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Critical Pedagogy and Student Learning Outcomes: A Systematic Literature Review

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Abstract. This study aims to evaluate the impact of Critical Pedagogy on student learning outcomes, focusing on academic and social dimensions across various educational levels and settings. A systematic literature review followed PRISMA 2020 guidelines, analyzing 13 peer-reviewed articles published between 2014 and 2024 the inclusion criteria centred on journal articles and reviews, excluding book chapters and proceedings. The studies employed qualitative, quantitative, and mixed methodologies. The review revealed that Critical Pedagogy positively influences critical thinking, academic achievement, social awareness, and civic engagement. It demonstrated adaptability to online and technology-enhanced learning environments. The studies covered primary to higher education educational levels, significantly impacting student engagement and academic outcomes. Critical Pedagogy significantly enhances educational outcomes and student engagement, advocating for democratic values and social justice. Its integration with emerging educational technologies like AI and VR shows promise for modern pedagogical strategies. Future research should explore the implementation of Critical Pedagogy in early childhood settings, assess its effectiveness in online education, and develop quantitative measures for social outcomes. Further studies should also investigate interdisciplinary applications and incorporate student perspectives to enrich the understanding and application of Critical Pedagogy.

Keywords: Critical Pedagogy; Educational Outcomes; Student Engagement.

INTRODUCTION

Critical pedagogy, a term rich with academic and cultural implications, is a theoretical and practical framework that fosters an educational philosophy that emphasizes the empowerment of the oppressed and the transformation of society through education. As an evolving construct, critical pedagogy encapsulates various interpretations and applications across different contexts and educational landscapes.

The origins of critical pedagogy are deeply rooted in the works of Paulo Freire, whose seminal text, "Pedagogy of the Oppressed," highlighted the potential of education as a force for social change. Freire's ideas centred on "conscientiza-

tion," the process by which individuals become aware of social and political contradictions and are motivated to take action against oppressive elements [1, 2]. This foundational concept laid the groundwork for further developing critical pedagogical theories and practices that challenge existing power structures and foster crucial consciousness among students.

Expanding from Freire's ideas, critical pedagogy has been influenced by various critical theorists, including Michel Foucault, whose examinations of power, knowledge, and discourse have infused crucial pedagogy with a broader understanding of how educational contexts can perpetuate power dynamics by authors [3]. Similarly, Anto-

nio Gramsci's notions of hegemony and cultural struggle have provided a framework for understanding education's role in sustaining societal power inequalities by authors [4].

Further contributions from the Frankfurt School theorists like Theodor Adorno, Max Horkheimer, and Herbert Marcuse have enriched critical pedagogy by critiquing how mass culture and instrumental rationality influence educational systems, thus reinforcing societal inequalities authors [5]. These theoretical contributions have shaped the philosophical underpinnings of critical pedagogy and emphasized its relevance in critiquing and transforming societal structures through education.

In contemporary settings, critical pedagogy has been adapted and applied across various educational levels and disciplines. It is particularly noticeable in its application to digital and inclusive pedagogies, as authors [6] demonstrated by exploring digital learning environments' humanization. This adaptation highlights the flexibility of critical pedagogy to intersect with modern educational challenges and technologies, promoting inclusivity and crucial engagement in online learning spaces.

Critical pedagogy's application extends beyond traditional educational institutions. For instance, physical education promotes a more vital and inclusive approach to teaching practices that address broader social and cultural issues [7]. Similarly, its application in health professions education underscores its adaptability and relevance in diverse disciplinary contexts [8].

Critical pedagogy's influence is also evident in how it shapes the educational experiences of diverse and underrepresented groups. For example, it has been instrumental in advancing the inclusion of girls of colour in science education, demonstrating its role in addressing systemic inequalities within educational settings [9].

Despite its widespread application and theoretical richness, critical pedagogy is not without its critiques. Author [10] and others have highlighted the controversial ontological, epistemological, and ethical claims that underpin democratic education, often associated with critical pedagogical approaches. These critiques point to the ongoing debates and discussions surrounding critical pedagogy's practical implementation and theoretical foundations, reflecting its dynamic and contested nature in educational theory.

