
PRE-SERVICE TEACHERS' PERCEIVED PREPAREDNESS TOWARDS SUSTAINABILITY IN SOUTH AFRICAN FOUNDATION PHASE PE

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ABSTRACT

The sustainability of physical education (PE) in the Foundation Phase (Grade R-3) depends on what teachers feel capable of sustaining in their daily teaching practice. This paper examines Foundation Phase (FP) PE-service teachers' perceptions of their preparedness to teach PE, drawing on qualitative responses to a single open-ended question from a broader questionnaire distributed to selected South African teacher education institutions. The perceived strengths and vulnerabilities of these pre-service teachers reveal a need to work toward sustainable, inclusive PE teacher education. The full questionnaire had 96 respondents, of which 37 provided qualitative responses to the preparedness questions. Thematic analysis revealed four themes for areas in which pre-service teachers felt well prepared and four themes for areas in which they felt they needed more preparation. Analysis revealed clear patterns of confidence and vulnerability that shape the aspects of FP PE teachers perceive to sustain their teaching practice. The limited response rate to this single open-ended question is discussed as an indicator of PE's marginal status within teacher education in South Africa. This paper argues that teacher education is not merely an individual attribute but a core sustainability condition for PE in the FP.

INTRODUCTION

In South Africa, 11 universities offer early childhood education (ECE) as part of their teacher-training programs (Steyn et al., 2012). These universities integrate literacy, numeracy (mathematics), and life skills (LS). Higher education institutions (HEIs) utilize the National Curriculum Statement (NCS) and the Curriculum Assessment Policy Statement (CAPS) as guides for structuring ECE programs (Steyn et al., 2012). As outlined in CAPS, the LS curriculum is strategically designed to promote the holistic development of learners, addressing their social, personal, intellectual, emotional, and physical well-being (DBE, 2011). Physical Education, a vital component of the LS subject, plays a crucial role in fostering this holistic development (Kohl & Cook, 2013). However, despite its importance, the state of Physical Education Teacher Education (PETE) in South African higher education institutions

remains under scrutiny, necessitating innovative solutions to address persistent challenges (Couto et al., 2024)

Current PETE programs for FP teachers lack structured and comprehensive training, leaving teachers underprepared for effective and inclusive PE delivery. Van Deventer (2011) claims that "the CAPS policy does not permit HEIs to train teachers specifically for LS because, with all its broad topics, LS does not constitute a specific discipline at HEIs". Issues such as unclear content scope, insufficient practical training, and the absence of specific performance descriptors for assessing learner progress exacerbate the problem (Stroebel et al., 2017; Burnett, 2020). Additionally, there is limited guidance on how to adapt PE lessons to meet diverse learner needs, particularly in resource-constrained environments (Burnett, 2020; Tee, 2020).

At the seventh International Conference of Ministers Officials responsible for Physical Education and Sports (MINEPS VII) held in Baku, Azerbaijan, the ministerial representatives' key recommendations included recognition of PE as a fundamental right, the integration of PE into Sustainable Development Goals (SDGs), implementation of the Fit for Life initiative, addressing physical inactivity and health crises, ensuring quality PE and safeguarding participants in PE (UNESCO, 2023).

Critical issues aside, there has recently been growing interest in exploring and establishing links between PE and perspectives on sustainable development (Fröberg & Lundvall, 2022). The paper addresses the question of what must change for FP PE to be reimaged.

THEORETICAL FRAMEWORK AND PROJECT OVERVIEW

TEACHER PREPAREDNESS & SUSTAINABLE PE

The study is theoretically framed by Vygotsky's socio-interaction theory and the Diffusion of Innovations theory, which underscore the importance of collaborative learning and the adoption of new teaching strategies in education for sustainability. Together, they provide a lens for understanding teacher preparedness as a socially constructed and systemically sustained process rather than an individual attribute.

Vygotsky (1978) provides a socio-interactionist perspective in which teacher learning is understood as a socially mediated process shaped by interaction, guided practice, and participation in professional contexts. In teacher education, the goal is for pre-service teachers' preparedness to teach PE to develop through collaborative learning experiences, modelling and scaffolded practice during coursework and work-integrated learning. Burnett (2020) Arufe-Giráldez et al. (2023) emphasizes that quality PE requires pedagogical approaches that provide meaningful experiences, promote learner engagement, and allocate sufficient time for practice. However, many teachers struggle to achieve these goals due to gaps in training and resource availability (Burnett, 2020). Complementing this view, the Diffusion of Innovations theory highlights how teaching practices can be adopted based on perceived complexity and pre-service teachers' existing beliefs (Rogers, 2003).

