



ORIGINAL ARTICLE

TEACHERS' NARRATIVES IN A COLLABORATIVE TRAINING ON HYBRID TEACHING

Ezevaldo Aquino Santos ¹ Bernadete Lema Mazzafera ²

ABSTRACT

As of Ordinance No. 2,117, of December 6, 2019, curricular content for undergraduate courses in Psychology could be offered "in the Distance Learning (EaD) modality" (Brazil, 2019), without exceeding 40% of the course's total workload. This article analyzes teachers' narratives during collaborative training. In this way, three psychologist teachers, from a discipline taught in the modality, were invited to participate in collaborative training, so that they could adapt to this new reality A qualitative analysis of the narratives produced during the six meetings was carried out, using the content analysis methodology and word categorization with the Atlas.Ti® software. From the narratives, the participants' perception of collaborative training stands out; teamwork to develop innovative and effective pedagogical practices and changes in communication and interaction between teachers and students in hybrid learning environments. It is concluded that this collaborative training helped in the continuous professional development of teachers, in access and positive adaptations to technological and pedagogical innovations.

Keywords: Collaborative Training; Hybrid Teaching; Psychology; Teaching Practice; Atlas.Ti.

NARRATIVAS DE PROFESSORES EM UMA FORMAÇÃO COLABORATIVA SOBRE ENSINO HÍBRIDO

RESUMO

A partir da Portaria nº 2.117, de 6 de dezembro de 2019, conteúdos curriculares da graduação em Psicologia puderam ser ofertados "na modalidade de Ensino a Distância (EaD)" (Brasil, 2019), sem exceder 40% da carga horária total do curso. Este artigo analisa as narrativas dos professores durante

^{2.} Universidade Pitágoras Unopar (bernalema@gmail.com)



^{1.} Universidade Pitágoras Unopar (easants@gmail.com)





a formação colaborativa. Desta forma, três docentes psicólogos, de uma disciplina ministrada na modalidade, foram convidados a participar de uma formação colaborativa, para que se adequassem a essa nova realidade. Foi realizada uma análise qualitativa das narrativas produzidas durante os seis encontros, utilizando-se a metodologia de análise de conteúdo e a categorização de palavras com o software *Atlas.Ti*®. Das narrativas, destaca-se a percepção dos participantes sobre a formação colaborativa; o trabalho em equipe para o desenvolvimento de práticas pedagógicas inovadoras e eficazes e as mudanças na comunicação e na interação entre professores e estudantes em ambientes de ensino híbrido. Conclui-se que essa formação colaborativa auxiliou no desenvolvimento profissional contínuo dos professores, no acesso e em adaptações positivas frente às inovações tecnológicas e pedagógicas.

Palavras-chave: Formação Colaborativa; Ensino Híbrido; Psicologia; Prática Docente; Atlas.Ti.

NARRATIVAS DE PROFESORES EN UNA FORMACIÓN COLABORATIVA SOBRE ENSEÑANZA HÍBRIDA

RESUMEN

A partir de la Ordenanza n° 2.117, de 6 de diciembre de 2019, los contenidos curriculares de los cursos de pregrado en Psicología podrían ofrecerse "en la modalidad de Educación a Distancia (EaD)" (Brasil, 2019), sin exceder el 40% de la carga horaria total del curso. Este artículo analiza las narrativas de los docentes durante la formación colaborativa. De esta manera, tres docentes psicólogos, de una disciplina que se imparte en la modalidad, fueron invitados a participar de una formación colaborativa, para que pudieran adaptarse a esta nueva realidad. Se realizó un análisis cualitativo de las narrativas producidas durante los seis encuentros, utilizando la metodología de análisis de contenido y categorización de palabras con el software Atlas.Ti®. De las narrativas se destaca la percepción de los participantes sobre la formación colaborativa; trabajo en equipo para desarrollar prácticas pedagógicas innovadoras y efectivas y cambios en la comunicación e interacción entre docentes y estudiantes en entornos de aprendizaje híbridos. Se concluye que esta formación colaborativa ayudó en el desarrollo profesional continuo de los docentes, en el acceso y adaptaciones positivas a las innovaciones tecnológicas y pedagógicas.