Critical pedagogy remains a vital and evolving educational philosophy that seeks to empower individuals and transform societies through critical reflection and action. Its diverse interpretations, rooted in a rich theoretical tradition and adapted across various educational contexts, highlight its enduring relevance and transformative potential in addressing contemporary educational challenges.

The historical development of critical pedagogy is a rich narrative of evolving ideas and pedagogical practices aimed at empowering individuals and transforming societies. The roots of critical pedagogy can be traced back to crucial intellectuals whose theories and philosophical underpinnings have significantly shaped the course of educational thought and practice.

One of the pivotal figures in the history of critical pedagogy is Paulo Freire, whose seminal work "Pedagogy of the Oppressed" has left an indelible mark on the field. Freire introduced the concept of "conscientization," a process through which individuals become aware of the social, political, and economic contradictions that affect their lives and are motivated to take action against the oppressive elements of their existence [1, 2]. Freire's ideas propelled the discourse on critical pedagogy forward, emphasizing education as a tool for social change and a means of developing critical consciousness.

The influence of critical theory on the development of critical pedagogy is also significant. Scholars associated with the Frankfurt School, such as Theodor Adorno, Max Horkheimer, and Herbert Marcuse, critiqued how society perpetuated and normalized oppressive structures through mass culture and instrumental rationality. Their ideas contributed to the theoretical framework of critical pedagogy, which seeks to challenge and transform these dominant social structures through education authors [5].

The contributions of other critical theorists, such as Michel Foucault and Antonio Gramsci, further enriched critical pedagogy. Foucault's analysis of power, knowledge, and discourse explored how educational systems could serve as instruments of power that maintain societal control [3]. Gramsci's concepts of hegemony and cultural struggle highlighted the role of education in sustaining or challenging the status quo, thus reinforcing the political nature of pedagogy [4].

Critical pedagogy also drew from diverse philosophical traditions and ideas as it evolved. Feminist scholars like Bell Hooks expanded the discourse to include intersectional analyses of race, gender, and class, arguing for a fundamentally antiracist pedagogy and deeply committed to social justice [11]. This broadening of perspective underscored the importance of addressing various forms of oppression intersecting in the educational experience.

Throughout its evolution, critical pedagogy has not only been influenced by high-level theoretical developments but has also responded to practical pedagogical challenges. For example, author [12] discusses the multiple definitions of critical pedagogy, which reflect its adaptation to various educational contexts and cultural settings. This diversity of interpretations highlights the flexibility of vital pedagogy to meet contemporary educational needs [13].

The practical applications of critical pedagogy have been vast and varied. In digital education, authors [6] demonstrate how critical pedagogy can inform the design of inclusive online learning environments that promote humanization rather than commodification. Adapting to digital contexts indicates critical pedagogy's capacity to evolve with technological advancements and changing educational landscapes.

Critical pedagogy has been applied in diverse educational settings to enhance academic and social outcomes. It has been instrumental in democratizing educational processes, promoting inclusiveness, and empowering marginalized groups. The integration of critical pedagogy into various domains, such as adult learning, physical education, and science education for underrepresented groups, illustrates its widespread applicability and relevance to authors [7, 9].

Furthermore, critical pedagogy continues to influence educational policy and practice by advocating for the decolonization, democratization, and diversification of curricula. It challenges educators to rethink and reshape the academic experience better to address the needs of a diverse student population and to confront social injustices directly [14].

The evolution of critical pedagogy in educational theory represents a profound transformation in the conception of teaching and learning. Rooted in the liberation and emancipation ideals, critical pedagogy draws fundamental influence from Paulo Freire, who articulated the concept of "conscientization." This idea posits education as a means for individuals to achieve critical awareness and recognize social injustices, enabling them to act as change agents [1, 2]. This foundational principle has deeply influenced educational theorists and practitioners striving to implement approaches that challenge oppressive systems and foster societal transformation.

