

Review

Critical Pedagogy in Health Education (2014–2025): A Scoping Review of Themes, Trends and Transformations

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Abstract

This scoping review explores how critical pedagogy has been conceptualized and implemented in school-based health education between 2014 and 2025. Grounded in Freirean principles, the review addresses a growing call to move beyond biomedical, behaviorist models toward equity-oriented, dialogical, and empowering educational practices. A systematic search across five academic databases identified 21 peer-reviewed studies applying critical pedagogy frameworks in primary and secondary schools and teacher education. The analysis was guided by the PRISMA-ScR framework and involved inductive thematic synthesis using NVivo. Results were organized across three analytical axes: temporal clustering (pre- and post-pandemic), seven overarching pedagogical themes, and five phases of conceptual evolution. Findings show a trajectory from early embodied and feminist frameworks toward post-pandemic ecological, decolonial, and digital pedagogies. Despite regional innovations—particularly in New Zealand, Australia, and Europe—implementation remains constrained by institutional resistance, policy standardization, and curricular tensions. This review identifies key implications for educational policy, curriculum reform, teacher training, and future research. It argues that critical pedagogy offers a timely, transformative alternative for advancing health equity and social justice in global school health education.

Keywords: health education; health promotion; critical pedagogy; scoping review; schools; teacher training; social justice



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1. Introduction

The new generation's health and wellbeing is of paramount importance; it constitutes a priority for the United Nations, complies with Children's Rights, and is directly linked to Sustainable Development Goals (SDG) adopted by national governments of United Nations Member States at the 17th UN General Assembly. A particular goal requires these states to ensure that institutions, services and facilities responsible for the care and protection of children will conform with the standards established by competent authorities with respect to health ([United Nations, 2015](#)). One principal pathway to fulfill the goal of improving children's health is through health education.

Health education originated in the 19th century, and initially emerged as a response to rapid urbanization, poor sanitation and epidemic diseases, functioning as sanitary propaganda—a top-down mechanism for promoting hygiene, obedience, and social order;

its aim was preventive and economic: to preserve public health and reduce medical costs through population-level compliance with hygienic norms (Kenwood, 1932). By the 1970s, this mechanistic view began to give way to a socio-behavioral model (Bunton & MacDonald, 2002). The Lalonde Report in 1974 further reframed health as the product of lifestyle, environment and social factors, rather than constituting medical care alone. This shift laid the groundwork for the emergence of health promotion, a novel approach which sought to empower individuals and communities to actively shape their own health outcomes (Kickbusch, 2003).

Over recent decades, health education and health promotion—often used interchangeably as terms, since the former is the pedagogical aspect of the latter—have become a cornerstone of national public health strategies aimed at addressing escalating concerns regarding children’s health needs. However, dominant approaches to school-based health education remain largely rooted in biomedical and behaviorist paradigms, emphasizing individual responsibility, risk reduction and compliance with normative health behaviors (Fitzpatrick & Allen, 2019; Fitzpatrick, 2014; Tian et al., 2025). These approaches have been widely critiqued for perpetuating healthism, a perspective that pathologizes and moralizes individual behaviors while obscuring the structural, social and political determinants of health (Crawford, 1980). Within such frameworks, youth may be positioned as passive recipients of expert knowledge, with limited opportunities to critically examine how factors such as poverty, racism, gender inequality, or environmental degradation influence health opportunities and lived experiences.

In contrast, critical pedagogy, grounded in the emancipatory work of Freire (1970), offers a profoundly different vision of education which could be extended to health education, as it situates learners as co-creators of knowledge and emphasizes dialog, power analysis, and collective transformation, placing social justice and solidarity at the heart of its perspective on education (Giroux, 2014). Reconceptualizing health education through the lens of critical pedagogy is not a recent development but part of a sustained intellectual movement spanning more than four decades. Early adaptations of Freirean thinking appeared in U.S. public health scholarship in the 1980s. It was first argued that developing critical consciousness within health contexts could expose how structural inequities shape illness and care (Minkler & Cox, 1980). These arguments have been subsequently formalized in models of empowerment education, which demonstrated that prevention and health promotion programs are most effective when grounded in participation, equality, and collective action (Wallerstein & Bernstein, 1988).

The urgency of this pedagogical reorientation was intensified in the wake of global crises: the COVID-19 pandemic, the climate emergency, the digital misinformation epidemic, and the widening mental health and equity gaps affecting youth worldwide (Baum, 2021). Within such a landscape, models of health education that merely encourage young individuals to “make better choices” risk reinforcing systemic inequities rather than addressing them. By contrast, critical pedagogy reconceptualizes health education as a participatory, justice-oriented process that emphasizes empowerment, collective responsibility, and social transformation, moving beyond information transmission toward meaningful engagement with the conditions that shape health and wellbeing (Carlsson, 2024; Matthews, 2014).

In addition, the pandemic has disrupted the long-standing dominance of the biomedical model of health on two interrelated fronts. First, it has revealed that the threat of infectious disease remains a persistent global challenge despite unprecedented biomedical and technological advances. Epidemics are likely to re-emerge due to broader ecological and socioeconomic transformations, including industrialized agriculture, habitat destruction and global mobility (Baum, 2021; Waitzkin, 2020). Second, it exposed widespread

resistance to biomedical hegemony, manifested in the proliferation of misinformation and conspiracy narratives—what the World Health Organization has termed an “infodemic” (Lancet, 2020). This phenomenon has not only undermined public trust in scientific expertise, but has also prompted governments and media to adopt a militarized and patriarchal rhetoric—speaking of “wars” against the virus and “frontline heroes”—that reinforces hierarchical, paternalistic, and masculinized metaphors of health governance (Williams & Greer, 2023).

In response to the above, critical pedagogy holds the potential to rejuvenate school health education by embedding the principles of democratic dialog, equity, solidarity, and participatory decision-making. This approach advocates replacing martial metaphors—which often frame health education as a battle against disease—with educational practices grounded in egalitarian and democratic values. Through this reorientation, learners and communities are empowered to critically engage with misinformation, power relations, and the sociopolitical determinants of health, fostering a more just and reflective understanding of wellbeing. In doing so, such a pedagogical transformation equips societies to confront future health crises, as it is forewarned, by cultivating the collective critical consciousness necessary to address the systemic roots of health inequities.