Palabras clave: Formación Colaborativa; Enseñanza híbrida; Psicología; Práctica docente; Atlas.Ti.

1. Introduction

In recent years, the educational landscape has undergone significant transformations, largely driven by the incorporation of digital technologies and the increasing demand for hybrid teaching.







These changes have modified the dynamics of teaching practice, from lesson preparation to student assessment. "Hybrid teaching stands out as a methodological combination that intertwines face-to-face teaching practices with digital tools and virtual spaces" (Bacich et al., 2015, p. 74).

With the issuance of Ordinance No. 2,117 on December 6, 2019, curricular content in undergraduate Psychology programs could be offered "in the Distance Learning (DL) modality" (Brazil, 2019), without exceeding 40% of the total course workload. Prior to this ordinance, this workload did not exceed 20%.

These changes have required teachers to continuously adapt and seek new competencies that enable them to face the challenges arising from this context. In this regard, collaborative training stands out as a strategy for the professional development of educators, aimed not only at updating knowledge and skills but also at exchanging experiences and strengthening pedagogical practices (Domingues, Barbosa, & Bioto, 2020).

Collaborative training is understood as a process in which teachers work together to reflect on their practices and develop educational strategies in response to the demands of a teaching approach that combines in-person and online modalities (Feitosa, 2022). The proposed collaborative training initially aimed at the construction of the course on Assessment in Psychology. The narratives that emerged, through content analysis, provided reflections on the contributions of this process to the continuing education of teachers.

This article aims to analyze teachers' narratives during a collaborative training program.

2. Method

The research is based on a qualitative analysis, utilizing content analysis as the main methodology to investigate the narratives of three Psychology professors involved in a collaborative training program. These professors represent the entirety of the teaching staff at a private institution that offered the course on Assessment in Psychology.

The content analysis involved the categorization and interpretation of participants' statements during a collaborative training session for Psychology³ professors in a digital environment. This approach enabled the identification of themes related to collaborative training, teaching practices in hybrid education, and communication and teamwork among professors.

Content analysis (CA), as proposed by Moraes (1999), is a robust methodology for the categorization and interpretation of data, as well as for extracting meanings from textual narratives (Moraes, 1999). This qualitative method is useful for understanding educational phenomena, as

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it allows for a systematic and objective analysis of discursive content, resulting in categories that reflect the perceptions and experiences of the participants (Minayo, 2014).

Data were collected through narrative transcriptions of the statements made by the teachers participating in the collaborative training, which represents a paradigm shift in the process of continuing education focused on adapting the course on Assessment in Psychology to hybrid teaching. The statements from the meetings were recorded, transcribed, and analyzed using the Atlas. ti® software, which aided in organizing and categorizing the information, promoting a systematic analysis of the teachers' perceptions regarding the challenges and benefits of collaborative training, as well as the creation and adoption of a virtual environment for use in the hybrid teaching model in a Psychology course.

In this research, six transcriptions of meetings from the collaborative training were analyzed and coded following content analysis. The training was conducted in a virtual environment. Each set of meetings was analyzed separately within an Atlas.ti® file, totaling six meetings, with one meeting per file.