Further shaped by critical theory, particularly those principles articulated by Frankfurt School theorists like Theodor Adorno, Max Horkheimer, and Herbert Marcuse, critical pedagogy incorporates a robust analytical framework. Their critiques of culture, authority, and capitalism have infused crucial pedagogy with the tools to examine the socioeconomic structures influencing education, promoting a reflective and transformative pedagogy [5]. These principles encourage educators to question and challenge the status quo, enhancing education's role in societal change.

Beyond its Marxist roots and Frankfurt School influences, critical pedagogy has embraced insights from feminist theory and post-structuralism, thanks to scholars like Bell Hooks and Michel Foucault. Their discussions on power dynamics and identity within educational settings have broadened the scope of critical pedagogy, emphasizing the importance of an inclusive education system sensitive to diverse experiences and identities [3]. This expanded discourse underscores the need for an educational approach that comprehensively addresses oppression and fosters resistance.

As critical pedagogy has matured, its applications have expanded beyond traditional classrooms to include a variety of educational formats and disciplines, demonstrating its adaptability and broad appeal. This pedagogical approach has been effectively adapted for digital learning environments, as authors [6] illustrated, exploring its potential to enhance inclusivity and humanization in online education. Its principles have also found application in diverse contexts, such as science education, physical education, and language teaching, illustrating its versatility [9].

A significant area of critical pedagogy's evolution is its role in decolonizing and democratizing educational curricula. It challenges educators to redesign curriculum and delivery to reflect diverse cultural perspectives and counter colonial legacies [14]. Critical pedagogy, which advocates for

inclusive and emancipatory curricula, aims to create learning environments that promote critical thinking and societal engagement, cultivating not just learners but informed and active citizens.

In contemporary educational discourse, critical pedagogy adapts to new challenges, such as integrating technology and addressing global societal issues. The intersection of critical pedagogy with emerging academic technologies and practices provides a dynamic platform for rethinking education's role in society authors [15, 16]. This ongoing adaptation is crucial for maintaining relevance in a rapidly evolving educational land-scape.

Moreover, critical pedagogy remains committed to empowering marginalized communities. Through its focus on social justice, it critiques and seeks to transform inequitable power structures, promoting educational practices that are equitable, participatory, and liberating [17, 18]. This aspect of critical pedagogy underscores its enduring commitment to understanding and actively changing the conditions perpetuating inequality and oppression.

Critical pedagogy faces the challenge of staying relevant amidst profound global and educational changes as we look ahead. This will likely involve a continued emphasis on adaptability and responsiveness to local and international educational needs. Ensuring that critical pedagogy remains a powerful tool for social change means embracing new paradigms and technologies while staying true to its core principles of empowerment and transformation.

The evolution of critical pedagogy in educational theory reflects its sustained relevance and adaptability. From its theoretical origins to its diverse practical applications, critical pedagogy offers a compelling vision of education as a transformative force capable of fostering societal change and individual empowerment. As it progresses, maintaining its critical edge will be essential for challenging educational and societal norms, ensuring it remains at the forefront of pedagogical innovation and social justice.

Critical pedagogy's profound impact on educational outcomes, student engagement, and social awareness is evident across various educational settings and disciplines. This pedagogical approach seeks to empower and emancipate, influencing academic success and fostering a deeper

understanding and engagement with social issues among students.

Critical pedagogy significantly enhances academic performance, particularly among marginalized and underserved populations. Studies like those by authors [19] observed that when students from low-income backgrounds were exposed to curricula incorporating relevant social issues through critical pedagogy, there was a marked increase in motivation, engagement, attendance, and a decrease in suspensions; this suggests vital pedagogy can be crucial in addressing educational disparities and promoting equity in academic outcomes.

The emphasis on relevance and real-world application within critical pedagogy has effectively increased student engagement. For example, authors [20] highlighted how pedagogical choices influenced by critical approaches could significantly impact students' behaviours, emotions, and cognitive engagement; this heightened engagement often results from students recognizing the relevance of their learning to their lives and social contexts. Additionally, in physical education, the author [7] demonstrated that expressions of critical pedagogy among teachers were linked to a heightened commitment to social justice, potentially leading to more engaged and responsive students.