Within this frame of reference, this scoping review seeks to explore the extent to which critical pedagogy has been employed in primary and secondary school health curricula in the last decade. To enable meaningful comparisons, the data set is divided into two periods: prior to the pandemic (2014–2019) and the post-pandemic period (2020–2025). More specifically, this review aims to map how critical pedagogy is conceptualized and operationalized in school health education and promotion, to identify the curricular, political, and institutional conditions that support or constrain its use and highlight gaps in the literature that warrant further theoretical or empirical exploration.

2. Materials and Methods

Conducting a systematic review or meta-analysis was considered methodologically inappropriate due to the marked heterogeneity in study designs, educational settings, intervention formats and outcome measures across the available literature. The reviewed studies employed diverse theoretical interpretations of critical pedagogy, ranging from Freirean dialogical education to transformative learning and participatory action frameworks, which precluded statistical aggregation or direct comparison of effects.

This scoping review investigates how critical pedagogy has been applied as a theoretical and methodological framework in health promotion and education interventions published between January 2014 and December 2025. The time period covers a decade divided into equal parts: five years before the pandemic (2014–2019) and five years after the pandemic (2020–2025).

This review follows the Joanna Briggs Institute (JBI) methodological recommendations for scoping reviews (Arksey & O'Malley, 2005; Levac et al., 2010) and adheres to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses Extension for Scoping Reviews (PRISMA-ScR) (Tricco et al., 2018).

“How has the use and conceptualization of critical pedagogy in health promotion and health literacy evolved between 2014–2025?”

This principal research question could be framed more specifically within the following:

1. What were the dominant pedagogical and theoretical framings of critical pedagogy in health promotion before COVID-19 (2014–2019)?
2. How did these framings and practices change after COVID-19 (2020–2025)?
3. What factors appear to have influenced these shifts (e.g., digitalization, policy priorities, public health crises)?

This review was guided by a broad research question exploring the evolution of critical pedagogy within health promotion and health literacy education between 2014 and 2025. To capture conceptual transitions over time, the primary question was disaggregated into three guiding questions focusing on (1) dominant pre-pandemic framings, (2) post-pandemic transformations, and (3) influencing contextual factors. This structure aligns with the PCC framework (Population—educators/students in health promotion; Concept—critical pedagogy; Context—global health education settings) and facilitates temporal mapping consistent with scoping review objectives under the PRISMA-ScR guideline.

2.1. Eligibility Criteria

Table 1 summarizes eligibility criteria outlining the key parameters defining inclusion across study type, focus, educational context, publication characteristics, and accessibility.

Table 1. Inclusion criteria for study selection.

Criterion	Description
Type of study	Primary empirical studies employing qualitative, quantitative, mixed-methods, participatory action research or case study designs.
Focus	Explicit use or interpretation of critical pedagogy (e.g., Freirean, emancipatory, transformative-learning, or dialogical frameworks) applied to health promotion, health education, or health literacy.
Educational context	Interventions or programs implemented within primary or secondary education, community education, or teacher training settings.
Publication characteristics	Articles published in peer-reviewed journals, written in English, published between January 2020 and December 2025.
Accessibility	Studies available in full-text format through academic databases or institutional repositories.

Table 2 summarizes the database-specific search strings, applied filters, and the number of records retrieved from each database. The search strategy was iteratively refined across five major databases (Scopus, ERIC, ProQuest, EBSCO, and PubMed), ensuring comprehensive coverage across both educational and public health disciplines. The inclusion of Boolean operators (“AND,” “OR”) and controlled vocabulary terms (e.g., “critical pedagogy,” “health promotion,” “school”) maximized sensitivity and specificity.

Table 2. Searching strategies.

Database	Search String	Filters Applied	Results
Scopus (Elsevier)	“critical pedagogy” AND (“health education” OR “health promotion”) AND (“school”)	English; Articles and Reviews; 2014–2025	10
EBSCO Education Source	TI,AB,SU(“critical pedagogy”) AND TI,AB,SU((“health promotion” OR “health education”) AND (school* OR “teacher education” OR “curriculum”))	English; Articles and Reviews; 2014–2025	153
ERIC	(“critical pedagogy”) AND (“health promotion” OR “health education”) AND (school* OR “teacher education” OR curriculum) pubyearmin:2014 pub year max: 2025 language: English publication type: “Journal Articles”	English; Articles and Reviews; 2014–2025	32

Table 2. Cont.

Database	Search String	Filters Applied	Results
ProQuest	TI,AB,SU("critical pedagogy") AND TI,AB,SU(("health promotion" OR "health education") AND (school* OR "teacher education" OR "curriculum")) AND (la.exact("ENG") AND pd (20140101–20251223))	English; Articles and Reviews; 2014–2025	42
PubMed (NCBI)	"critical pedagogy" [Title/Abstract] AND ("health education" [Title/Abstract] OR "health promotion" [Title/Abstract]) AND ("school" [Title/Abstract])	English; Articles and Reviews; 2014–2025	10
EBSCO Education Source	TI,AB,SU("critical pedagogy") AND TI,AB,SU(("health promotion" OR "health education") AND (school* OR "teacher education" OR "curriculum"))	English; Articles and Reviews; 2014–2025	153

2.2. Study Selection

All retrieved citations were imported into Rayyan (Qatar Computing Research Institute) for screening and deduplication. Screening proceeded in two stages: (A) Title and Abstract Review—Using the inclusion/exclusion criteria. (B) Full-Text Review—For studies deemed potentially eligible.

Figure 1 is the PRISMA 2020 flow diagram, which is used to document all stages of the screening process (identification, screening, eligibility, inclusion).