In the South African FP context, the sustainability of PE depends on whether pre-service teachers are sufficiently supported to adopt and sustain effective practice, which is currently affected by its integration into Life Skills and by its typically being taught by generalist teachers.

PROJECT OVERVIEW

This paper forms part of a broader, ethically approved research project. Ethical clearance was obtained from the Faculty of Education's Ethics Committee of the University of Pretoria, South Africa (Ref: EDU105/23). The research followed all relevant ethical guidelines and principles stipulated by the University of Pretoria and adhered to the principles outlined in the Helsinki Declaration. The project titled *FP PE* examines FP pre-service teachers' perceptions, knowledge, and preparedness to facilitate PE in South African schools. The purpose of this paper is to examine pre-service teachers' perceived preparedness to teach as a sustainability condition in FP PE.

METHODS

SAMPLE AND DATA COLLECTION

The data for this paper were drawn from an online questionnaire distributed via the South African Universities Physical Education Association (SAUPEA) network to the pre-service FP teachers enrolled in South African teacher education institutions. Participation was voluntary, and responses were anonymous. In total, 96 pre-service teachers completed the broader questionnaire. This paper draws specifically on qualitative responses from a single open-ended question: *Identify one area where you feel well-prepared to teach physical education and one area where you feel you might need more preparation*, to which only 37 participants responded.

DATA ANALYSIS

The study adopted an adaptation of the six-step thematic analysis process developed by Braun and Clarke (2006). These steps serve as a roadmap to meticulously process qualitative data. They enhance the rigour of the research process and the depth of the research findings (Naeem et al., 2023). Initial engagement with the data involved reviewing all 37 responses and identifying recurring keywords and phrases related to both perceived preparedness and areas requiring further preparation. These keywords were used to organise the data into two broad categories: perceived preparedness and perceived unpreparedness. Rather than treating the keywords as standalones, they were interpreted in context and iteratively developed into patterns of meaning. Through this process, themes were generated per category to inform the discussion.

FINDINGS

The responses from the 37 participants revealed distinct patterns in how they described areas of perceived preparedness versus areas requiring further preparation. The recurring keywords and phrases were interpreted in context and developed into themes reflecting shared meanings. The findings are presented in two sections: perceived preparedness and perceived unpreparedness.

PERCEIVED PREPAREDNESS

Responses relating to areas of perceived preparedness were characterised by recurring keywords such as motor skills development, fundamental movement skills, and creative and play-based activities. Below is a breakdown of the recurring keywords and their interpretations for thematic meaning.

Keywords	Interpretive focus	Themes
Motor skill development	Confidence in supporting age-appropriate physical development	<i>Confidence in fundamental movement and gross motor skill development</i>
Fundamental movement skills	Familiarity with core movement competencies (e.g., running, jumping, throwing)	
Movement games	Use of structured and semi-structured activities to teach movement	<i>Movement through play and play-based pedagogy</i>
Creative and play-based activities	Alignment with FP teaching philosophies and learner-centered practice	

PERCEIVED UNPREPAREDNESS

In contrast, responses described various areas which require further preparation such as adaptation toward inclusive education as well as planning and assessment. The table below represents the thematic meaning derived from the recurring keywords.

Keywords	Interpreted meaning	Themes
Inclusive, special needs, adaptation	Uncertainty in inclusive pedagogical practice	<i>Inclusive and adapted PE</i>
Assessment, progress, criteria	Limited assessment literacy	<i>Assessment and monitoring of physical development</i>
Planning, lesson design, structure	Difficulty translating knowledge into pedagogy	<i>Lesson planning, structure, and progression</i>

DISCUSSION

The findings extracted from this single open-ended question demonstrate that sustainability in FP PE is closely tied to teacher preparedness. The findings lead to the argument that PE's sustainability depends on what teachers feel capable of sustaining in practice. There is a clear divide between confidence in familiar, play-based movement activities and uncertainty about more complex pedagogical demands, with important implications for the future of PE in relation to SDG 4 – inclusive education, to ensure inclusive and quality education for all and promote lifelong learning (UN, 2015). The discussion points below provide insight into pre-service teachers' perceptions of preparedness and unpreparedness and discuss how these perceptions inform the reimagining and sustainability of PE in the FP.