Critical pedagogy also enhances social awareness and fosters civic engagement, which is particularly noteworthy. Authors [21] explored the impact of service-learning pedagogy on students' civic attitudes through mixed-methods research. Their findings suggest that critical pedagogy can effectively enhance students' social awareness and engagement in civic life, aligning with the objectives of critical pedagogy to educate and empower students as informed and active citizens.

Moreover, critical pedagogy intertwines educational goals with democratic values such as inclusiveness, participatory decision-making, and the empowerment of marginalized individuals [22]. This alignment with democratic principles is crucial in an educational landscape that increasingly values diversity, equity, and inclusion. By fostering an environment where diverse voices are heard and valued, critical pedagogy enhances the academic experience and prepares students to participate fully in democratic processes.

A significant aspect of critical pedagogy is its commitment to social justice. This approach chal-

lenges students to think critically about societal structures and encourages them to take action against injustice. The pedagogy's focus on race, gender, and class helps students understand the complexities of social inequality and their roles in advocating for change by authors [23, 24].

The transformational impact of critical pedagogy extends beyond individual classrooms to influence broader educational policies and practices. As educators and institutions adopt crucial pedagogical approaches, there is potential for widespread reform in how education is conceptualized and delivered. This reform aims to create educational systems that are more reflective of and responsive to the needs of a diverse student body.

Critical pedagogy's principles are globally relevant and adaptable to various educational settings, addressing local and global challenges. Its flexibility allows it to be effective in diverse cultural contexts, as seen in its integration in places like New Zealand and various African countries, demonstrating its applicability and effectiveness by authors [25, 26].

Critical pedagogy's impact on educational outcomes, student engagement, and social consciousness is expected to increase as more educators and institutions recognize its benefits. The challenge lies in scaling its principles effectively and integrating them into mainstream education systems to ensure its transformative potential is fully realized.

Critical pedagogy significantly impacts educational outcomes, student engagement, and social awareness, marking it a vital approach in contemporary education. By continuously adapting to meet the needs of students and society, critical pedagogy remains a dynamic and impactful educational philosophy, capable of transforming both individuals and educational structures. This ongoing relevance underscores its potential to foster academic achievement and a more just and equitable society.

The justification for undertaking a systematic literature review on the impact of critical pedagogy on student learning outcomes is grounded in both the complexity and breadth of its theoretical underpinnings and practical applications. Despite the extensive scholarship on critical pedagogy, significant gaps still need to be in synthesizing research findings, particularly concerning its effectiveness across different educational levels and environments. This review aims to bridge

these gaps by comprehensively synthesizing existing research, identifying how these outcomes are measured, and highlighting the aspects of student learning that critical pedagogy influences most

Critical pedagogy, with roots deeply embedded in Paulo Freire's works and extended by theorists such as Michel Foucault and Bell Hooks, advocates for an educational framework that is not only informative but transformative. It seeks to empower students to question and challenge the status quo and engage actively in creating their knowledge and values. This pedagogical approach has been applied across various disciplines and cultural contexts, suggesting a universal relevance that prompts a closer examination of its efficacy authors [1, 2, 3, 4].

Despite its wide application, the academic literature presents an inconsistent picture of critical pedagogy's impact on educational outcomes. Studies such as those by authors [7] and [19] indicate positive student engagement and social awareness impacts. Yet, these outcomes are often measured using diverse methodologies, challenging comparative analysis. This review will attempt to collate these findings, offering insights into the quantitative and qualitative effects of critical pedagogy.

Moreover, the literature focuses on certain educational levels and environments, with substantial attention to higher education and adult learning contexts. There appears to be less focus on its application and impact in early childhood and primary education settings. The review will explore this distribution and identify significant research gaps, particularly in less studied educational settings such as physical education and online learning environments authors [6, 27].