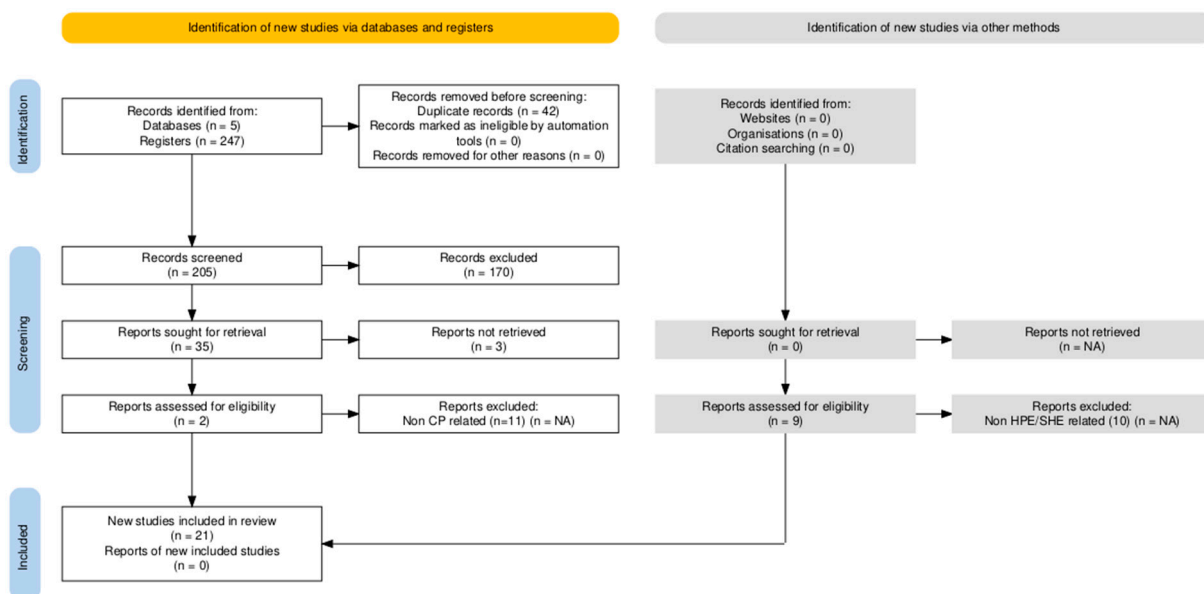


Figure 1. PRISMA 2020 flow diagram.

2.3. Data Analysis and Synthesis

A qualitative thematic synthesis approach (Thomas & Harden, 2008) was used to integrate findings from diverse studies.

The analysis involved three iterative stages:

1. Initial coding—Descriptive codes were assigned to text segments that described pedagogical principles, learning processes, or outcomes.
2. Development of descriptive themes—Codes were grouped into broader conceptual categories reflecting recurrent patterns (e.g., dialog, praxis, empowerment, resistance).
3. Analytical synthesis—Categories were compared and linked to key theoretical constructs from Freirean and critical education theory.

Comparisons were made across regional contexts (Europe vs. non-European), educational levels (higher education vs. community), and intervention types (curricular vs. participatory). The synthesis aimed to capture both the diversity and the coherence of how critical pedagogy was applied across health promotion initiatives.

The coding framework was reviewed through peer debriefing sessions with a colleague familiar with critical pedagogy to challenge interpretations, clarify code meanings, and enhance analytical transparency.

Throughout the coding process, reflexive memos were maintained to track analytical decisions, emergent categories, and shifts in interpretation. This enhanced transparency and supported the iterative refinement of themes. The analytical process was conducted in accordance with inductive thematic synthesis principles (Thomas & Harden, 2008; Tricco et al., 2018) adapted for scoping review methodology (Levac et al., 2010). The aim was to identify how critical pedagogy was conceptualized, operationalized, and evaluated in the included studies, rather than to aggregate quantitative effect sizes. The process was iterative, reflexive, and multi-staged, involving both descriptive and interpretive layers of analysis. All data analysis was carried out between October and December 2025 using NVivo 14 (QSR International) for qualitative coding and Excel for descriptive frequency counts.

Initial inductive coding was open and line-by-line, allowing analytical categories to emerge organically from the data without imposing a pre-existing theoretical framework. As codes accumulated, they were grouped into second-order descriptive themes and subsequently synthesized into seven overarching analytical themes. The coding process was iterative and reflexive, with regular revisiting of earlier studies to ensure consistency across the temporal span (2014–2025). A provisional coding framework was developed after reviewing approximately 25% of the included studies and then refined through constant comparison as new studies were added.

2.4. Ethical Reflexivity

This review used only publicly available data and therefore did not require institutional ethical approval. However, the research team adopted a critical-reflexive stance, recognizing that interpretation is shaped by social and epistemological position. In line with Freire's (1970) principle of co-intentionality, the reviewers approached the analysis as a dialogical process aimed at understanding and representing global diversity in critical pedagogical practices.

3. Results

Table 3 provides a detailed overview of all 21 included studies, summarizing the author(s), publication year, country or region, methodological design, pedagogical focus, and key findings. This table functions as the descriptive foundation for the thematic synthesis and supports transparency in data charting. It captures the diversity of contexts—from New Zealand's health and physical education reforms to European, North American, and Australasian applications of critical pedagogy in health promotion.

Figure 2 illustrates the variety and frequency of methodological designs employed across the reviewed literature, such as ethnography, case studies, interviews, and conceptual essays. It highlights the dominance of qualitative and interpretive approaches consistent with critical pedagogical inquiry.

Figure 3 demonstrates the concentration of studies across key regions, with New Zealand and Australia being the most represented. The clustering underscores regional leadership in applying critical pedagogy in health and physical education.

Table 3. Overview of included studies.

