

State of the Art: Paulo Freire's didactics in licentiate courses

ARTICLE

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1

Abstract

This study analyzes the state of the art of the application of Paulo Freire's didactics in undergraduate courses, exploring its relevance, challenges, trends and impacts. Through a literature review approach, a variety of studies were examined that address the intersection between Freirean principles and teacher education. The analysis highlights the diversity of pedagogical practices that incorporate Freire's approach, emphasizing dialogue, critical awareness and social transformation. At the same time, challenges were identified such as institutional resistance and a lack of teacher training in the implementation of Freirean pedagogy. The results highlight the positive impacts on teacher training and teaching practices, as well as the international application of Freirean principles. The study concludes that Paulo Freire's pedagogy remains relevant and adaptable, enabling educators to build a reflective, participatory and socially conscious educational environment.

Keywords: Paulo Freire. Degree courses. Teacher training. Pedagogy. Impact of education.

Estado da Arte: didática de Paulo Freire nos cursos de licenciatura

Resumo

Este estudo examina o estado da arte da aplicação da didática de Paulo Freire em cursos de licenciatura, explorando sua relevância, desafios, tendências e impactos. Por meio de uma abordagem de revisão bibliográfica, foram examinados diversos estudos que abordam a interseção entre os princípios freireanos e a formação de professores. A análise destaca a diversidade de práticas pedagógicas que incorporam a abordagem freireana, enfatizando o diálogo, a consciência crítica e a transformação social. Ao mesmo tempo, foram identificados desafios na implementação da pedagogia freireana, como a resistência institucional e a falta de formação dos professores. Os resultados destacam os impactos positivos na formação de professores e nas práticas de ensino, bem como a aplicação internacional dos princípios freireanos. O estudo conclui que a pedagogia de

Paulo Freire permanece relevante e adaptável, capacitando os educadores a criar um ambiente educacional reflexivo, participativo e socialmente consciente.

Palavras-chave: Paulo Freire. Cursos de licenciatura. Formação de professores. Pedagogia. Impacto na educação.

1 Introduction

In the contemporary educational scenario, the influence of pedagogical theories on teacher training and teaching practice is a constantly evolving field of study. Paulo Freire's didactics¹, a renowned Brazilian educator and thinker, has had a profound impact on the way education is conceived and applied. The empowerment of students, critical awareness and engagement with socio-political reality are precepts that underpin his transformative approach.

In this context, state-of-the-art research has emerged as a valuable methodology for understanding the extent and evolution of pedagogical practices. Through a thorough examination of academic publications, researchers have drawn up a panorama of trends, challenges and advances in the application of pedagogical theories in different educational contexts.

In the work by Vasconcellos, Gonçalves and Mira (2023), entitled "Paulo Freire e formação docente: uma pesquisa do tipo da arte", an in-depth investigation is conducted into the influence of Freirean pedagogy on teacher training, exploring its relevance and implications in the current scenario.

Other studies have also examined the state of the art in different educational areas. Vilarinho et al. (2023) explore educational products aimed at teaching biology to visually impaired students, while Fonseca (2022) focuses on the training of teachers of natural sciences and mathematics in youth and adult education.

¹ Paulo Reglus Neves Freire (1921-1997) was a renowned Brazilian educator, born in the city of Recife, Pernambuco. He is widely recognized for his contributions to critical pedagogy and popular education.

The interest in analyzing the state of the art extends to diverse fields, such as the relationship between young people and the environment (PETRÓ, 2023), the teaching of physics in the context of MNPEF² (FERREIRA et al., 2021), the teaching of geography in national journals (FONSECA; RICARDO 2019), and even the application of game theory in the Brazilian educational context (SOUZA; MALAVAZI, 2021).

3

In this sense, the present research is part of this state-of-the-art research scenario, with a focus on analyzing the application of Paulo Freire's didactics in undergraduate courses. According to Ferreira (2002), the State of the Art is an analysis that explores studies in the scientific context, outlining the perspective of the researcher and their object of study, in order to formulate a narrative, the understanding of science and the epistemic relevance of academic productions.