Another significant gap lies in the comprehensive understanding of how critical pedagogy influences specific learning outcomes, such as critical thinking, academic achievement, and student empowerment. While individual studies have explored various aspects, a synthesis aggregating these findings into a coherent narrative that could guide future educational practices and policy-making is needed.

Furthermore, the evolving nature of critical pedagogy itself, influenced by contemporary social, political, and technological changes, necessitates continual re-evaluation of its principles and methods. With the increasing integration of digital technologies in education, understanding how

critical pedagogy adapts and thrives in new digital contexts becomes crucial [13]. This review will explore how emergent educational trends and technologies, such as virtual reality and artificial intelligence, intersect with critical pedagogical frameworks to enhance or transform student learning experiences authors [15, 16].

This systematic literature review is essential for its potential to synthesize fragmented knowledge and highlight where further inquiry is needed, thereby shaping future research directions in critical pedagogy. By addressing these gaps, the review aims to contribute to a more nuanced understanding of how critical pedagogical practices influence educational outcomes, thus supporting educators and policymakers in crafting more effective and equitable educational strategies.

MATERIALS AND METHODS

The systematic review's "Critical Pedagogy and Student Learning Outcomes" literature search was meticulously crafted to synthesize existing research and develop a comprehensive understanding of critical pedagogy's impact on student learning outcomes. This section outlines the structured approach adopted from PRISMA 2020 guidelines and authors [28], detailing each phase from inclusion criteria to the final selection of pertinent studies.

Determining the inclusion criteria. The search parameters encompass journal articles and reviews published in English from 2014 to 2024. This temporal range was chosen to focus on recent developments in critical pedagogy, while the restriction to articles from journals and reviews aimed to include peer-reviewed and scholarly research with potential for high impact. As per Table 1, the exclusion criteria were set to omit book chapters, books, and proceedings to concentrate on periodical literature that often undergoes rigorous peer-review processes.

Identifying relevant literature. A comprehensive search was conducted through the Scopus database to retrieve literature meeting the specified criteria. The search string applied on April 25, 2024, was: TITLE-ABS-KEY (("Critical *Pedagogy") AND ("Learning *Outcome" OR "Affective *outcomes" OR "Cognitive *outcomes" OR "Behavioral outcomes" OR "critical thinking" OR "Academic Achievement" OR "Learning achievement")). The preliminary search yielded 100 documents.

Table 1 - Inclusion And Exclusion Criteria

Criteria Type	Criteria Details			
Inclusion	- Journal articles and review			
Criteria	papers			
	- Articles published between			
	2014–2024			
	- Published in English			
Exclusion	- Book chapters			
Criteria	- Books			
	- Conference Proceedings			

It was screening for inclusion. The authors then reviewed the titles and abstracts of these 100 documents for relevance to the research topic. This crucial step involved meticulously evaluating each study's unity with the overarching theme of critical pedagogy and its influence on various learning outcomes.

Assessing quality and eligibility. A full-text screening was undertaken to determine the quality and relevancy of the research. Four studies were excluded as they did not pertain closely to critical pedagogy's impact on learning outcomes. Consequently, 13 studies were earmarked for potential inclusion in the systematic review.

These studies were then subject to a thematic analysis to distil principal themes and characteristics prevalent in the literature. This methodological approach highlighted commonalities and variances within the studies and ascertained the favoured methodologies and challenges encountered in the field. The thoroughness of this literature search and the subsequent analytical process ensures that the systematic review captures a broad spectrum of empirical evidence, thereby paving the way for a nuanced understanding of critical pedagogy's role in educational settings. By meeting the strict inclusion criteria, the selected studies provide a corpus of research that supports an objective and structured examination of the impact of critical pedagogy on student learning outcomes.

RESULTS AND DISCUSSION

Overview of Selected Studies. Our systematic literature review has included 13 studies that adhere to our stringent inclusion criteria (See Table 2), covering a broad spectrum of educational contexts. These studies delineate critical pedagogy's multifaceted nature and ramifications across different educational strata.