Author(s)	Year	Country/ Region	Context/ Discipline	Methodology/ Design	Critical Focus	Key Findings
Alfrey and O'Connor	2020	Australia	HPE	Case study	Curriculum transformation	"Liminal praxis" between tradition and critique fosters agency despite resistance.
Elia and Tokunaga	2015	USA	Sexuality Education	Conceptual	Anti-oppressive pedagogy	Proposes critical and intersectional model for inclusive sexuality education.
Fitzpatrick and Allen	2019	New Zealand	SHE	Ethnography	Pedagogies of uncertainty	Teachers blend biomedical and critical health discourses.
Fitzpatrick and Russell	2015	New Zealand	HPE	Critical ethnography	Embodiment and identity	Enacts "embodied" critical pedagogy using humor and reflexivity to challenge gender binaries.
Fyall and Metzler	2019	New Zealand	HPE/PETE	Case study	Models-based practice	Tension between critical ideals and classroom realities limits praxis.
Gerdin et al.	2018	New Zealand	HPE/PETE	Qualitative interviews	Praxis translation	Graduate teachers express "seeded" social justice ideals but limited critical enactment.
Jarpe-Ratner and Marshall	2021	USA	Sexual health education	Case study	Sexual health education policy and curriculum	Findings align with a critical pedagogical approach and highlight need to understand SHE implementation context.
Martinson and Elia	2018	USA	SHE	Ecological model framework	Critical model for SHE	Justification for a critical SHE model grounded in pedagogy and ecological approaches.
McCuaig et al.	2014	Australia	SHE	Case study	Social justice pedagogy	Capacity of schools to foster critical health literacy valued by students.
McIntyre et al.	2016	New Zealand	HPE	Semi-structured interviews	Teacher understanding	Teachers conflate critical pedagogy with wellbeing, overlooking structural inequity.
Moen et al.	2020	Nordic	HPE	Comparative qualitative study	Caring pedagogy	Justice-oriented, caring pedagogy across diverse school settings.
O'Toole	2017	Ireland/Europe	Mental Health Education	Conceptual essay	Systems and critical pedagogy	Calls for ecological models linking pedagogy, equity, and mental wellbeing.
Philpot	2017	New Zealand	PETE	Interviews with teachers	Coherency, complexity	Reveals diverse critical pedagogy understandings from Marxism to feminism.

Table 3. Cont.

Author(s)	Year	Country/Region	Context/Discipline	Methodology/Design	Critical Focus	Key Findings
Philpot et al.	2021	New Zealand	HPE/PETE	CIT methodology	Social Justice	CIT methodology reaffirms social justice agenda in HPE.
Powell	2018	New Zealand	Health/Consumer Ed	Policy critique	Neoliberalism and resistance	Proposes ‘culture jamming’ as counter-hegemonic pedagogy.
Ruge	2021	Denmark	Arts-based Health Promotion	Case study	Creative pedagogy	Art and food literacy foster empowerment and health equity.
Sanjakdar et al.	2015	Australia/New Zealand	Sexuality Education	Theoretical synthesis	Critical sexuality pedagogy	Advocates Freirean critique to disrupt heteronormativity and risk-focused teaching.
Shelley and McCuaig	2018	Australia	HPE/PETE	Ethnography	Socio-critical pedagogy	Students embrace critical theory but feel constrained by neoliberal university cultures.
Soulatou and Athanasiou	2024	Greece/Europe	SHE	Curriculum study	Critical pedagogy in SHE	Critical pedagogy absent in half of pre-service programs.
Thorp	2023	New Zealand	SHE	Review of qualitative studies	Fear/risk vs. critical pedagogy	Two contradictory themes: risk-based and critical pedagogy coexist.
Wright et al.	2018	Australia	HPE	Interviews	Socially critical approach	Need for social-context-aware, non-behaviorist health education.

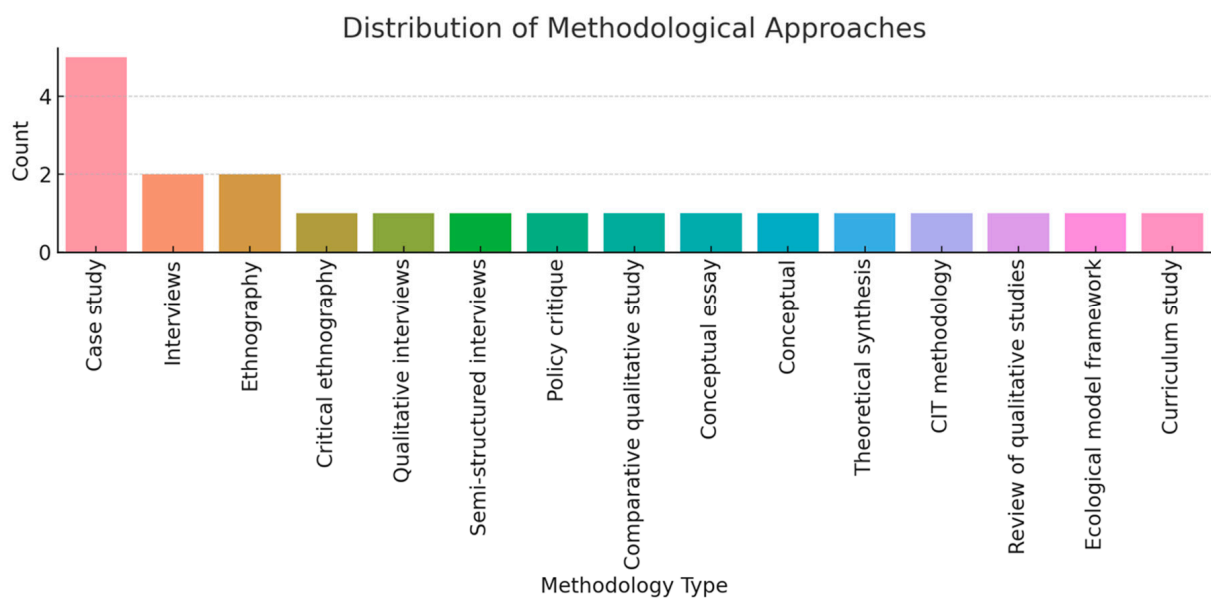


Figure 2. Distribution of methodological approaches used in the included studies (2014–2025).