In addition, we sought to understand how Freirean principles have been incorporated into teacher training and what impact this approach has had on the preparation of future educators. The systematic analysis of the literature and the examination of emerging pedagogical practices will provide a comprehensive view of the trends, challenges and opportunities in this context, contributing to the enrichment of discussions around teacher training and transformative pedagogy.

The choice of this topic for state-of-the-art analysis is motivated by the fundamental importance of teacher training in undergraduate courses and the growing recognition of the relevance of Paulo Freire's pedagogy in this context. In this respect, Paulo Freire's approach, centered on conscientization, dialogical practice and social transformation, has the potential to shape more critical, reflective and engaged teachers, capable not only of transmitting knowledge, but also of inspiring students to become active citizens who are aware of their role in society (GADOTTI, 2004). However, the effective application of Freirean principles in undergraduate courses faces challenges ranging from institutional resistance to a lack of teacher training (VIEIRA, 2008).

² (Programa Nacional de Mestrado Profissional em Ensino de Física).

By exploring the state of the art of applying Paulo Freire's didactics in undergraduate courses, this research seeks to contribute to a deeper understanding of the benefits and challenges associated with this approach. Through a systematic literature review and content analysis of publications, we aim to identify emerging trends, innovative pedagogical practices and successful strategies for integrating Freirean pedagogy.

The relevance of this research extends beyond the academic environment, reaching educational policy makers, higher education institutions and educators who wish to improve teacher training. The results obtained can inform decision-making regarding the reformulation of curricula, teacher training programs and pedagogical strategies, with the aim of creating more inclusive, participatory and socially conscious learning environments.

Ultimately, this research will contribute to building a solid knowledge base that will help improve teacher training in undergraduate courses, promoting the dissemination of innovative and transformative educational practices.

2 Methodology

This research will adopt the bibliographic review methodology to carry out an in-depth analysis of the state of the art of the application of Paulo Freire's didactics in undergraduate courses. A literature review is a systematic approach involving the search, selection, analysis and synthesis of relevant literature to answer specific research questions (SEVERINO, 2007).

The data collection process will be conducted by searching academic databases, digital libraries and repositories of theses and dissertations. The keywords used in the research will be carefully selected to cover the main concepts related to Paulo Freire's pedagogy, teacher training and degree courses.

The selection of studies will include papers that directly or indirectly address the application of Paulo Freire's didactics in undergraduate courses, as well as those that discuss challenges, trends and opportunities associated with this approach. Content analysis will be used to categorize and group the main themes, approaches and results

found in the literature reviewed. This process will allow us to identify recurring patterns, research gaps and insights relevant to understanding the implementation of Freirean pedagogy in undergraduate courses.

In addition to the literature review, this research also intends to complement its findings through interviews and questionnaires with teachers, students and education professionals. These qualitative approaches will provide practical information about the experience and perceptions of applying Paulo Freire's approach.

International comparison will be an integral part of this research, allowing us to explore how Paulo Freire's pedagogy is applied in different countries and educational contexts. This will provide a more comprehensive view of the variations and adaptations of the Freirean approach, as well as the possible cultural and social implications.

The theoretical foundation of this study seeks to understand the application of Paulo Freire's didactics in undergraduate courses, contextualizing it within the panorama of contemporary education and relating it to emerging pedagogical approaches. The academic literature presents a diversity of studies that explore different aspects of the application of Freirean pedagogy, as well as its implications for teacher training and teaching practice.

In summary, the literature review methodology will allow for a comprehensive and in-depth analysis of the state of the art of the application of Paulo Freire's didactics in undergraduate courses. The combination of literature review, content analysis and qualitative approaches will provide valuable insights to understand the trends, challenges and opportunities related to this transformative pedagogical approach.

2.1 Applying Paulo Freire's didactics to undergraduate courses

The application of Paulo Freire's didactics in undergraduate courses represents a dynamic and relevant field of study, with several researchers exploring how Freirean principles are incorporated into pedagogical practices and teacher training. These studies

demonstrate the influence of the Freirean approach in preparing future educators and building a more participatory, conscientizing and transformative educational environment.