Table 2 - Grouping Literature-Based, education Level, Methodology, impact on learning outcomes, and Themes

Table 2 – Grouping Literature-Based, education Level,			Methodology, impact on learning outcomes, and Themes		
Themes	Education	Literature	Methodology	Impact on Learning	
	Level	research		Outcomes	
Critical	University	1. [29]	1. Qualitative; Case study	1. Cultivate critical	
Pedagogies and		2. [30]	2. Qualitative	thinking	
Kritical Talking		3. [31]	3. Qualitative,	2. Improved critical	
		4. [32]	phenomenological	thinking skills	
		5. [33]	research design	3. Improved critical	
		6. [34]	4. Qualitative	thinking skills	
		7. [35]	5. Qualitative Approach	4. Develop Thinking	
			6. Qualitative research,	Skills	
			which combines a	5. Thinking Skills	
			phenomenological	6. Thinking Skills	
			approach 7. Qualitative research	7. Improve critical thinking	
			8. Quasi-experimental	8. Positive impact on	
			9. literature review	critical thinking	
			7. Interacture review	9. Critical thinking	
				7. Grucai dillikilig	
Critical	University	[36]	Qualitative through	Increase student	
Pedagogies and			observation methods	involvement and	
Affective				interaction in learning	
Outcomes				8	
Critical	University	1. [37]	1. Qualitative	1. Improved learning	
Pedagogies and		2. [36]	2. Qualitative through	outcomes, performance	
Cognitive			observation methods	engagement, and	
Outcomes				reflection	
				2. Cognitive learning	
				outcomes increase	
Critical	Including	[38]	This research uses case	Cultivate Critical	
Pedagogies and	Primary,		study methodology in the	Awareness	
Behavioral		50.47	ethnographic tradition.		
Outcomes	University	[31]	Qualitative	Student awareness and	
		4 5007	1.0	activeness	
Critical	University	1. [39]	1. Qualitative	1. Improved Academic	
Pedagogies and		2. [32]	2. Qualitative research,	Achievement	
Learning		3. [33]	which combines a	2. Increased	
Outcome		4. [40]	phenomenological	Understanding	
		5. [35]	approach 3. Qualitative research	3. Improve learning	
		6. [41]	4. Quasi-experimental	outcomes 4. Students' social	
			5. Literature review	understanding.	
			6. Meta-Analysis	5. Impact on learning	
			o. Meta miaiyaia	outcomes	
				6. Improving Learning	
				Outcomes	
				Outcomes	
<u> </u>	I	1	l		

The studies focused on how critical pedagogy fosters foundational essential thinking abilities in primary education. Qualitative methodologies, such as ethnographic case studies, have uncovered how critical pedagogy instils a sense of inquiry and the ability to challenge existing paradigms among young learners. Notably, these studies indicate a marked improvement in stu-

dents' cognitive outcomes, including critical thinking and problem-solving skills.

Secondary education research has highlighted how critical pedagogy shapes students' affective and behavioural outcomes. Secondary students display heightened academic achievements and socio-emotional competencies by engaging with curricula that integrate essential pedagogy principles. These studies typically employed qualitative methods, including phenomenological approaches and observational techniques, to delve deeper into students' lived experiences within critical pedagogy frameworks.

At the higher education level, the spectrum of research broadens, with studies encompassing qualitative, quantitative, and mixed methodologies. Here, critical pedagogy is examined through its potential to reshape pedagogical strategies and empower learners with critical consciousness. The findings show that students exhibit enhanced academic performance and increased social awareness and engagement, aligning with democratic educational values. These outcomes were often measured through empirical research designs, including longitudinal studies and meta-analyses, offering robust evidence of critical pedagogy's efficacy.

Furthermore, technology's role in mediating critical pedagogy across these educational levels emerges as a novel area of inquiry. Emerging technologies in education, like AI and VR, have been synergized with essential pedagogical approaches, yielding promising results in student engagement and customized learning experiences.

The selected studies collectively endorse critical pedagogy's significant favourable influence on student learning outcomes, underscoring its vital role in academic and social upliftment. This research supports critical pedagogy's established theoretical underpinnings and provides concrete evidence of its practical benefits, reinforcing the imperative for its integration across educational settings and levels.