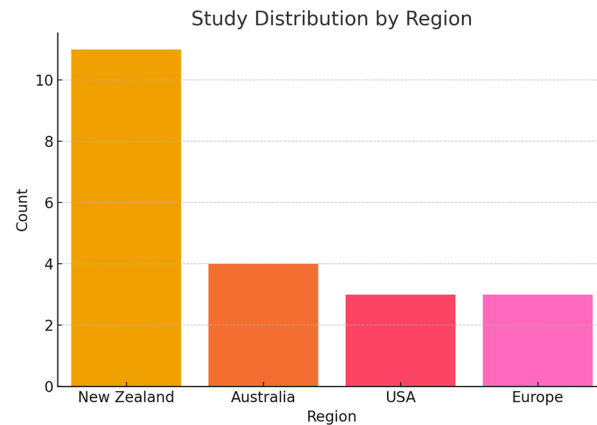


Figure 3. Geographical distribution of studies by region.

Table 4 categorizes the included studies into two temporal clusters (pre- and post-COVID-19) corresponding to the first two guiding research questions. It illustrates how conceptualizations of critical pedagogy evolved between 2014–2019 and 2020–2025 and identifies cross-cutting influences that persisted across both periods. This temporal mapping establishes the analytical framework for comparative synthesis.

Table 4. Temporal clusters of included studies.

Cluster	Analytical Purpose	Time Period	No of Studies	Included Studies
A. Pre-COVID-19 framings	Identify dominant theoretical and pedagogical framings prior to 2020	2014–2019	14	Elia & Tokunaga; Fitzpatrick & Allen; Fitzpatrick & Russell; Fyall & Metzler; Gerdin et al.; Martinson & Elia; McCuaig et al.; McIntyre et al.; O’Toole; Philpot; Powell; Sanjakdar et al.; Shelley & McCuaig; Wright et al.
B. Post-COVID-19 re-framings	Capture conceptual and practical changes post-COVID-19 (2020–2025)	2020–2025	7	Alfrey & O’Connor; Jarpe-Ratner & Marshall; Moen et al.; Philpot et al.; Ruge; Soultatou & Athanasiou; Thorp
C. Cross-cutting factors	Identify cross-cutting contextual drivers across both periods	2014–2025	20	Alfrey & O’Connor; Elia & Tokunaga; Fitzpatrick & Allen; Fitzpatrick & Russell; Fyall & Metzler; Gerdin et al.; Jarpe-Ratner & Marshall; Martinson & Elia; McIntyre et al.; Moen et al.; O’Toole; Philpot; Philpot et al.; Powell; Ruge; Sanjakdar et al.; Shelley & McCuaig; Soultatou & Athanasiou; Thorp; Wright et al.

Table 5 summarizes the thematic synthesis results derived through inductive coding in NVivo. It identifies seven overarching themes—Dialog as Co-creation, Praxis and Empowerment, Embodiment and Reflexivity, Relational and Caring Pedagogies, Intersectionality and Sexual Justice, Ecological and Political Pedagogies, and Institutional Resistance—each supported by representative studies and key evidence. The table illustrates how critical pedagogy was operationalized across diverse school health education contexts.

Table 5. Thematic synthesis—summary of critical pedagogy applications.

Theme	Core Concept	Clusters	Representative Studies
Dialog as Co-creation	Freirean problem-posing and collective reflection	A. Pre-COVID framings, B. Post-COVID re-framings	Alfrey & O'Connor; Fitzpatrick & Allen; Philpot et al.
Ecological and Political Pedagogies	Systems thinking and policy critique	A. Pre-COVID framings, B. Post-COVID re-framings	O'Toole; Powell; Thorp; Dixon & Robertson
Embodiment and Reflexivity	The body as a site of power, learning, and identity	A. Pre-COVID framings	Fitzpatrick & Russell; Martinson & Elia
Institutional Resistance	Policy and neoliberal constraints	A. Pre-COVID framings	Fyall & Metzler; Shelley & McCuaig; Wright et al.
Intersectionality and Sexual Justice	Challenging heteronormativity and cultural exclusion	A. Pre-COVID framings, B. Post-COVID re-framings	Elia & Tokunaga; Jarpe-Ratner & Marshall; Sanjakdar et al.
Praxis and Empowerment	Linking critical reflection with transformative action	A. Pre-COVID framings, B. Post-COVID re-framings	Gerdin et al.; Philpot; Soultaou & Athanasiou
Relational and Caring Pedagogies	Ethics of care as justice	A. Pre-COVID framings, B. Post-COVID re-framings	McCuaig et al.; Moen et al.

Table 6 depicts the temporal evolution of critical pedagogy applications across five phases (2015–2025). These phases trace the transition from foundational feminist and embodied frameworks to digital, ecological, and decolonial pedagogies emerging in the post-pandemic period. This longitudinal mapping aligns with the principal research question on conceptual evolution and demonstrates how critical pedagogy has adapted to shifting sociopolitical and educational landscapes.

Table 6. Temporal evolution of critical pedagogy in school-based health education (2015–2025).

Phase	Description of Conceptual Emphasis	Representative Studies
2015–2016	Foundational critical frameworks: feminist and social justice orientations begin shaping HPE.	Fitzpatrick and Russell (2015); Sanjakdar et al. (2015); McIntyre et al. (2016)
2017–2018	Embodied, relational, and caring pedagogies gain prominence; focus on teacher–student dynamics.	Philpot (2017); O'Toole (2017); Gerdin et al. (2018); Martinson and Elia (2018); Wright et al. (2018); Shelley and McCuaig (2018)
2019	Rise in ecological, political economy, and intersectional perspectives; curriculum critiques emerge.	Fitzpatrick and Allen (2019); Fyall and Metzler (2019)
2020–2022	Pandemic-triggered digital pedagogies and mental health-centered approaches reshape priorities.	Alfrey and O'Connor (2020); Moen et al. (2020); Jarpe-Ratner and Marshall (2021); Philpot et al. (2021); Ruge (2021)
2023–2025	Decolonial, anti-oppressive, and sustainability-driven pedagogies dominate post-pandemic discourses.	Thorp (2023); Soultaou and Athanasiou (2024); Jacobs and Morton (2024)

Table 7 synthesizes key implications derived from the thematic and temporal analyses of included studies. It organizes the findings into four domains—policy, practice, curriculum, and research—highlighting how critical pedagogy has shaped and can further influence school-based health education. Each implication is grounded in representative themes and supported by key studies identified through the scoping process.

