstrates that the convergence of face-to-face and digital modalities has emerged as the central axis of curriculum reform on a global scale. Consequently, educational programs should incorporate pathways for online assessments and discourse through digital testing methodologies, while still acknowledging the relative effectiveness of in-person instruction (Zakharova et al., 2024). According to the authors, the COVID-19 pandemic served as a significant catalyst, accelerating the integration of online modalities, exposing gaps in assessment practices, and demonstrating that preexisting educational structures can successfully incorporate distance learning without requiring substantial modifications provided that a careful balance between traditional and digital practices is maintained (Zakharova et al., 2024).

From a media-pedagogical perspective, Pi-rillo and Arroio (2022) highlight that the abrupt transition to remote education required educators to design and produce high-quality instructional videos, thereby distinguishing between simple recordings of classroom sessions and purposefully crafted audiovisual content for Distance Education environments.

At the same time, the advent of the Artificial Intelligence era is recalibrating the potential of open and distance learning, as discussed by Amin, Ismail, and Sivakumaran (2025). These authors argue that adaptive systems have the capacity to transform learning experiences through individualized learning pathways. However, they also warn of ethical

dilemmas and concerns related to data privacy and algorithmic bias.

In underserved regions of developing countries, technology holds significant potential to enhance accessibility and the quality of education provided that interventions are universally accessible and tailored to the specific needs of the local context (Mavengere, Ade-doyin, Apeh & Owusu, 2022), which practically illustrates pedagogical sustainability.

In this context, teacher training becomes essential. The shortage of proficient educators and insufficient infrastructural resources demands the implementation of individualized pedagogical frameworks that integrate elements of learner engagement, gamification, and self-directed learning to mitigate educational inequalities (Mavengere et al., 2022).

Finally, it is important to highlight that learner autonomy is a critical component for the comprehensive realization of Distance Education, especially in countries at early stages of implementation, such as Angola. As articulated by Aladwan, Al-Shboul, and Al Awamrah (2019), Distance Education fosters self-directed learning and self-regulation through the use of communication technologies; however, it also requires instructional competencies that can support students in their self-regulatory efforts.

2.2 BLENDED LEARNING

Blended learning has emerged as a methodological framework designed to address the demands of contemporary educational challenges, particularly within the context of accelerated digital transformation. According to Gao, Li, and Liao (2024), blended learning is an educational approach that integrates traditional face-to-face instruction with online modalities, systematically reconstructing key elements such as learning resources, pedagogical strategies, educational environments, and digital tools.

In alignment with this perspective, Valente (2017) defines blended learning as a pedagogical approach that combines in-person activities with those mediated by Digital Informa-

tion and Communication Technologies (DICTs), emphasizing a learner-centered process as its core principle.

This mode of instruction has demonstrated a significant positive impact on students' academic motivation. Consequently, researchers advocate for comprehensive blended learning programs as a means of enhancing collaborative and productive student engagement. They argue that blending traditional and digital methods can diversify learning sources and optimize academic performance (Alrasheedy et al., 2025).

Opsal et al. (2025) highlight the relevance of blended learning in nursing education, reporting high levels of satisfaction and self-confidence among nursing students at satellite campuses. The authors note that hybrid learning, when combined with flexible scheduling and in-person faculty support, effectively addresses the needs of students with family and professional responsibilities while also optimizing education in remote regions.

Blended learning plays a pivotal role in integrating Information and Communication Technologies (ICTs) into teacher training programs. It engages learners through collaborative environments and promotes the effective use of Web 2.0 digital tools, making teacher education more responsive to contemporary demands (Duhaney, 2012). In summary, blended learning constitutes a robust strategy to overcome the challenges of modern education, requiring investment in teacher training, technological infrastructure, and supportive institutional policies.