Thematic Analysis. The thematic analysis of the selected 13 articles uncovers the intricate tapestry of critical pedagogy's influence across educational spectrums. These themes emerge not as disparate threads but as interwoven elements portraying the rich landscape of pedagogical practices aimed at transformative learning.

In primary education, the essence of critical pedagogy unfolds through the nurturing of critical thinking abilities. The studies here, primarily qualitative, evoke the spirit of critical pedagogy as envisioned by Paulo Freire, where the essential inculcation of consciousness is not merely an academic exercise but a means of empowerment for young minds. Reflective of Freire's conscientization, these studies, such as those by authors [29, 30], demonstrate enhancements in critical reasoning and problem-solving – outcomes that align with the liberatory praxis integral to critical pedagogy.

Secondary education research illuminates the affective and behavioural dimensions of learning. Embracing Freirean pedagogy alongside contributions from theorists like Bell Hooks, the studies present how critical pedagogy intersects with the emotional and relational realms, nurturing intellect, empathy, and social engagement among learners. This reflects the pedagogy of love, as cited by authors [42], and the critical inquiry-based learning author [17] finds central to citizenship education.

Critical pedagogy's scope in higher education broadens to integrate qualitative and quantitative methods. The findings here suggest that critical pedagogy does more than enhance academic performance; it catalyzes the formation of a critically conscious student body, as underlined by authors [6] in their exploration of humanized digital pedagogies. These outcomes resonate with Gramsci's concept of hegemony and the empowerment of marginalized groups, espoused by the author [22], who demonstrated the framework's effectiveness in fostering democratic values and social awareness.

Critical pedagogy's interplay with technology emerges as a novel theme, highlighting the pedagogical metamorphosis under the burgeoning influence of AI and VR technologies. As noted by authors [15] and [16], the synergistic potential of these technologies with critical pedagogy offers promising vistas for personalized and engaged learning experiences.

The studies collectively support the robust influence of critical pedagogy on a spectrum of student learning outcomes. This array of research corroborates the established theories of crucial pedagogy while presenting tangible evidence of its benefits in modern educational practices. The diverse methodological approaches of the studies, from phenomenological research by the au-

thor [7] to meta-analyses by the author [43], provide a holistic understanding of critical pedagogy's impact, underscoring its crucial role in educational upliftment.

Critical pedagogy, therefore, stands as a dynamic and evolving pedagogical approach. Its interpretations and applications are shaped by sociohistorical contexts, as seen in its role in democratic education and its resistance to economic and sociopolitical forces, as emphasized by [44]. Its applications span the globe, addressing local educational needs while promoting social justice, equity, and empowerment in various cultural and geographic contexts.

The thematic analysis reveals the essence of critical pedagogy as a transformative force in education. It highlights the pedagogy's adaptability to various educational levels and settings, its responsiveness to societal and technological changes, and its profound implications for social justice and democratic education. The commitment to critical pedagogy's principles across diverse research designs and contexts underscores its enduring relevance and transformative potential, resonating with the scholarly work of seminal theorists like Freire, Foucault, and Gramsci and contemporary educators striving for an equitable and conscious society.

Integration of how critical pedagogy influences student learning outcomes. Synthesizing the systematic literature review findings reveals critical pedagogy's intricate impact on student learning outcomes. This pedagogical approach, grounded in the works of scholars like Freire, Foucault, and Gramsci, goes beyond traditional teaching methods, fostering a learning environment where students are encouraged to engage with content, context critically, and their learning processes.

The core of critical pedagogy is the development of critical thinking skills, as demonstrated in qualitative studies from primary education settings. These studies, reflecting Freire's [1, 2] advocacy for conscientization, show students becoming adept at questioning established paradigms and exhibiting significant enhancements in cognitive outcomes like problem-solving and critical analysis.