Table 7. Summary of implications for policy, practice, curriculum, and research in critical health education (2015–2025).

Domain	Key Implications	Supporting Themes	Representative Studies
Policy	Need for integration of critical pedagogy into national HPE and SHE frameworks.	Political economy, decolonial turn	Powell (2018)
Practice	Teacher training should emphasize reflexivity, embodiment, and relational pedagogies.	Caring pedagogy, embodiment	Fitzpatrick and Russell (2015) ; Moen et al. (2020)
Curriculum	Shift from biomedical to justice-oriented, participatory health education models.	Ecological and Political Pedagogies	O’Toole (2017) ; Philpot et al. (2021) ; Soultatou and Athanasiou (2024)
Research	Need for more longitudinal, post-pandemic, and decolonial studies in critical SHE.	Decolonial and sustainability turns	Thorp (2023)

4. Discussion

This scoping review examined how critical pedagogy has been conceptualized and operationalized in school-based health education between 2014 and 2025. Using temporal clustering, thematic synthesis and longitudinal mapping, this analysis highlights discernible shifts in pedagogical orientations over the examined decade. These shifts appear to be associated, in part, with the COVID-19 pandemic as well as broader sociopolitical transformations, which may have influenced how critical pedagogical approaches are articulated and applied within school health education contexts.

The findings indicate that critical pedagogy in health education has evolved from early applications of feminist and embodied frameworks ([Fitzpatrick & Russell, 2015](#); [McIntyre et al., 2016](#); [Philpot, 2017](#)) toward approaches that increasingly incorporate intersectional and ecological perspectives in the post-pandemic period ([Philpot et al., 2021](#); [Soultatou & Athanasiou, 2024](#); [Thorp, 2023](#)). This trajectory suggests an increasing recognition of health as not merely a biological or behavioral matter, but as one that is embedded in structural, cultural, and political contexts.

The pre-pandemic cluster (2014–2019) was characterized by relational pedagogies, socio-critical curriculum critiques and Freirean Dialog as Co-creation. These studies foregrounded reflexivity, student voice, and the challenges associated with implementing justice-oriented approaches within education systems shaped by neoliberal constraints ([McCuaig et al., 2014](#); [Shelley & McCuaig, 2018](#); [Wright et al., 2018](#)). The pandemic appears to have disrupted these trajectories, with emerging framings of health literacy placing greater emphasis on digital access, mental health, and ecological sustainability ([Jarpe-Ratner & Marshall, 2021](#); [Thorp, 2023](#)).

By contrast, the post-pandemic cluster seems to place greater emphasis on caring pedagogies, teacher wellbeing, and student agency within disrupted learning environments ([Moen et al., 2020](#); [Ruge, 2021](#)). At the same time, climate change has entered the health education agenda: recent research shows that integrating climate-change topics into health curricula “strengthens health literacy and cultivates environmental stewardship,” aligning school content with global health goals. Public health infrastructure changes are also visible. In the United States, public health experts have urged that K–12 schools be treated as critical infrastructure—for example, to ensure clean air, water, and facilities as part of infection prevention—and noted that school-based health centers remained open during COVID-19 to serve vulnerable students ([APHA, 2021](#)). Taken together, these shifts illustrate

that critical pedagogy in the health education domain operates as a non-static framework but a responsive framework that evolves alongside its sociopolitical context.

Across both periods, persistent barriers to the enactment of critical pedagogy were identified. These include institutional resistance, policy standardization, teacher uncertainty, and curricular tensions between performativity and transformation. While many educators embraced critical ideals, enactment was frequently partial or constrained by systemic limitations (Fyall & Metzler, 2019; Gerdin et al., 2018). For instance, Gerdin et al. (2018) and Soulatou and Athanasiou (2024) report that most HPE teachers are not adequately prepared to address complex social inequities or power dynamics in their lessons. As Dixon and Robertson (2023) argue, even in contexts where socio-critical health education is embedded in national curriculum policy, enactment is frequently constrained by institutional logics, competing agendas, and entrenched pedagogical traditions. The feasibility of teacher-led, dialogic classroom methods combined with parental involvement—as seen in evaluated early-years curricula—also suggests that some implementation barriers may be partially mitigated through structured design and support mechanisms (Kourmoussi et al., 2017). Overall, these findings suggest that factors related to policy contexts and teacher education continue to shape the conditions under which critical pedagogical approaches may be implemented.

The review also highlights geographical trends, with New Zealand (e.g., Dixon & Robertson, 2023; McIntyre et al., 2016; Philpot, 2017), Australia (e.g., Alfrey & O'Connor, 2020; McCuaig et al., 2014; Shelley & McCuaig, 2018; Wright et al., 2018), the United States (e.g., Martinson & Elia, 2018; Jarpe-Ratner & Marshall, 2021; Elia & Tokunaga, 2015) and parts of Europe (e.g., Stavrou et al., 2022; Soulatou & Athanasiou, 2024) leading in critical health pedagogical research and implementation. This may reflect both the political culture of these education systems and the active scholarly networks engaging with Freirean and social justice theories. In terms of conceptual development, seven overarching themes were identified (Table 6), revealing the breadth of critical pedagogy's application in SHE and HPE. Themes such as Dialog as Co-creation and Embodiment and Reflexivity point to epistemological reconfigurations in how learning is framed, while Ecological and Political Pedagogies reflect the ontological repositioning of health within global justice narratives.

The synthesis of implications underscores the importance of alignment across multiple domains. At the policy level, this points to the integration of critical pedagogy within national curriculum standards. In practice, teacher professional development may benefit from prioritizing not just knowledge transmission but dialogical, relational, and culturally responsive teaching. Curricular design may similarly shift away from risk-based models toward transformative, equity-focused learning. Future research may further focus on longitudinal, decolonial, and intersectional studies that extend critical pedagogy beyond Eurocentric and Anglophone contexts. Illustrative evidence from evaluated school-based programs suggests that participatory and relational pedagogical approaches can be implemented within formal education systems under certain conditions, as shown in primary and early childhood settings where teacher-led curricula were associated with improvements in socio-emotional skills and school engagement (Kourmoussi et al., 2017; Stavrou et al., 2022).