Brito (2019), in her work on the state of the art of reading in Paraíba, highlights how the Freirean approach has been used in diverse educational contexts, including undergraduate courses. The author highlights the relevance of Paulo Freire's pedagogy in stimulating the active participation of students in the construction of knowledge, fostering pedagogical practices centered on dialogue and awareness.

Carvalho (2022), in his research on teaching mathematics using the abacus, discusses the practical application of Freirean didactics in promoting innovative teaching strategies. The author argues that Paulo Freire's approach can be applied not only in humanities contexts, but also in scientific disciplines such as mathematics, contributing to the construction of a more participatory and meaningful educational environment.

Baratto and Menin (2023), in their research on pedagogical workshops with the film "The Wall", explore the practical application of Freirean pedagogy in teacher training. The authors show how Paulo Freire's approach can be adapted to specific contexts, promoting critical reflection and student engagement.

Miranda and Sousa. (2022), when analyzing the use of textual genres as a liberating practice in Portuguese language teaching, highlight how Freirean pedagogy can be applied to stimulate students' critical and reflective thinking. This approach contributes to training teachers capable of empowering students through language and expression.

Gomes et al. (2019), when exploring university extension and teacher training, highlight the practical application of Freirean principles in the creation of transformative educational spaces. The experience of the Paulo Freire Pre-Enem popular course at the Federal University of Piauí demonstrates how Paulo Freire's pedagogy can be used to expand access to education and promote social awareness.

Jesus (2019), in his research on Science-Technology-Society-Environment (STS/STE) education based on Paulo Freire, explores the intersection between Freirean pedagogy and this approach. The author highlights how the application of Freirean

principles can enrich science teaching, stimulating critical reflection on the relationship between science, technology and society.

These studies corroborate the applicability of Paulo Freire's didactics in undergraduate courses, highlighting his influence in building a more participatory, critical and socially engaged education. The variety of contexts covered demonstrates the versatility of the Freirean approach and its potential to transform teacher training and educational practice.

7

2.2 Challenges and opportunities in applying Freirean pedagogy

Paulo Freire's pedagogy in undergraduate courses does not come without facing a series of challenges and, at the same time, identifying opportunities to improve teaching practices. The Freirean approach, by its critical and transformative nature, encounters specific obstacles and offers important potential. By analyzing the literature, it is possible to explore both the obstacles and the opportunities inherent in this educational approach.

Paz (2020), when addressing the ongoing training of school supervisors, highlights the challenges of adapting Freirean pedagogy to the already established and often hierarchical structures in educational institutions. The process of empowerment and dialog proposed by Freire can confront traditional institutional cultures, requiring a reconfiguration of power dynamics.

Silva (2020), in his master's thesis on language games in the classroom, points out a methodological challenge in philosophy teaching when applying Freirean pedagogy. Dialogical interactivity can be complex to establish in more theoretical subjects, which requires a creative adaptation of Freirean principles to the specific context.

Andrade (2020), when discussing the training of science teachers, highlights the challenge of integrating the approach to socio-scientific issues with Freirean pedagogy. The need to link complex science and society issues with students' critical engagement requires careful articulation between the two approaches.

Vieira (2021) explores the possibility of combining Freirean pedagogy with digital technologies in education. In this scenario, one of the challenges is to ensure that technologies are tools for emancipation and not merely vehicles for transmitting content.

Querido (2021) examines Universal Design for Learning (UDL) in combination with Freirean pedagogy, emphasizing the creation of inclusive learning environments. Here, the challenge lies in adapting Freirean principles to meet the diverse needs of students, ensuring participation and learning for all.

The analysis of these studies highlights the complexity of applying Paulo Freire's pedagogy in undergraduate courses. Although they face significant challenges, the opportunities for pedagogical transformation, critical training and student engagement are undeniable prospects. Understanding these challenges and opportunities is essential for improving the implementation of the Freirean approach and for training educators who are committed to building a fairer and more participatory education.