PERCEIVED PREPAREDNESS & SUSTAINABLE PRACTICE

Participants most frequently reported preparedness in relation to motor skill development, fundamental movement skills, movement games, and creative, play-based activities. This pattern aligns with existing research indicating that early childhood and generalist teachers tend to feel most confident when PE practices reflect broader early childhood pedagogies that emphasise play, enjoyment, and learner engagement (Tsangaridou et al., 2021). As one participant noted, *“I feel well-prepared to design and implement engaging physical activities that develop fundamental movement skills... using games, music, and playful routines”*. Tsangaridou et al. (2021) further notes that most teachers employ generic, rather than content-specific practices in their PE classes. This tendency was also evident in respondents' responses, in which pre-service teachers expressed preparedness in broad pedagogical or affective terms rather than PE-specific content or a learning progression. One respondent stated, *“I feel prepared when learners are enthusiastic towards PE”*, while another described being *“well-prepared for fun and interactive, engaging lessons.”* While enjoyment is a valuable foundation, research cautions that PE risks being marginalised when it is sustained primarily as an informal activity rather than as a coherent learning area (Beddoes et al., 2014).

Preparedness was also framed in relation to general teaching concerns such as context and management, with responses including *“In the sports ground... inside the classroom”* and *“the discipline of the learners is a bit tricky when doing physical education.”* In some cases, PE was subsumed within broader wellbeing or life skills practices, as reflected in the comment, *“We implement the Wellness to Life activities that not only focus on physical education but include emotions and discussion, giving learners an overall experience.”* Together, these responses suggest that preparedness is often conceptualised through generic teaching lenses, reinforcing the risk that PE is sustained as activity or engagement rather than as a content-rich and pedagogically coherent learning area.

From a sustainability perspective, this alignment is significant. Practices that fit comfortably within teachers' existing pedagogical repertoires are more easily integrated into daily routines and are therefore more likely to be sustained over time (Kirk, 2013).

PERCEIVED UNPREPAREDNESS AS A SUSTAINABILITY RISK

Areas of unpreparedness clustered around inclusive and adapted PE, assessment of physical development, lesson planning, and specific movement domains. These findings mirror the international literature, which highlights that generalist teachers often feel least prepared for aspects of PE that require specialised pedagogical knowledge or adaptation (Morgan & Bourke, 2008).

Inclusive PE emerged as a particularly significant concern. The CAPS curriculum identifies teachers as key support structures in implementing inclusive, diversified and well-managed PE programs (DBE, 2011); however, many of the pre-service teachers expressed uncertainty about implementation, with one noting a need for *“more specific and practical training on how to effectively adapt physical education for children with diverse needs,”* while others highlighted concerns such as needing *“more preparation in adjusting my lessons to fit more inclusive children, like children with disabilities.”*

Similarly, limited confidence in assessment was evident, as reflected in the comment, *“I would benefit from more training on how to systematically assess their progress using clear criteria”*. This uncertainty highlights gaps in teachers' assessment literacy, where initial teacher education programmes limit their ability to make informed decisions about learners' physical performance in PE (Bradford, 2021). This weakens PE's pedagogical legitimacy and increases its vulnerability within curriculum contexts that prioritise assessment and accountability (Penney et al., 2009). Participants also reveal uncertainty about planning, lesson design, and pedagogical structure. As one participant noted, *“I know all the concepts that need to be developed in children, but I don't know exactly how the best way to teach or develop them is.”* This distinction reflects a lack of pedagogical content knowledge, where knowing *what* should be taught does not necessarily translate into knowing *how* to teach it (Shulman, 1986).

CONCLUSION

Only 37 of the 96 participants provided qualitative responses to the single open-ended question: *Identify one area where you feel well-prepared to teach physical education and one area where you feel you might need more preparation;* therefore, the findings cannot be generalised. However, rather than being viewed solely as a methodological limitation, this limited engagement may signal the marginal status of PE within teacher education and pre-service teachers' uncertainty or lack of confidence in articulating preparedness in South Africa. Taken together, the findings suggest that what pre-service teachers feel prepared to teach becomes what is sustained in practice, while aspects of PE perceived as complex or under-supported remain vulnerable. From a sustainability perspective, PE cannot be sustained if teachers do not feel professionally equipped to teach it.

Reimagining sustainable PE in the South African FP therefore requires targeted strengthening of initial teacher education, particularly in relation to inclusive practice, assessment literacy, and pedagogical planning. Addressing these gaps demands systemic change that positions PE as a core pedagogical responsibility rather than an optional or intuitive classroom activity. As Tsangaridou et al. (2021) argue, understanding the practices teachers employ in PE enables teacher educators to provide more meaningful support that enhances children's learning experiences. This is particularly important given

evidence that quality PE makes a vital and unique contribution to learners' education and that healthy children are better able to learn (Beddoes et al., 2014).

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