The main categories emerging from the analysis were: Professional Development, Teaching Practice, Teamwork, and Communication. Each of these categories was explored with a focus on the impacts of collaborative training for adapting to new educational technologies and reconfiguring pedagogical practices in hybrid teaching. To conduct the content analysis according to the method proposed by Moraes (1999), five main stages must be followed:

- 1. Preparation of Information, where a floating reading of the participants' responses was conducted to obtain an overview of the pedagogical strategies used in hybrid Psychological Assessment education. This stage involved defining the recording units and context, as well as formulating the hypothesis that pedagogical strategies are diverse and positively impact student learning.
- 2. Unitization, in which participants' responses were fragmented into smaller units of meaning. Each response was divided into distinct parts, focusing on excerpts that capture relevant concepts or ideas for analysis, ensuring that all units of analysis could be treated individually.
- 3. Categorization, where the units of analysis were classified into categories and subcategories based on defined criteria to ensure the validity, exhaustiveness, homogeneity, exclusivity, and consistency of the categories. The units of analysis were grouped according to common themes that emerged from the material.
- 4. In the Description stage, the characteristics of the identified categories and subcategories were detailed to reveal the positive perceptions regarding the effectiveness of active methodologies in the Psychological Assessment course within the hybrid teaching modality. The categories were described in a way that accurately reflects the collected data and its nuances.
- 5. Interpretation, where the results were interpreted in light of the initial hypothesis and







the underlying theoretical framework. This stage sought to explain how diverse pedagogical strategies impact student learning, correlating the data with existing literature and the formulated hypotheses, while also identifying the meanings and implications of positive perceptions regarding active methodologies and their contributions to hybrid teaching.

Using Atlas.ti®, the data were initially reduced using predetermined selective categories, allowing citations related to these categories to be grouped according to their thematic content. The analysis continued by focusing on the predetermined selective categories with the highest number of citations, leading to the formulation of conceptual categories. The coding of the meetings from the collaborative training with the teachers allowed for the identification of various classes of words, specifying the citations associated with each of them.

The Atlas.ti® software (version 5.0) was used as a resource in this study and contributed to the interpretation of the data, as computational analysis generates a comprehensive system of memories about the data (Friese, 2019). This software is widely recognized in qualitative data analysis for its ability to aid in the interpretation of complex educational data, facilitating the structuring of codes and categories, and assisting researchers in tracking the various stages to achieve results (Friese, 2019; Biggs, 2003). The analysis conducted using Atlas.ti® favored the deduction of data, where individual themes are examined, and from these, generalizations or groupings emerge, referred to in this study as conceptual categories (Saldana, 2021).

Presenting data in an understandable manner is essential. As Robson (2002) emphasizes, "You know what you display" (p. 476). According to Schlosser, Frasson, and Cantorani (2019), the presentation of data promotes the formulation of conclusions and actions, as it constitutes an organized and condensed set of information. Displaying data is fundamental since the human capacity to process large volumes of information is limited; cognitively, we tend to reduce complex information to selective gestalts or configurations that are easily comprehensible (Schlosser, Frasson, & Cantorani, 2019).

3. Results and Discussion

Based on the data collected from the transcribed meetings and categorized using Atlas.ti® (Table 1), in accordance with the methodological proposal by Moraes (1999) for content analysis, the identified categories, subcategories, recording units, and context units are presented below. The narratives were coded and categorized, resulting in the following main categories: Learning, Collaboration, Collaborative Teaching, Educational Innovation, Student Perception, Suggestions for Improvement, Professional Development, Teaching Practice, Teamwork, and Communication.