2.3 Impact on teacher training and teaching practice

The incorporation of Paulo Freire's didactics into undergraduate courses has a significant impact on both the training of future teachers and the way they conduct their teaching practices. Freire's approach, which emphasizes awareness, the active participation of students and social transformation, shapes the perspective and actions of educators, contributing to the creation of more engaged and reflective learning environments.

Ferraz (2023) points out that digital culture also influences teacher training, promoting reflections on educational innovation. Integrating Paulo Freire's pedagogy with digital culture can amplify the impact on teacher training, enabling future educators to explore technological tools in a critical and transformative way.

Mühl's research (2023) examines continuing teacher training in mathematics, revealing the influence of this training on teaching practice in the early years of elementary school. The Freirean approach, by stimulating critical reflection and the contextualization

of knowledge, can contribute to the construction of more meaningful and relevant mathematics lessons for students.

Continuing education is also explored by Carraro (2021), who evaluates the impact of the "A União Faz a Vida" program on teaching practice. Paulo Freire's pedagogy, by encouraging the participation and protagonism of educators, can strengthen continuing education initiatives, allowing teachers to apply more participatory and reflective approaches in their classrooms.

Almeida, Costa and Queiróz (2023) discuss the application of Design Thinking in teacher training, highlighting the relevance of innovative methodologies that align with Freirean principles of dialog and participation. This intersection between innovative approaches and Freire's pedagogy can stimulate the creation of learning environments that encourage creativity, collaboration and critical reflection.

Corrêa's (2019) research investigates teacher training in the Amazon, highlighting the National Program for Literacy at the Right Age (PNAIC). The Freirean approach can enrich the pedagogical practices of PNAIC, enabling educators to engage more effectively with the specific educational challenges of the region.

Paula (2022) examines the use of digital technologies in teaching practices in the context of emergency remote teaching, highlighting how the Freirean approach can guide educators in creating more interactive and reflective learning experiences, even at a distance.

Mata (2022) analyzes the teaching identity of the bachelor working in professional and inclusive education, pointing out how Paulo Freire's pedagogy can help build practices that are more inclusive and sensitive to students' needs.

In summary, the incorporation of Paulo Freire's didactics into undergraduate courses has a transformative impact on teacher training and teaching practice. By promoting awareness, engagement and critical reflection, this approach empowers educators to create more participatory, inclusive and socially relevant learning environments. The intersection between Freirean pedagogy and other approaches to

teacher training and practice strengthens the preparation of educators for contemporary educational challenges.

2.4. Trends and innovations in the application of Freirean pedagogy

10

It is important to note that the analysis of Paulo Freire's pedagogy in undergraduate courses does not take place in a static vacuum, but rather in a constantly evolving educational environment. Trends and innovations in education have influenced the way the Freirean approach is interpreted and applied in teacher training contexts. By analyzing emerging trends, it is possible to identify how Freirean pedagogy integrates with new pedagogical practices and contemporary educational approaches.

Andrade's research (2020) highlights the connection between the approach to socio-scientific issues and Freirean pedagogy in the training of science teachers. This intersection highlights the importance of promoting critical and reflective debates in the classroom, enriching the application of Freire's pedagogy with questions that address the complexities of science and society.

Preta (2020) contributes to the discussion by exploring the role of the teacher as a researcher and adapter of pedagogical theories to the school context. This approach resonates with the spirit of Freirean pedagogy, which emphasizes critical reflection and the creative adaptation of theory to practice, allowing educators to innovate in their approaches.

Rossi's (2021) research examines pedagogical trends in geography teaching, highlighting changes and continuities in educational practices. This reflects the dynamic nature of Freirean pedagogy, which can be adapted to address changing educational trends, while always maintaining its commitment to conscientization and transformation.

Barbosa et al.'s (2019) study on educational robotics highlights innovation in Brazilian education, suggesting new ways of integrating pedagogical approaches, including Freirean pedagogy, with the use of technology and robotics as active and participatory learning tools.

Camargo (2022) explores innovations in the field of critical and transformative environmental education. The relationship between Freirean pedagogy and humanistic environmental education is examined, highlighting how the principles of conscientization and dialogue can be applied to address contemporary socio-environmental problems.

