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Culturally Responsive and Inclusive Physical Education in Rural Schools

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ABSTRACT

Physical education can promote physical competence, social development, cultural understanding, and lifelong participation in physical activity. However, the relevance and accessibility of learning experiences may be shaped by cultural differences, disability-related needs, gender expectations, school resources, and teacher preparation. These concerns are particularly important in rural schools, where geographical conditions, facilities, community knowledge, and institutional support vary. This narrative integrative review examines how culturally responsive and inclusive physical education may be implemented in rural schools through culturally meaningful curriculum, equitable participation, resource-sensitive instruction, teacher preparation, and school-community partnerships. The reviewed literature indicates that cultural responsiveness and inclusion should be addressed together rather than treated as separate objectives. Community consultation, adaptable instruction, appropriate assessment, and sustained institutional support emerge as important considerations. The review also identifies a need for context-specific research on the intersection of cultural responsiveness, disability inclusion, and rural physical education, particularly in culturally diverse and Indigenous communities. The synthesis offers implications for curriculum development, teacher education, resource allocation, and future research.

Keywords: *Culturally Responsive Pedagogy, Inclusive Physical Education, Rural Schools, Indigenous Games, Educational Equity, Physical Literacy*

1. INTRODUCTION

Physical education contributes to students' physical, cognitive, social, and emotional development by providing structured opportunities to develop movement competence, understand health-related concepts, cooperate with peers, and participate in physical activity. Physical literacy scholarship emphasizes that physical competence, motivation, confidence, knowledge, and understanding are interrelated dimensions of engagement in movement and physical activity (Edwards et al., 2017; Carl et al., 2022). Quality physical education therefore involves more than athletic performance; it also concerns meaningful participation, learning, and the development of positive relationships with physical activity (UNESCO, 2015; World Health Organization [WHO], 2020). These opportunities are not experienced equally across schools. Differences in facilities, equipment, teacher preparation, curriculum implementation, and geographical conditions can influence the learning experiences available to students. Rural schools should not be treated as a homogeneous category because local resources, cultural practices, student populations, and school-community relationships differ considerably. Hudson et al. (2026) identify rural physical education as a distinct and comparatively underexplored research area, underscoring the need to examine particular settings rather than assume that one model applies to all rural schools.

Cultural responsiveness is relevant because students bring community knowledge, identities, languages, experiences, and understandings of movement into physical education. Research on culturally relevant physical education has highlighted the value of conversations with Indigenous Elders and community leaders (Robinson et al., 2016), while studies of Indigenous games have examined their contribution to physical education teacher education and culturally responsive pedagogy (Bonato et al., 2024; Wrench & Garrett, 2021). Cultural responsiveness must be considered alongside inclusion. Students with disabilities may experience barriers related to inaccessible facilities, inflexible activities, limited teacher preparation, or inadequate support. Reviews indicate that inclusion requires more than physical placement in mainstream classes; it involves meaningful participation, appropriate instructional design, and support for teachers and learners (Wilhelmsen & Sørensen, 2017; Pocock & Miyahara, 2018; Rekaa et al., 2019; Tarantino et al., 2022).

Despite growing scholarship on culturally relevant teaching, disability inclusion, physical literacy, and rural schooling, these areas are often examined separately. Their intersection warrants synthesis to clarify how rural physical education can recognize cultural knowledge while guaranteeing equitable participation for learners with diverse abilities and needs.

Research Question

This review is guided by one central research question: How can culturally responsive and inclusive physical education be effectively implemented in rural schools, considering the pedagogical practices, contextual challenges, and institutional support needed to promote equitable student participation.

2. METHODOLOGY

Research Design

The study adopts a narrative integrative literature review design. This approach brings together empirical studies, systematic reviews, conceptual publications, and policy guidance to develop an integrated understanding of culturally responsive and inclusive physical education in rural school contexts. The review focuses on the relationships among rural school conditions, culturally meaningful curriculum, disability inclusion, gender equity, physical literacy, teacher

preparation, and school-community partnerships. It is not presented as a systematic review because a complete database search record, screening log, duplicate-removal procedure, and final eligibility count were not available in the manuscript supplied for revision.

Literature Search Strategy

The proposed search sources are Scopus, Web of Science, ERIC, SPORTDiscus, and Google Scholar. The intended publication period is 2021–2026. Foundational publications outside this period may be retained when they provide concepts directly relevant to culturally responsive pedagogy and inclusive education. Search terms include combinations of the following: "rural physical education," "culturally responsive physical education," "Indigenous games," "inclusive physical education," "disability inclusion," "gender equity," and "physical literacy." For a journal-ready and reproducible account, the author must complete the database searches and record the exact search date, search strings used in each database, filters applied, and number of records retrieved. These details are intentionally not fabricated in this revised draft.