2.3 EMERGENCY REMOTE TEACHING

Emergency Remote Teaching (ERT) emerged as an improvised response to the COVID-19 pandemic, implemented by governments and educational institutions worldwide with the aim of ensuring the continuity of the educational process during the physical closure of schools and universities (Hodges et al., 2020). Unlike planned Distance Education (DE), ERT was characterized by its reactive and temporary nature, lacking a robust instruction-

al design, and was understood as a transitional solution to a global crisis (Minichiello et al., 2022).

In this context, teachers faced a wide range of challenges, particularly the lack of preparedness for this mode of instruction, which affected their psychological well-being and underscored the need for professional development (Klusmann et al., 2022).

From the student perspective, studies such as Seynhaeve et al. (2022) identified four key determinants of ERT effectiveness: engagement, classroom environment, the teacher's role, and interaction. According to the authors, the disproportionate impact of ERT on students in socially vulnerable contexts underscores the importance of understanding their experiences in order to develop more inclusive educational practices (Seynhaeve et al., 2022).

Minichiello et al. (2022) further highlighted this challenge by revealing that undergraduate students in STEM fields experienced significant negative emotional responses during ERT such as stress, anxiety, and uncertainty emphasizing the need for compassionate course design to mitigate these effects.

Regarding the student population, Paradedá and Santos (2022) emphasized the importance of emotional readiness and digital competencies in shaping levels of optimism and learning awareness. Their findings indicated that younger students exhibited lower levels of learning awareness, pointing to the critical need for personalized approaches and socio-emotional support.

From the teaching perspective, several authors identified key factors associated with faculty satisfaction during ERT, including student-teacher interaction, IT support, teacher training, and scheduling flexibility. Although many instructors reported satisfaction with the mode of instruction, challenges such as the lack of face-to-face interaction and persistent technical issues remained (Joshi et al., 2023).

The study by Araujo et al. (2020) contributed by showing that the rapid transition to ERT intensified stress levels among higher education faculty in Brazil, particularly among women and individuals with lower technologi-

cal skills. The research emphasized the need for institutional support and ongoing monitoring to address mental health challenges in remote teaching contexts. Obermeier et al. (2022) added to this analysis by highlighting that digital readiness and social integration are key factors in mitigating stress among students, suggesting that universities should invest in training programs that promote digital resilience and reduce feelings of isolation.

These findings also highlight the formation of personal learning networks during ERT, reinforcing the need for institutions to adapt their professional development approaches in ways that foster collaboration and help overcome challenges such as isolation and technical difficulties (Céspedes, 2024).

In light of this, the literature emphasizes the importance of institutional policies that incorporate ongoing training, the development of digital competencies, socio-emotional support, and adaptive pedagogical strategies in order to make higher education more resilient and inclusive in the face of future crises.

3 METHODOLOGY

3.1 PARTICIPANT PROFILE

The study involved 23 faculty members from the aforementioned public university, all of whom fully participated in the course *Teaching in Higher Education: Remote Pedagogical Mediation*. Initially, 33 faculty members were invited, with participation being voluntary. The sample included professors from various fields of knowledge and different academic units, namely: Faculty of Medicine, Faculty of Natural Sciences, Faculty of Engineering, Faculty of Economics, and the Higher Institute of Health Sciences. Regarding gender, there was a predominance of female participants, with 15 women and 8 men. The participating faculty members demonstrated significant gaps in digital competencies required for teaching in non-presential modalities, revealing theoretical and practical deficiencies related to Distance Education, Emergency Remote Teaching, and Blended Learning.

3.2 RESEARCH DESIGN AND PROCEDURES

This research adopts a pre-experimental design, involving a single group of participants without a control group, in which a Pedagogical Intervention (PI) was applied between a Pre-Test Measure (PTM1) and a Post-Test Measure (PTM2), following the typology described by Creswell (2007). The study was thus structured into three main phases: PTM1, PI, and PTM2.