The research by Alves Filho (2022) analyzes innovation in science teaching in Brazil and its educational aims. Freirean pedagogy can be seen as an approach that innovates by considering the formation of critical and participatory citizens as a central objective of science education.

Barbosa (2019) contributes to the discussion by exploring the relationship between socio-scientific issues, pedagogy of alternation and humanistic science education in rural contexts. The Freirean approach resonates with the emphasis on contextualized education that is relevant to students' realities.

This research demonstrates that Freirean pedagogy is not static, but flexible enough to adapt and dialog with contemporary educational trends and innovations. Through these dynamic interactions, the Freirean approach continues to influence and enrich teacher training in undergraduate courses, enabling them to face the challenges of teaching in the 21st century.

Ultimately, this state-of-the-art analysis enriches the understanding of the interaction between Paulo Freire's pedagogy and undergraduate courses by providing a comprehensive picture of the challenges, opportunities and emerging trends. The application of the Freirean approach in teacher training courses is not only a reaffirmation of Paulo Freire's transformative principles, but also an expression of the commitment to building a more reflective, participatory and socially conscious educational environment.

3 Results and Discussion

The state-of-the-art analysis of the application of Paulo Freire's didactics in undergraduate programs reveals a complex and multifaceted panorama, where the intersection between Freirean pedagogy and teacher education presents intricately

interwoven challenges and opportunities. The results of this research offer valuable insights into how Freirean principles are adopted, adapted and integrated into teacher education programs, as well as the perceived impacts and emerging trends in this field.

The research revealed a diverse range of pedagogical practices that incorporate Paulo Freire's precepts in undergraduate programs. These practices include promoting dialog and the active participation of students, encouraging critical awareness of social issues and seeking an education that goes beyond the transmission of information. Andrade's work (2020) highlights how the approach to socio-scientific issues can be enriched by Freirean dialog, making it possible to explore complex and relevant themes.

However, the implementation of Freirean pedagogy also presents substantial challenges. Institutional resistance and a lack of teacher training are frequently mentioned obstacles. Souza's (2021) approach highlights that the interaction between pedagogical trends and geography teaching can represent both ruptures and continuities, emphasizing the need to overcome barriers to the adoption of new practices.

An important finding is that Paulo Freire's pedagogy is highly adaptable to different educational contexts. This is evidenced by Preta's research (2020), which emphasizes the role of the teacher as a creative adapter of pedagogical theories, which resonates with Freirean pedagogy's spirit of critical reflection and transformation. In addition, the application of the Freirean approach can occur in various disciplines and areas of knowledge, as demonstrated by Alves Filho's (2022) study on innovation in science teaching.

Trends and innovations in contemporary education have also influenced the way Paulo Freire's pedagogy is applied in undergraduate courses. The research by Barbosa et al. (2019) highlights the incorporation of educational robotics as an innovative approach that aligns with Freirean principles of active and participatory learning.

The relationship between Freirean pedagogy and socio-environmental issues emerges as a relevant theme, especially in Camargo's (2022) approach, which explores the intersection between critical environmental education and Freirean pedagogy. This

demonstrates the ability of Freire's pedagogy to adapt to address pressing contemporary issues.

The impacts of applying Paulo Freire's pedagogy to undergraduate courses are equally notable. The literature highlights how undergraduates who are exposed to this approach often develop critical thinking skills, social engagement and empathy. Miranda and Sousa's (2022) research exemplifies how Freirean pedagogy can be applied to the Portuguese language, catalyzing critical reflection and student motivation.

When examining the international scene, it becomes clear that Paulo Freire's pedagogy transcends borders and finds varied applications. The analysis of pedagogical practices in different countries and contexts, such as Fonseca's (2022) research into the training of teachers of natural sciences and mathematics in youth and adult education, illustrates the adaptability and universality of Freirean principles.

The analysis of the state of the art in the application of Paulo Freire's didactics in undergraduate courses shows the vitality and resilience of the Freirean approach in teacher training. The challenges and opportunities identified are intrinsic to the process of adapting Freire's pedagogy to diverse educational contexts. The results of this research reinforce the importance of training educators to understand and apply the Freirean principles of conscientization, dialogue and transformation in their pedagogical practices.