Table 1 - Content Analysis Categories

Category	Subcategory	Recording Unit	Context Unit
Learning	Knowledge Ex- pansion	"Then it ends up that, in addition to having to navigate the theoretical knowledge of the topics, you also have to navigate a bit of what relates to the students' perceptions, right?" (SPEAKER_02)	The collaborative training promoted not only the reinforcement of theoretical knowledge but also the development of practical skills.
	Positive Impact	"The collaborative training positively impacts teaching practice as it allows for a constant exchange of experiences and practices among teachers, enriching the teaching-learning process" (SPE-AKER_01).	The exchange of experiences and practices among teachers enriches the teaching-learning process.
Collaboration	Collaborative Work	"I believe it brings a bit more innovation. I think it moves away from the traditional model where the teacher delivers information and the student absorbs it, as it allows for more interaction" (SPE-AKER_02). "Sharing our experiences and challenges made us realize that we are not alone and that we can learn a great deal from one another" (SPEAKER_00).	Collaboration among teachers fosters an environment for the deconstruction of knowledge, reflecting Vygotsky's sociocultural perspective.
	Cooperation Among Teachers	"Collaboration among teachers allows for the exploration of new methodolo- gies and innovation in teaching, which is fundamental in the hybrid context" (SPEAKER_01).	Cooperation facilitates the exploration of new methodologies and innovations in teaching.
Collaborative Teaching	Innovative Me- thodologies	"Setting up the entire classroom and focusing on measures is our goal for some subjects" (SPEAKER_00). "This training challenged us to step out of our comfort zone and experiment with new teaching techniques, which certainly results in more dynamic and interactive classes" (SPEAKER_02).	The use of a Virtual Learning Environment (VLE) and the personalization of teaching environments demonstrate a trend toward adopting active methodologies.
	Personalization of Teaching	"I see a very clear relationship between psychological tests and games you are engaging the person in play, and they respond to the stimuli" (SPEAKER_02). "Now, I want to plan my lessons considering the greater possibilities for the students, which significantly improves engagement and participation" (SPE-AKER_00).	The constant assessment of feedback allows for effective adjustments in teaching.







Educational Innovation	Content Adapta- tion	"How do you think it would be possible to manage time and also adapt content as effective strategies so that it also becomes participatory and enjoyable for the students to engage in the activities?" (SPEAKER_01).	Educational innovation is essential for content adaptation and effective time management.
	Use of New Tech- nologies	"Implementing innovative teaching practices in the hybrid environment is a challenge but also an opportunity to make teaching more dynamic and engaging" (SPEAKER_01). "The use of technologies [] transforms the dynamics of classes, making them more engaging and participatory" (SPE-AKER_02).	The use of educational technologies promotes a more dynamic and engaging teaching environment.
Student Per- ception	Feedback	"I see a very clear relationship between psychological tests and games you are engaging the person in play, and they respond to the stimuli" (SPEAKER_02). "Based on student feedback, we always adjust our activities to make them more challenging and engaging, but by using [] the teaching and learning platform, the result will also be a significant increase in participation" (SPEAKER_01). "Students report that the new approaches make classes more interesting and relevant, which is a clear indication that we are on the right track" (SPEAKER_00).	Student perception is crucial for the adaptation of teaching techniques.
Suggestions for Improve- ment	Time Manage- ment	"How do you think it would be possible to manage time and also adapt content as effective strategies so that it also becomes participatory and enjoyable for the students to engage in the activities?" (SPEAKER_01). "We need to adapt our materials to make them more interactive and engaging for students, especially in the online format" (SPEAKER_02).	Effective time management is essential for the success of hybrid teaching.
	Adaptation of Strategies	"It was tedious, but necessary to adjust our strategies for better time manage- ment and effectiveness in hybrid tea- ching" (SPEAKER_02).	Adjustments to teaching strategies are essential for better time management.
Professional Development	Continuous Development	"Collaborative training provides us with a unique opportunity for continuous professional development, essential for facing the challenges of hybrid teaching" (SPEAKER_01).	Collaborative training is viewed as an opportunity for continuous professional growth.