Eligibility Criteria

Literature considered relevant to the review includes peer-reviewed empirical studies, systematic or scoping reviews, conceptual scholarship, and authoritative policy or guidance documents that address at least one of the review's central concepts: rural physical education, culturally responsive or culturally relevant pedagogy, Indigenous knowledge and games, inclusive physical education, disability inclusion, gender equity, or physical literacy. Foundational works published before 2016 may be included when needed to explain key theoretical concepts. Publications that do not meaningfully relate to physical education, cultural responsiveness, inclusion, rural schooling, or the conceptual foundations of the review should be excluded.

Literature Selection and Data Extraction

The selection process should proceed through title and abstract screening, followed by full-text assessment of potentially relevant publications. Duplicate records should be removed before screening. For each included source, the author should extract the publication details, study purpose, context or participants, research design, major findings, and relevance to culturally responsive and inclusive physical education in rural schools. The final manuscript should report the actual number of records identified, screened, assessed for eligibility, excluded, and included after the searches have been completed.

Thematic Synthesis

The literature is organized through thematic synthesis. Findings and arguments are compared and grouped according to recurring concepts concerning (1) rural school contexts and resources; (2) cultural relevance, Indigenous knowledge, and student voice; (3) disability inclusion, gender equity, and assessment; and (4) teacher preparation, community partnerships, and institutional support. The synthesis considers both areas of convergence and limitations in the available evidence. The themes are used to address the single research question and to identify implications and research gaps.

3. RESULTS AND DISCUSSION

3.1 Rural School Contexts and Physical Education Opportunities

Facilities, equipment, safe activity spaces, teacher expertise, and professional learning opportunities can shape the range of physical education experiences available to students. UNESCO (2015) identifies curriculum, teacher development, equipment, facilities, and inclusion

as relevant dimensions of quality physical education. Hudson et al. (2026) specifically reviewed rural physical education and highlighted the need for a stronger evidence base on this context.

Limited equipment may require teachers to adapt tasks, share materials, reorganize available spaces, or select activities that can be delivered safely with locally available resources. Such adaptations can be useful when they preserve learning goals and enable meaningful participation. However, adaptation should not normalize inadequate provision or lower expectations for rural learners. Resource-sensitive teaching should be accompanied by institutional investment and equitable access to facilities, equipment, and teacher development (UNESCO, 2015; WHO, 2020). Rurality should be understood through the actual circumstances of each school rather than treated as a simple proxy for disadvantage (Hudson et al., 2026).

3.2 Cultural Relevance, Indigenous Knowledge, and Student Voice

Culturally responsive teaching considers how learners' cultural experiences and community knowledge can inform instructional design. Foundational scholarship describes culturally relevant pedagogy as supporting academic learning while recognizing students' cultural competence (Ladson-Billings, 1995; Gay, 2002, 2018). Culturally sustaining pedagogy further emphasizes maintaining and developing cultural and linguistic practices rather than treating culture merely as a tool for delivering conventional content (Paris, 2012; Paris & Alim, 2017). In physical education, cultural responsiveness includes considering which games, sports, dance forms, and movement traditions are represented in the curriculum, whose knowledge is recognized, and whether teaching practices are meaningful to the students involved. Wrench and Garrett (2021) provide an example of community-engaged inquiry, while Bonato et al. (2024), Wrench and Garrett (2021), and Eather et al. (2024) examine Indigenous games as a site for culturally responsive teaching and teacher learning. Cultural responsiveness requires more than inserting a traditional game into a lesson. Teachers should consider the activity's cultural meaning, community perspectives, intended learning outcomes, and accurate representation. Consultation is particularly important when activities are associated with Indigenous communities or cultural protocols. Students should also be invited to express which activities they find meaningful and which classroom practices create barriers to participation. Cultural groups are not homogeneous, and teachers should avoid stereotyping learners based on ethnicity or location (Gay, 2018; Paris & Alim, 2017).

3.3 Inclusive Practices and Equitable Participation

Inclusive physical education aims to provide meaningful learning opportunities for students with different abilities and support needs. The presence of students with disabilities in mainstream classes does not automatically ensure participation or belonging. Reviews by Basso-Braz et al. (2024), Liu et al. (2025), and Tarantino et al. (2025) identify continuing challenges related to teacher attitudes, student experiences, and the conditions needed for inclusion. Tarantino et al. (2022) report generally positive teacher attitudes while noting less favorable attitudes in some cases involving students with profound disabilities or behavioral disorders, as well as concerns about inadequate initial preparation.