Trends and innovations point to a constantly evolving education, in which Paulo Freire's pedagogy continues to play a relevant and adaptable role. The positive impacts on teacher training and teaching practices underscore the continued need to encourage student-centered, critical and socially engaged pedagogical approaches.

Castro and Almeida Neto (2021), in their research on didactic sequences in the evaluation of dance teaching and learning at school, highlight the importance of innovative pedagogical approaches in promoting meaningful learning. This approach is in line with Paulo Freire's pedagogy, which emphasizes the active engagement of students in the learning process.

Souza's (2021) research on developmental teaching with Youth and Adults demonstrates the relevance of pedagogical approaches adapted to different audiences and

educational contexts. This resonates with Paulo Freire's approach, which values contextualization and adapting teaching to students' realities.

Moura and Conell (2021), in exploring the application of conservation approaches, highlight the importance of participatory and collaborative methods in education. This approach is in line with the Freirean perspective of dialog and the active participation of students in the construction of knowledge.

Miranda and Sousa (2022), when investigating the relationship between Paulo Freire and Portuguese language teaching, emphasize the potential of the Freirean approach for developing students' critical and reflective thinking. This perspective is one of the pillars of Freire's pedagogy, which aims to raise awareness and bring about social transformation.

Ribeiro's (2020) research into teacher training for inclusive education highlights the importance of preparing teachers to work in diverse contexts. This aspect is in line with the Freirean approach, which seeks to enable educators to understand and deal with the complexities of heterogeneous classrooms.

These studies provide a solid basis for exploring the application of Paulo Freire's didactics in undergraduate courses. By contextualizing Freirean pedagogy within a wide range of pedagogical approaches and investigating its implications in different educational contexts, it aims to enrich the understanding of transformative pedagogical practices and their impact on teacher education.

4 Final considerations

The analysis of the state of the art in the application of Paulo Freire's didactics in undergraduate courses revealed a complex and dynamic scenario, where the principles of Freire's pedagogy are intertwined with contemporary trends in teacher training. Going through the pages of the research, it is clear that Paulo Freire's pedagogy is not just a relic of the past, but a living, adaptable and influential approach to preparing future educators.

The results of this analysis highlight the diversity of pedagogical practices that incorporate Freirean principles. From the promotion of dialogue and the active participation of students to the search for a contextualized and transformative education, Freire's pedagogy finds a place in diverse disciplines and educational contexts. This adaptability reflects the resonance and continued relevance of Freire's approach in current pedagogical discussions.

However, the analysis also highlighted the challenges that accompany the application of Freire's pedagogy. Institutional resistance and a lack of teacher training can hinder the full incorporation of Freirean principles into degree courses. However, it is encouraging to note that, even in the face of these obstacles, many educators are committed to adapting and integrating the Freirean approach in creative and meaningful ways.

The trends and innovations observed in this analysis highlight that Paulo Freire's pedagogy is not static, but flexible enough to adapt to educational changes. The integration of the Freirean approach with socio-environmental issues, technological innovations and other contemporary pedagogical approaches demonstrates its ability to dialog with the current demands of education.

Internationally, the universality of Freirean principles is evidenced by the application of Freire's pedagogy in different countries and contexts. This reflects not only the versatility of the approach, but also its ability to transcend cultural and geographical boundaries, promoting awareness and transformation in diverse global contexts.

In conclusion, the analysis of the state of the art reinforces the importance of keeping Paulo Freire's pedagogy alive in undergraduate courses. The results indicate that Freirean principles continue to shape educators committed to the formation of critical, participatory citizens who are socially induced to engage in conscientizing dialogue. As trends and innovations in education advance, the Freirean approach remains a guiding light for teacher training that transcends the mere transmission of knowledge, aiming to build a more just, egalitarian and democratic society. The commitment to applying Paulo

Freire's pedagogy in undergraduate courses is therefore a continuous testimony to the transformative power of education.

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16

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