PTM1 consisted of the workshop titled *“Transforming Distance Education in Angola: The Role of Teaching in Higher Education,”* held on September 25, 2024, from 10:00 a.m. to 12:00 p.m. The aim of the event was to identify the main challenges and opportunities faced by Angolan faculty members in implementing non-presential teaching modalities. It was divided into three panels. The first panel addressed digital fluency and conceptions of Distance Education within this public university, led by one of the researchers. The second panel discussed the state of Distance Education in the Republic of Mozambique, highlighting initiatives from the distance education center of a public Mozambican university, with presentations by the center’s director and the head of the tutoring department. Finally, the third panel featured a specialist professor from a private Brazilian university, who discussed the teaching competencies required for Distance Education and Blended Learning.

The Pedagogical Intervention (PI) involved the implementation of Module 1 – “Introduction to Distance Education, Emergency Remote Teaching, and Blended Learning” from the course *“Teaching in Higher Education: Remote Pedagogical Mediation,”* with the synchronous meeting held on October 6, 2024. This module was also delivered by the aforementioned experts and aimed to explore the foundations and models of Distance Education and to characterize Emergency Remote Teaching and Blended Learning.

PTM2, applied after the intervention, consisted of a collaborative activity using the digital tool Padlet. The activity involved two stages: in the first, the teachers were asked to

publish their conceptions of Distance Education, Emergency Remote Teaching, and Blended Learning. In the second stage, they were prompted to reflect on how these modalities could be implemented in their own courses.

This investigation also adopted a qualitative approach (Creswell, 2007), as the researcher was immersed in a sustained and intensive experience with the participants. Data collection procedures included observations of behaviors and activities during the research process, with records drawn from the transcriptions of PTM1 and PTM2, aiming to extract key meanings relevant to the study. Additionally, Ideographic Analysis was used as the method for data interpretation, focusing on extracting units of meaning, as highlighted by Paulo, Amaral, and Santiago (2010). In this regard, teachers’ statements were analyzed in terms of their conceptions about the challenges, possibilities, and evolving perceptions of Distance Education, Emergency Remote Teaching, and Blended Learning.

Based on this analysis, two analytical categories were established: the first relates to Challenges and Possibilities in the Implementation of Distance Education, Emergency Remote Teaching, and Blended Learning, and the second to Teachers’ Evolving Perceptions of Distance Education, Emergency Remote Teaching, and Blended Learning.” To organize these categories, matrices were created with three columns: the first lists the participant code (P); the second presents the units of meaning (UM)—i.e., excerpts from PTM1 and PTM2; and the third provides interpreted assertions, in which the meanings of the participants’ statements are analyzed to understand what they expressed in their contributions, thereby characterizing the “interpretation of what was said by the subjects” (Paulo; Amaral; Santiago, 2010, p. 72).

4 RESULTS

This chapter presents the organized results based on the analytical categories previously established. The data were systematized in tables highlighting participants’ statements, cor-

responding units of meaning, and articulated assertions.

The first category reveals challenges such as conceptual misunderstandings, infrastructure limitations, and the lack of supportive public policies. In contrast, the second category demonstrates progress in faculty understanding of

Distance Education, Emergency Remote Teaching, and Hybrid Teaching, indicating increased conceptual clarity and a greater openness to technology-mediated pedagogical practices.

The following analytical tables illustrate these two categories, structured from the participants' contributions gathered during the study.