This scoping review has several limitations. First, most included studies originated from Anglophone countries—particularly New Zealand, Australia and the United States—potentially limiting the global generalizability of the findings. Second, while many studies demonstrated theoretical sophistication, fewer provided empirical evaluations of implementation effectiveness or student outcomes. Third, most studies focused on secondary education; research at the primary level within diverse cultural contexts remains underex-

plored. Finally, as this review focused on peer-reviewed literature, it may not fully capture emerging practices or unpublished innovations occurring in classroom settings.

Future research may explore how critical pedagogy is evolving in underrepresented regions, including the Global South, and in relation to global crises such as migration, climate change, and digital transformation. Mixed-methods studies and participatory research involving students and communities may be valuable for understanding the lived impact of critical pedagogical approaches.

5. Conclusions

This review maps a decade of critical pedagogy in school-based health education, revealing its evolution from feminist and embodied approaches to more intersectional, ecological, and decolonial frameworks in the post-pandemic era. Across time and context, critical pedagogy has offered a dynamic, justice-driven alternative to reductive, biomedical models of health education. However, its implementation has often been constrained by institutional resistance, policy rigidity, and fragmented curricula. For critical pedagogy to more fully inform educational policy, teacher training, and curricular design, greater integration across these domains appears necessary. As global challenges reshape how we teach and learn about health, critical pedagogy provides not just tools, but a compass—one that reorients health education toward equity, relationality, and collective empowerment.

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Abbreviations

The following abbreviations are used in this manuscript:

SHE	School Health Education
HPE	Health and Physical Education
PETE	Physical Education Teacher Education

References

- Alfrey, L., & O'Connor, J. (2020). Critical pedagogy and curriculum transformation in secondary health and physical education. *Physical Education and Sport Pedagogy*, 25(3), 288–302. [CrossRef]
- APHA. (2021). *Preparing public schools in the United States for the next public health emergency: Lessons learned from COVID-19*. American Public Health Association. Available online: <https://www.apha.org/policy-and-advocacy/public-health-policy-briefs/policy-database/2022/01/10/preparing-public-schools-for-the-next-public-health-emergency> (accessed on 3 February 2026).
- Arksey, H., & O'Malley, L. (2005). Scoping studies: Towards a methodological framework. *International Journal of Social Research Methodology*, 8(1), 19–32. [CrossRef]
- Baum, F. (2021). How can health promotion contribute to pulling humans back from the brink of disaster? *Global Health Promotion*, 28(4), 64–72. [CrossRef]
- Bunton, R., & MacDonald, G. (2002). *Health promotion: Disciplines, diversity, and developments*. Routledge. [CrossRef]
- Carlsson, M. (2024). Schools addressing health, wellbeing and sustainability challenges: A literature review of perspectives on social justice, equity and agency. *Health Education*, 124(3/4), 142–159. [CrossRef]

- Crawford, R. (1980). Healthism and the medicalization of everyday life. *International Journal of Health Services*, 10(3), 368. Available online: <https://cir.nii.ac.jp/crid/1573668925395813376> (accessed on 3 February 2026).
- Dixon, R., & Robertson, J. (2023). Paradigms of health education in Aotearoa New Zealand: A heuristic for critiquing the promises, practices, and potential of school-based health education. *Curriculum Studies in Health and Physical Education*, 14(1), 56–72. [CrossRef]
- Elia, J. P., & Tokunaga, J. (2015). Sexuality education: Implications for health, equity, and social justice in the United States. *Health Education*, 115(1), 105–120. [CrossRef]
- Fitzpatrick, K. (2014). Critical approaches to health education. In K. Fitzpatrick, & R. Tinning (Eds.), *Health education: Critical perspectives* (pp. 173–189). Routledge. [CrossRef]
- Fitzpatrick, K., & Allen, J. M. (2019). What does critical health education in schools look like? Two ethnographic narratives of critical practice. *Health Education Journal*, 78(6), 647–661. [CrossRef]
- Fitzpatrick, K., & Russell, D. (2015). On being critical in health and physical education. *Physical Education and Sport Pedagogy*, 20(2), 159–173. [CrossRef]
- Freire, P. (1970). *Pedagogy of the oppressed*. Continuum.
- Fyall, G., & Metzler, M. W. (2019). Aligning critical physical education teacher education and models-based practice. *The Physical Educator*, 76(1), 24–56. [CrossRef]
- Gerdin, G., Philpot, R., & Smith, W. (2018). It is only an intervention, but it can sow very fertile seeds: Graduate physical education teachers' interpretations of critical pedagogy. *Sport, Education and Society*, 23(3), 203–215. [CrossRef]
- Giroux, H. A. (2014). The swindle of democracy in the neoliberal university and the responsibility of intellectuals. *Democratic Theory*, 1(1), 9–37. [CrossRef]
- Jacobs, J., & Morton, B. (2024). Exploring critical health literacy in health education: A social justice approach. *Health Education Journal*, 83(6), 681–692. [CrossRef]
- Jarpe-Ratner, E., & Marshall, B. (2021). Viewing sexual health education through the lens of critical pedagogy: A case study in Chicago public schools. *International Journal of Environmental Research and Public Health*, 18(4), 1443. [CrossRef]
- Kenwood, K. R. (1932). Organized health propaganda in England—What the government is doing. *American Journal of Public Health*, 22(5), 571–574.
- Kickbusch, I. (2003). The contribution of the World Health Organization to a new public health and health promotion. *American Journal of Public Health*, 93(3), 383–388. [CrossRef]
- Kourmoussi, N., Salagianni, M., Merakou, K., Tzavara, C., & Koutras, V. (2017). Evaluation of the “Steps for Life” personal and social skills Greek K-curriculum. *Creative Education*, 8, 1912–1940. [CrossRef]
- Lancet. (2020). The COVID-19 infodemic. *The Lancet Infectious Diseases*, 20(8), 875. [CrossRef]
- Levac, D., Colquhoun, H., & O'Brien, K. K. (2010). Scoping studies: Advancing the methodology. *Implementation Science*, 5(1), 69. [CrossRef] [PubMed]
- Martinson, M., & Elia, J. P. (2018). Ecological and political economy lenses for school health education: A critical pedagogy shift. *Health Education*, 118(2), 131–143. [CrossRef]
- Matthews, C. (2014). Critical pedagogy in health education. *Health Education Journal*, 73(5), 600–609. [CrossRef]
- McCuaig, L., Carroll, K., & Macdonald, D. (2014). Enacting critical health literacy in the Australian secondary school curriculum: The possibilities posed by e-health. *Asia-Pacific Journal of Health, Sport and Physical Education*, 5(3), 217–231. [CrossRef]
- McIntyre, J., Philpot, R., & Smith, W. (2016). HPE teachers' understanding of socially critical pedagogy and the New Zealand health and physical education curriculum. *New Zealand Physical Educator*, 49(2), 5–9.
- Minkler, M., & Cox, K. (1980). Creating critical consciousness in health: Applications of Freire's philosophy and methods to the health care setting. *International Journal of Health Services*, 10(2), 311–322. [CrossRef]
- Moen, K. M., Westlie, K., Gerdin, G., Smith, W., Linnér, S., Philpot, R., Schenker, K., & Larsson, L. (2020). Caring teaching and the complexity of building good relationships as pedagogies for social justice in health and physical education. *Sport, Education and Society*, 25(9), 1015–1028. [CrossRef]
- O'Toole, L. (2017). A bioecological perspective on parental involvement in children's education. In *Conference proceedings: The future of education* (7th ed.). Libreriauniversitaria.it. Available online: <https://mural.maynoothuniversity.ie/id/eprint/12057/> (accessed on 3 February 2026).
- Philpot, R. (2017). What Critical Pedagogy is possibly becoming and why this is not the preferred outcome. *New Zealand Physical Educator*, 50(1), 12–13.
- Philpot, R., Smith, W., Gerdin, G., Larsson, L., Schenker, K., Linnér, S., Moen, K. M., & Westlie, K. (2021). Exploring social justice pedagogies in health and physical education through critical incident technique methodology. *European Physical Education Review*, 27(1), 57–75. [CrossRef]
- Powell, D. (2018). Culture jamming the “corporate assault” on schools and children. *Global Studies of Childhood*, 8(4), 379–391. [CrossRef]