Teachers may adapt equipment, rules, task complexity, grouping arrangements, communication methods, and assessment criteria to support participation. These changes should respond to individual needs while maintaining meaningful learning objectives. Universal Design for Learning has also been examined as a framework for improving access through flexible engagement, representation, and action or expression (Lourenço et al., 2025). Gender equity is another dimension of inclusion. Participation may be shaped by gender stereotypes, social norms, prior access to sport, safety, and the organization of activities. Işıkgöz et al. (2025) found that educational programs, policies, and innovative teaching approaches can support gender

equality, while limited resources, insufficient awareness, and short-term interventions remain challenges. Teachers can monitor who receives equipment, leadership roles, feedback, and opportunities to demonstrate competence. Cultural sensitivity should not be used to justify discriminatory practices; physical education should maintain fair access, safety, and nondiscrimination (UNESCO, 2015).

3.4 Assessment and Physical Literacy

Assessment influences which forms of learning are recognized. If achievement is measured only through speed, strength, or competitive performance, students with different starting points or support needs may be disadvantaged. Physical literacy offers a broader perspective that includes physical competence, motivation, confidence, knowledge, and understanding (Edwards et al., 2017; Carl et al., 2022). Barnett et al. (2023) reviewed the validity, reliability, and feasibility of physical literacy assessments for school-aged children, emphasizing the importance of appropriate measurement. Assessment in culturally responsive and inclusive physical education should align with intended outcomes and provide fair ways for students to demonstrate learning. Depending on the lesson, evidence of learning may include movement skill development, understanding of rules, decision-making, cooperation, reflection, and personal progress. Assessment criteria should be transparent, and appropriate accommodations should be provided (Barnett et al., 2023; Tarantino et al., 2022).

3.5 Teacher Preparation, Community Partnerships, and Institutional Support

Teacher preparation is central to implementation. Teachers need opportunities to examine assumptions, learn about local cultural practices, plan accessible activities, and evaluate whether students can participate meaningfully. Scholarship on culturally relevant physical education and Indigenous games connects teacher learning with community knowledge and culturally responsive practice (Robinson et al., 2016; Bonato et al., 2024; Wrench & Garrett, 2021). Reviews of disability inclusion likewise emphasize teacher knowledge, experience, collaboration, and institutional support (Tant & Watelain, 2016; Wilhelmsen & Sørensen, 2017; Rekaa et al., 2019; Tarantino et al., 2022). In rural schools, professional learning may need to account for travel, staffing, time, and access to specialist resources. Peer mentoring, school-based learning communities, shared lesson plans, and partnerships with community knowledge holders may help teachers exchange strategies. Partnerships may involve parents, Elders, local sports practitioners, cultural organizations, and other community members. Such partnerships should be based on mutual respect, appropriate recognition, and attention to cultural protocols. One individual should not be assumed to represent every member of a community.

School leaders and policymakers have responsibilities beyond encouraging individual teacher initiative. Facilities, equipment, teacher development, collaboration time, accessible environments, and sustained community partnerships require institutional planning and support. Resource constraints should be documented and addressed through school improvement planning rather than treated solely as problems for individual teachers to solve (Hudson et al., 2026; UNESCO, 2015).

4. CONCLUSION, RECOMMENDATIONS, AND LIMITATIONS OF THE STUDY

The study concludes that culturally responsive and inclusive physical education plays an important role in promoting equitable, meaningful, and participatory learning experiences for students from diverse cultural backgrounds and with varying learning needs. Integrating Indigenous games, culturally relevant activities, disability-inclusive practices, and flexible instructional approaches can help create a learning environment that respects cultural identities

and individual differences. In rural schools, successful implementation requires consideration of local resources, geographical conditions, community traditions, and the specific needs of learners.

Based on the synthesis, physical education teachers are encouraged to integrate culturally relevant activities, including Indigenous games and community-based physical activities, into their instructional practices while ensuring accessibility and meaningful participation for all learners. Schools and educational institutions should strengthen teacher preparation through professional development on culturally responsive and inclusive physical education, provide appropriate instructional resources, establish partnerships with Indigenous communities and local stakeholders, and promote flexible assessment strategies that recognize diverse learner abilities. Educational policymakers should also consider sustained institutional support and context-responsive curriculum implementation, particularly in geographically isolated and resource-limited schools.

This study was limited to a review and synthesis of existing literature on culturally responsive and inclusive physical education, particularly in rural school settings. The availability of research specifically examining the intersection of cultural responsiveness, disability inclusion, and rural physical education remains limited, which may affect the breadth of the synthesis. Furthermore, the study did not involve direct data collection from teachers, learners, or community members. Future researchers may conduct empirical studies using qualitative, quantitative, or mixed-methods approaches to examine actual classroom practices, learner experiences, community participation, and institutional factors influencing the implementation of culturally responsive and inclusive physical education in rural communities.

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