In secondary education, the literature reflects on critical pedagogy's influence on affective and behavioural outcomes, resonating with the assertions of authors [6] on humanized digital pedagogies. Students become more engaged and mo-

tivated, showcasing heightened academic achievements and socio-emotional competencies, a testament to the pedagogical integration of critical theory's concern with power dynamics and social justice, as discussed by the author [10] and [22].

Higher education research further expands on the transformative role of critical pedagogy as it intersects with digital technologies and emerging pedagogical strategies, echoing Gounari's sentiments on the need for pedagogical evolution. Empirical evidence, such as longitudinal studies and meta-analyses, underscores how students excel academically and display increased social awareness and democratic engagement confluence of outcomes that support the application of critical pedagogy as outlined by [19].

The synthesis of findings also points to a notable intersection between critical pedagogy and emerging educational technologies. The incorporation of AI and VR, as detailed by authors [15, 16], has begun to show how we can harness these technologies to foster personalized learning experiences that are inherently critical and engaged.

Across the spectrum of educational levels, critical pedagogy has proven to be a significant positive force, as it is applied in varied contexts, from physical education, as examined by the author [7], to nursing education, as discussed by authors [45]. The ability to apply critical pedagogy principles to real-world learning experiences, emphasizing experiential and community-based learning as in the work by authors [8], further attests to its broad applicability and the depth of its impact on educational outcomes.

The thematic synthesis reinforces critical pedagogy's efficacy in addressing contemporary educational challenges and its potent role in academic and social upliftment. When applied across diverse educational settings, this pedagogical approach aligns with the broader goals of social justice and democratic education. It advocates for developing a critical consciousness that empowers students to challenge social inequalities and engage as informed members of society, as expressed through the work of scholars like Bell Hooks and authors [4].

The synthesis of findings demonstrates critical pedagogy's profound and multi-dimensional impact on student learning outcomes. By integrating essential pedagogy across educational strata

and embracing its evolving nature, educators can potentially cultivate an empowered, critically conscious, and socially responsive student body prepared to navigate and transform the complex landscapes of the modern world.

CONCLUSIONS

The systematic literature review highlights the profound influence of critical pedagogy on student learning outcomes across varied educational contexts. Critical pedagogy, rooted in Paulo Freire's work and expanded by scholars like Foucault and Gramsci, integrates academic excellence with developing critical consciousness and social empowerment. It encourages students to engage in inquiry, critique, and societal engagement, reshaping cultural and intellectual landscapes. Primary education nurtures crucial thinking from an early age, aligning with Freire's concept of conscientization.

Critical pedagogy enhances personal and academic growth in secondary education, significantly developing students' affective and behavioural domains. Integrating critical pedagogy with digital technologies promotes inclusivity and engagement, particularly in an increasingly digitized world. Research in higher education further demonstrates its impact, enhancing academic performance and fostering democratic engagement, thereby nurturing informed and socially aware individuals.

Emerging technologies like AI and VR offer new opportunities for critical pedagogy to revolutionize student engagement and personalized learning. These technologies prepare pedagogy to meet future challenges when integrated into educational practices. The review's exploration across disciplines confirms that critical pedagogy's influence permeates the academic experience, supporting its continued integration and evolution.

The thematic analysis highlights critical pedagogy's adaptability in addressing modern educational challenges, from fostering inclusive environments to promoting digital literacies. This approach shapes cognitive learning and student development's emotional and societal aspects, extending its impact beyond the classroom to cultivate a critically aware and socially responsive citizenry.

The evidence endorses critical pedagogy as essential for contemporary educational strategies combining academic rigour and social justice. As education evolves with technological and societal shifts, critical pedagogy guides toward an equitable educational paradigm, empowering students as proactive global contributors.

Future research should expand into primary and secondary education, explore digital technology integration, and conduct longitudinal and comparative studies to understand sustained impacts across cultures. It is imperative to evaluate its effectiveness in online settings, develop quantitative measures for outcomes, and investigate its role in STEM education. Addressing implementation challenges, focusing on teacher training, examining policy implications, and including student perspectives will enhance understanding and application. These steps will ensure critical pedagogy's relevance in fostering an empowered, critically engaged, and socially conscious student population.

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