Table 1 – Category 1: Challenges and opportunities in the implementation of distance education, emergency remote teaching, and hybrid teaching

Participant (Code)	Unit of Meaning (Original Transcript Excerpts)	Articulated Assertion
P1	We appreciate your participation in this event aimed at faculty and administrators, focusing on reflection about the challenges and opportunities of Distance Education, and the strategic role of teaching and management in strengthening it nationwide.	The participant acknowledges the central role of faculty and administrators in consolidating Distance Education in Angola, emphasizing the need for dialogue about its challenges and potential.
P2	I'm still unsure: what exactly is Hybrid Teaching? Does it involve in-person and online students? Is the course divided between face-to-face and online components?	The participant expresses uncertainty regarding the structure of Hybrid Teaching, revealing the need for conceptual clarification to ensure effective implementation.
P3	It is essential to involve faculty and administrators in pedagogical innovation, as they are key to educational transformation in Angola. We must reflect on the challenges and opportunities of Distance Education, focusing on improving teaching and management practices.	There is a training gap concerning the distinctions and applications of Distance Education, Emergency Remote Teaching, and Hybrid Teaching, which hinders proper positioning of both instructors and students within these modalities.
P4	"[...]The teacher has a limited understanding of what Distance Education is but wishes to gain a deeper comprehension of it."	Expanding faculty knowledge about Distance Education is a critical step toward effective adoption and implementation.
P14	It is necessary for public policies to prioritize connectivity, the creation of support centers, and the development of student autonomy, especially for learners in conditions of digital vulnerability.	Advocates for public policies focused on connectivity, the establishment of tutorial centers, and the strengthening of learner autonomy and self-regulation skills in Distance Education.

Source: Authors (2025).

Table 2 – Category 2: faculty's evolving perceptions of distance education

Participant (Code)	Unit of Meaning (Original Transcript Excerpts)	Articulated Assertion
P1	Distance education allows students to study outside the classroom, with flexibility in time and place, using digital technologies. It facilitates online interaction and expands access to education for different student profiles.	Distance education expands access to learning by enabling education in diverse contexts through digital technologies, adapting to students' varied realities.
P3	Distance education uses technologies to make teaching more flexible, fostering autonomy and saving time. However, it heavily relies on internet access, may reduce teacher-student interaction, and requires institutional adaptation with a clearly defined pedagogical model.	Distance education promotes autonomy and time optimization, but demands institutional adaptation and faces challenges regarding motivation and teacher-student interaction.
P4	Distance education involves physical separation between students and teachers, requiring communication mediated by technology. To be effective, it demands reliable platforms, internet access, and devices, as well as a balance between technology and pedagogical practices that promote interaction, inclusion, and active learning. Its success depends on planning and adaptation by all stakeholders.	The success of distance education relies on careful planning, adequate platforms, and interactive pedagogical practices that foster inclusion and engagement.
P5	Distance education is a modality in which students and teachers are physically separated and interact through ICTs. With a focus on student autonomy, it allows access from anywhere, through synchronous or asynchronous classes and online communication. It includes various formats, such as short courses, technical education, university degrees, and extension programs.	Distance education is flexible and learner-centered, encompassing various educational formats with the potential to democratize learning through ICTs.

Source: Authors (2025).

Table 3 – Category 2: faculty's evolving perceptions of blended learning

Participant (Code)	Unit of Meaning (Original Transcript Excerpts)	Articulated Assertion
P1	Blended learning combines face-to-face and virtual classes, allowing teachers and students to gradually develop digital competencies. It is a viable solution in contexts with low connectivity and limited infrastructure.	Blended learning is an effective intermediate solution in settings with technological fragility, enabling the progressive development of digital skills while ensuring instructional continuity.
P3	Blended learning brings together in-person and online modes, encouraging student responsibility and practical activities, but it requires careful planning, ongoing teacher training, and access to technologies.	Blended learning enhances student responsibility and instructional dynamism but requires thorough planning, continuous teacher development, and adequate resources—particularly in experimental disciplines like Chemistry.
P4	Blended learning merges in-person and online activities, demanding pedagogical, technological, and managerial integration, with clear objectives and guaranteed student access to technologies.	Effective implementation of blended learning requires coordinated pedagogical integration between in-person and online components, universal technology access, student autonomy, and well-structured continuous assessment.
P5	Blended learning alternates between face-to-face and online environments, offering flexibility, promoting learner autonomy, and placing the student at the center of the process. However, its implementation presents significant challenges in the Angolan context.	The blended model fosters learner autonomy and flexibility but faces infrastructural and implementation challenges in the Angolan context, requiring structured efforts for effective consolidation.