- Ruge, D. (2021). Student creativity and professional artwork in a school food intervention in Denmark. In J. H. Corbin, M. Sammartino, E. A. Hennessy, & H. B. Urke (Eds.), *Arts and health promotion: Tools and bridges for practice, research, and social transformation* (pp. 53–66). Springer. [CrossRef]
- Sanjakdar, F., Allen, L., Rasmussen, M. L., Quinlivan, K., Brömdal, A., & Aspin, C. (2015). In search of critical pedagogy in sexuality education: Visions, imaginations, and paradoxes. *Review of Education, Pedagogy, and Cultural Studies*, 37(1), 53–70. [CrossRef]
- Shelley, K., & McCuaig, L. (2018). Close encounters with critical pedagogy in socio-critically informed health education teacher education. *Physical Education and Sport Pedagogy*, 23(5), 510–523. [CrossRef]
- Soultatou, P., & Athanasiou, K. (2024). School health education and teachers' preservice training: The case of Greece. *Education Sciences*, 14(5), 483. [CrossRef]
- Stavrou, V., Brouzos, A., Vassilopoulos, S. P., & Koutras, V. (2022). Human rights group intervention in primary school: Effectiveness of a short-term human rights education pilot programme aimed at Greek primary school students. *The International Journal of Children's Rights*, 30(3), 507–531. [CrossRef]
- Thomas, J., & Harden, A. (2008). Methods for the thematic synthesis of qualitative research in systematic reviews. *BMC Medical Research Methodology*, 8, 45. [CrossRef] [PubMed]
- Thorp, S. L. (2023). How is health education being taught and experienced? A literature review. *Teachers and Curriculum*, 23(1), 55–67. [CrossRef]
- Tian, C. Y., Ng, C. C. W., Xie, L., Mo, P. K. H., Dong, D., Nutbeam, D., & Wong, E. L. Y. (2025). Conceptualisation of critical health literacy—Insights from Western and East Asian perspectives: A scoping review. *BMJ Global Health*, 10(5), e018232. [CrossRef]
- Tricco, A. C., Lillie, E., Zarin, W., O'Brien, K. K., Colquhoun, H., Levac, D., Moher, D., Peters, M. D. J., Horsley, T., Weeks, L., Hempel, S., Akl, E. A., Chang, C., McGowan, J., Stewart, L., Hartling, L., Aldcroft, A., Wilson, M. G., Garritty, C., & Straus, S. E. (2018). PRISMA extension for scoping reviews (PRISMA-ScR): Checklist and explanation. *Annals of Internal Medicine*, 169(7), 467–473. [CrossRef]
- United Nations. (2015). *Transforming our world: The 2030 agenda for sustainable development (17th general assembly)*. Available online: <https://digitallibrary.un.org/record/3923923?ln=en&v=pdf> (accessed on 3 February 2026).
- Waitzkin, H. (2020). Confronting the upstream causes of COVID-19 and other epidemics to follow. *International Journal of Health Services*, 51(1), 55–58. [CrossRef]
- Wallerstein, N., & Bernstein, E. (1988). Empowerment education: Freire's ideas adapted to health education. *Health Education Quarterly*, 15(4), 379–394. [CrossRef]
- Williams, B., & Greer, B. (2023). All's fair in pandemic and war? A gendered analysis of Australian coverage of COVID-19. *Media and Communication*, 11(1), 91–101. [CrossRef]
- Wright, J., O'Flynn, G., & Welch, R. (2018). In search of the socially critical in health education. *Health Education*, 118(2), 117–130. [CrossRef]

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