Teaching Practice	Implementation of New Strategies	"The training prompted us to reflect on the importance of adjusting our assessment methods to the specific needs of students, fostering a more inclusive and effective learning environment" (SPE-AKER_01). "The use of technologies [] transforms the dynamics of the classes, making them more engaging and participatory" (SPE-AKER_02).	Teaching practice in the hybrid context requires the implementation of new pedagogical strategies.
	Adaptation to Hybrid Teaching	"The transition to hybrid teaching required a significant adaptation of our teaching practices, from lesson preparation to student assessment" (SPEAKER_01).	The adaptation of teaching practices is essential to meet the needs of students in hybrid teaching.
Teamwork	Knowledge Exchange	"Collaboration among faculty allows for the exploration of new methodologies and innovation in teaching, which is fundamental in the hybrid context" (SPE-AKER_02). "Collaborative training provided a conducive environment for the exchange of ideas and experiences, and strengthens the sense of community among faculty, as they can speak the same language, avoiding student comparisons regarding the topics covered, since everyone will be addressing the same subjects" (SPE-AKER_00). "Sharing our experiences and challenges made us realize that we are not alone and that we can learn a great deal from one another" (SPEAKER_01).	Teamwork facilitates knowledge exchange and the development of effective pedagogical practices.
	Effectiveness of Hybrid Teaching	"Teamwork is essential for the success of collaborative training and the effectiveness of hybrid teaching" (SPEAKER_01).	Collaboration among teachers is regarded as essential for knowledge exchange and the development of effective pedagogical practices.
Communica- tion	Emotional Expression	"Yes, of course, right? So, it's great, my dear. Thank you for changing once again, you know? It was tedious" (SPE- AKER_02).	Emotional expression and effective communication are crucial for collaborative training.
	Interaction	"I believe it brings a bit more innovation. I think it moves away from that traditional model, where the teacher presents the material and the student absorbs it, as it allows for more interaction" (SPE-AKER_02).	Communication and interaction among teachers are fundamental for the construction of knowledge.

Source: Research Data, 2024.







4. Word Cloud of the Analysis Categories from ATLAS.Ti®

The word cloud (Figure 1) was generated from the categorization of the transcripts of the meetings in the Atlas.Ti® software and displays the arrangement of central concepts and themes in the study on Teacher Training in Psychology, specifically for those teaching the Evaluation in Psychology courses.

psicológicos n Insatisfação **Exploration** Diferenciada Produtividade colaborativa Diversidade Professor Dificuldades Antecipado Habilidades Preconceito disponív Metodologia Learning ទ្ទី Limites ប Professiona Entusiasmo Compartilhamento Plataformas Interesse Necessidades
Treinamento . Interativo ت Q Engajamento 5 Facilidade esenvolvimento Implementação Esclarecimento Pedagógica Interação ē

Figure 1 - WORD CLOUD BY ANALYSIS CATEGORIES FROM ATLAS.Ti®

Source: Research Data, 2024 | Software: Bjorn's World Clouds.

The emphasis placed on "innovation" underscores the need for pedagogical practices that seek to incorporate technologies and educational approaches that can enrich the teaching-learning process. The integration of educational technologies is essential to transform education and promote the development of skills that meet the demands of the 21st century (Moran, 2015). The adoption of innovative pedagogical practices, such as active methodologies combined with the use of digital resources, contributes to student engagement and facilitates more meaningful learning (Mazzafera; Bianchini, 2021).







"Education" emerges as a key concept, reflecting both the fundamental mission of teachers and the centrality of the topic in discussions about professional development and social impact. According to Libâneo (2018), education is an intentional and systematic process aimed at the integral development of individuals, preparing them for active participation in society. Continuous teacher training, in this context, ensures that they are prepared to face the challenges posed by social and technological changes (Gatti; Barreto; Almeida, 2019).

The term "expression" emphasizes the teachers' ability to articulate ideas and concepts, which is essential in disciplines dealing with measurements and assessment, where precision and objectivity are necessary. According to Perrenoud (2001), teachers' communicative competence is one of the pillars of action and pedagogical effectiveness, useful in transmitting complex knowledge in a manner that is accessible and comprehensible to students.

The term "learning" stands out, indicating educational processes that promote a meaningful understanding of content. According to Ausubel (2014), meaningful learning occurs when new knowledge is substantively related to what the student already knows, creating a lasting cognitive anchor.