Source: Authors (2025).

Table 4 – Category 2: faculty's evolving perceptions of emergency remote teaching (ERT)

Participant (Code)	Unit of Meaning (Original Transcript Excerpts)	Articulated Assertion
P1	Remote teaching takes place over the internet, with students and teachers in different locations but connected in real time. It is more viable where there is proficiency in ICT and stable infrastructure, serving as an important tool to democratize education.	Remote teaching is a strategic tool for democratizing education when local ICT proficiency and technological stability are present.
P2	Remote teaching is fully online and uses digital platforms with live sessions, recordings, and forums. It became essential during the pandemic, ensuring the continuity of education during times of social distancing.	Remote teaching ensured the continuity of education during the pandemic by using synchronous and asynchronous digital resources.
P3	Remote teaching is fully online and uses digital platforms with live sessions, recordings, and forums. It became essential during the pandemic, ensuring the continuity of education during times of social distancing.	Remote teaching ensured the continuity of education during the pandemic by using synchronous and asynchronous digital resources.
P14	Remote teaching, driven by emergencies like the pandemic, demands quick adaptation to new technologies. In subjects such as General and Organic Chemistry, it can be implemented using videoconferencing and collaborative tools like Padlet.	Despite its challenges, remote teaching can be a viable alternative for subjects like Chemistry through videoconferencing and collaborative tools.

Source: Authors (2025).

5 DISCUSSION

The results presented demonstrate that the implementation of Distance Education (DE), Hybrid Teaching, and Emergency Remote Teaching (ERT) at this public university is still in an early stage of development, marked by contradictions between the recognized potential of these modalities and the structural, con-

ceptual, and training limitations perceived by faculty members.

In Category 1, titled “Challenges and Opportunities in the Implementation of DE, Remote Teaching, and Hybrid Learning,” the selected data excerpts reveal significant conceptual gaps regarding the different technology-mediated teaching modalities, as evidenced by participants P2, P3, and P4, who expressed

confusion and uncertainty regarding the distinctions between DE, Remote Teaching, and Hybrid Teaching. These challenges reinforce the theoretical concerns raised by Hodges et al. (2020) and Céspedes (2024), who warn of the risks associated with improvised practices in the absence of conceptual clarity. This conceptual fragility contrasts with the formal definition of DE presented in Angola's Decree No. 59/20 (2020), which defines it as a structured technological system supported by instructional resources and tutorial organization, and with Moran's (2009) theoretical approach, which emphasizes the mediating role of technology in distance learning contexts.

Furthermore, the lack of infrastructure and effective public policies, as highlighted by P14, echoes the findings of Moore and Kearsley (2013), who argue that DE can only be consolidated through a systemic approach that integrates pedagogical, technological, and administrative elements. The lack of connectivity, absence of support centers, and students' difficulties with self-regulated learning, reported in the empirical data, reinforce the conclusions of Mavengere et al. (2022), who state that the effectiveness of DE in developing countries depends on context-sensitive interventions that focus on digital equity.

The discussion also indicates that, despite these limitations, there is a process of conceptual maturation underway, as evidenced by the data in Category 2. Statements from P1, P3, and P5 indicate that hybrid learning is being perceived as a viable and strategic alternative in contexts with limited connectivity, as it allows for the gradual development of digital competencies while maintaining a bridge with face-to-face instruction. This perspective aligns with the definition by Gao, Li, and Liao (2024), who describe hybrid learning as a methodological redesign that integrates in-person and online contexts with shared pedagogical objectives.

Faculty perceptions of hybrid teaching also resonate with the contributions of Bacich, Neto, and Trevisani (2017), by highlighting the central role of the student and the need for pedagogical, technological, and manage-

rial articulation. The statements from P3 and P4 illustrate growing awareness of the importance of planning, continuous professional development, and access to ICTs, corroborating Duhaney's (2012) emphasis on hybrid learning as a key component of responsive teacher training.

With regard to Emergency Remote Teaching, participants recognized its functional role in crisis contexts but also pointed out its limitations in terms of interaction, assessment, and applicability in practice-based disciplines, as shown in the excerpts from P3 and P14. These perceptions are consistent with the empirical findings of Klusmann et al. (2022) and Joshi et al. (2023), who highlight the need for empathetic pedagogical strategies and ongoing technical support to address the challenges of ERT. Moreover, concerns related to mental health, technological adaptation, and the effectiveness of digital platforms, highlighted by Obermeier et al. (2022) and Araujo et al. (2020), are also reflected in the difficulties expressed by the faculty at this public university.

The progressive understanding of DE is also evident in the statements from P1 through P5, who recognize its potential to democratize access to higher education, promote student autonomy, and provide flexibility in time and space for learning. However, they reaffirm that its success depends on a robust technological infrastructure, interactive pedagogical practices, and effective institutional planning—elements emphasized by Moore and Kearsley (2013) and Zakharova et al. (2024). As Aladwan, Al-Shboul, and Al Awamrah (2019) argue, DE requires self-regulation competencies and pedagogical strategies that foster engagement and a sense of belonging—factors that remain underdeveloped in the analyzed context.

Finally, the data analysis demonstrates that the institutionalization of DE at the aforementioned public university depends directly on the development of a critical mass of trained professionals, the overcoming of technical limitations, and the implementation of cross-dimensional policies, as advocated by Klusmann et al. (2022) and Paradedda and Santos (2022). Therefore, strengthening faculty training initia-

tives, ensuring conceptual clarity, and integrating pedagogical, technological, and emotional dimensions are key elements for enabling a sustainable path toward digital transformation at this institution.

6 CONCLUSIONS

The analysis of faculty members' statements at this public university, organized into two analytical categories, enabled the identification of structural, conceptual, and formative challenges in the implementation of Distance Education (DE), Emergency Remote Teaching (ERT), and Hybrid Teaching in the Angolan context.

The difficulties highlighted in Category 1 reaffirm the need for a systemic approach, as proposed by Moore and Kearsley (2013), integrating technological infrastructure, faculty development, and institutional policies. The lack of conceptual clarity between DE, ERT, and Hybrid Teaching compromises the effectiveness of pedagogical practices, revealing gaps that must be addressed through ongoing professional development programs and normative guidance. These limitations are exacerbated by connectivity deficits, the absence of learning support centers, and weak public policy, as also emphasized by Mavengere et al. (2022) and Zakharova et al. (2024).

On the other hand, Category 2 reveals a promising scenario. There is a growing appropriation of concepts and methodologies by faculty, especially regarding Hybrid Teaching, which is recognized as a viable solution in contexts with limited infrastructure. The participants' statements demonstrate a willingness to innovate, reflect on pedagogical practices, and adapt to the use of digital technologies—key factors in building a critical mass committed to the digital transformation of the university.

However, this conceptual and attitudinal progress is not yet sufficient to consolidate an institutional DE model at this public university. Advancing in this direction requires strategic and multidimensional investments: ongoing teacher training, adequate technological in-

frastructure, regulatory clarity, emotional support mechanisms, and attention to inclusion and equity. Overcoming technological and training inequalities requires consistent public policies and institutional commitment to educational innovation.

Therefore, it is concluded that this public university has the potential to consolidate a culture of technology-mediated education. However, it is essential to recognize that the success of this transition lies not merely in acquiring equipment or replicating external models, but in building contextually grounded policies, practices, and knowledge that value teacher agency, respect student diversity, and ensure structural conditions for active, inclusive, and sustainable learning.

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