The presence of the word "virtual" highlights the relevance of digital platforms. Consequently, the "virtual environment" is configured as a significant learning space, requiring teachers to possess specific skills for managing and engaging students. Distance education and the use of virtual learning environments (VLEs) represent a natural evolution in education, necessitating from teachers not only technological competencies but also the ability to manage and engage students in a non-face-to-face setting (Bacich et al., 2015; Kenski, 2012).

The term "motivation" demonstrates the need for pedagogical strategies that keep students engaged, representing a constant challenge for teachers. Students' intrinsic motivation is essential for educational success and is influenced by factors such as autonomy, task relevance, and emotional support from teachers (Deci & Ryan, 1985).

"Creativity" and "collaboration" emerge as essential elements for constructing dynamic and interactive learning environments where students can develop critical skills and solve problems collaboratively. According to Teresa Amabile (1996), creativity is a key component for innovation in education and is fostered by an environment that values originality and experimentation. Collaboration, in turn, is fundamental for knowledge construction, allowing students to work together to solve complex problems and learn from one another. David Johnson and Roger Johnson (2009) explore how collaboration among students can be enhanced through the use of educational technologies, discussing strategies that highlight how this combination can improve interaction, collective knowledge construction, and engagement.

"Technology" is frequently mentioned as a supportive tool for teaching and learning. However, this also implies a challenge regarding the continuous training of teachers. According to Tardif (2014), teacher training should be a continuous process that enables teachers to stay updated on new technologies and teaching methodologies.







The terms "emotional" and "organization" highlight important aspects of the educational context: the need for adequate emotional support for both students and teachers, and the importance of good organization and planning for the success of educational activities. According to Goleman (2005), emotional intelligence is a critical factor for success in any educational context, influencing teachers' ability to manage stress and promote a positive learning environment. Meirieu (1998) argues that effective organization of educational activities creates a structured and productive learning environment.

Words such as "training" and "work" reiterate the importance of ongoing teacher preparation, emphasizing the need for training programs that provide opportunities for reflection and interaction. "Training in a collaborative context requires the sharing of decisions by all those involved." They are responsible "for the joint production, according to their needs, possibilities, and interests" (Bastos; Anacleto; Henrique, 2018, p. 383), as in the case of this research.

"Research on collaborative training reveals that an organized space can dissolve barriers and allow for exchanges and collaborative interactions (Bioto, 2021). As noted in this fragment from one participant's speech: 'Sharing our experiences and challenges made us realize that we are not alone and that we can learn a lot from each other.'

"In academic literature, the concepts of collaboration, community, and partnership have prevailed in recent documents produced by education departments" (Mateus, 2013, p. 1107). Pedagogical practice is the space where teachers' knowledge materializes and transforms (Tardif, 2014). In a process of collaborative training, teachers can reflect on and present this transformed and transformative practice. The initial training of teachers alone is not sufficient to face the complex challenges of the contemporary school environment; a continuous training process becomes necessary (Gatti; Barreto; Almeida, 2019).

5. Conclusions

The proposed collaborative training aimed initially at constructing the course "Assessment in Psychology." However, what emerged from the narratives prompted further reflections on the importance of organizing training sessions that foster collaborative interactions among teachers.

From the teachers' narratives, a significant perception emerged regarding collaborative training as a space for interaction that values each teacher's experience and knowledge exchange. In collaborative training, the teachers emphasized the importance of teamwork for the development of innovative and effective pedagogical practices, as well as the changes in communication and interaction between teachers and students in well-organized and structured hybrid teaching environments.

The integration of a technological tool to assist in the analysis of data from the six meetings facilitated the analytical process, as the tool does not perform automated systematic content analyses. All relationships established during the process are based on the researchers' decisions,





highlighting the important role of the authors in the development of any analysis conducted with the aid of software.

It is concluded that this collaborative training contributed to the continuous professional development of teachers, enhancing their access to and positive adaptations to technological and pedagogical innovations.







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