ADDRESSING CHALLENGES OF PE IN SOUTH AFRICAN PUBLIC SCHOOLS

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ABSTRACT

Physical education (PE) has increasingly received global recognition as subject in aid of multi-faceted development in United Nation's policy frameworks, declarations and strategic initiatives. This informed a national study on the state and status of PE in South African public schools in which 27 researchers from nine public South African universities participated. Four school types were included in all nine provinces. The paper reflects on the challenges and actionable recommendations obtained from interviews with key decision-makers (n=140), focus group discussions with HODs and teachers (n=323), secondary and primary school learners (n=601) who also completed questionnaires (HODs, n=56; teachers, n=175; primary school learners, n=1333; and secondary school learners, n=1348). Results show multiple approaches of PE implementation with key challenges relating to the low status, curricular constraints (time allocation, multiple assessments and content) and differential access (as per Quintile type of school) to resources. Teacher training remains a prominent concern as only 38.1% teachers and 40.0% HODs are formally qualified showing an "age-effect" and 14.7% schools outsourcing PE to external coaches or NGOs. Most girls (>65% primary and >74% secondary school learners) "dislike" the narrow range of competitive sport activities presented in large mixed-gender class settings.

Keywords: Physical education; South African public schools; status; implementation; challenges; recommendations.

INTRODUCTION

The declaration of access to physical education (PE) as a human right in 1948 (UN's Universal Declaration of Human Rights), followed by the International Charter of Physical Education and Sport (1978) and the Berlin Declaration (2013) (UNESCO, 2017) confirm the significance of PE at the global and national level. Since 2015, the United Nations Educational Cultural and Scientific Organisation (UNESCO) actively promoted Quality Physical Education (QPE) whilst advocating for a life-course approach in support of health-related outcomes within a development framework (Cloes, 2017). The latter focus featured at the sixth International Conference of Ministers and Senior Officials responsible for Physical Education and Sport (MINEPS VI) held in Kazan, Russia in June 2017, where the ministerial representatives pledged support for the revised UNESCO Charter and emphasised the social and health benefits of PE, physical activity (PA) and sport (UNESCO, 2017).

The Kazan Action Plan (KAP) became the guide for continental leadership to pledge support and action from national governments (UNESCO, 2017). In September 2019, under

the auspices of the African Union (AU), African sport ministers held their first regional conference in Madagascar and debated the role of PE in social transformation (AU, 2019).

International research by Hardman *et al.* (2014) produced benchmark data that elicited critical reflections and set a discourse relating to questioning the ontology of the field and tracing the complexity of educational outcomes (Lawson, 2018). Despite the politicising of PE, policies and political agendas do not always find traction in PE practices. PE's marginalisation seems to persist that stems from broad unachievable goals, curricular constraints, poor resource provision and the lack of qualified teachers (Perry *et al.*, 2012; Van Deventer, 2012; Fletcher *et al.*, 2018).

Researchers increasingly report barriers and challenges juxtaposed against an ideal model of what QPE should be to achieve meaningful and contextually relevant outcomes (Van Deventer, 2011; Perry *et al.*, 2012; Stroebel *et al.*, 2016). A national review had to consider the 2011 signed Memorandum of Understanding between two national government entities (Department of Basic Education and Sport and Recreation South Africa) in terms of the Intergovernmental Framework Act (Act No 13 of 2005) and agreed to share accountability for policy-to-practice integration of school sport with direct implication for PE (SRSA, 2018).

The strategic articulation of global-local configurations and drive for policy renewal and post-apartheid redress of resources thus informed South Africa of a QPE pilot project for UNESCO (2016/2017) and for a national research project to deliver key strategic insights (DBE, 2017; UNESCO, 2016, 2017). It is against this background that the PE 'space' is shaped and presents itself as 'a crowded policy space' in which multiple models of delivery and approaches exist (Houlihan, 2000:171). Particularly in the past ten years, academics reported on the main approaches of models that emerged or that were applied within physical education practices worldwide.

INFLUENTIAL MODELS INFORMING PE PRACTICES

The 21^{st} Century marked the proliferation of a models-based approach in PE operating at the curricular and instructional levels and substantiated by diverse philosophical justifications (Aggerholm, *et al.*, 2018). Several influential models emerged over time relating and bearing relevance to the South African context.

Sport Education

Sport Education (SE) is a model that features several game-centred pedagogical approaches that support delivery of the key sport-focused outcomes (Kirk, 2013; Green *et al.*, 2018). It allows for bridging school-community sport participation and focus on the development of multi-role acquisition for participants through authentic sport experiences (Siedentop *et al.*, 2011; Naul, 2017).

Multi-activities and games

PE in a multi-activity curriculum model is evident in Teaching Games for Understanding (TGfU) and Teaching Games for Understanding Game-Sense (TGfU-GS) (Kirk, 2013; Green *et al.*, 2018). Such a model supports a sport-focused approach for non-specialist teachers, who draw on their own sporting experiences for teaching PE (O'Neil & Richards, 2018). It further informs the multi-activity approach of the current South African curriculum (Curriculum and

Assessment Policy Statement or CAPS) that emphasises physical and performance measurability (DBE, 2011a & b).

Physical activity and health

Physical and health literacy is positioned as an activation discourse where public health and sport paradigms inform curriculum reforms in countries like Sweden (Larsson & Nyberg, 2017), Scotland (Kirk *et al.*, 2018), Canada (Fletcher *et al.*, 2018) and Australia (McCuaig & Hay, 2013). Such interventionist views positions health-optimising physical education (HOPE) to intersect with gender, life stage, resource availability and identity markers (Dudley *et al.*, 2016). South African researchers draw a direct link between the inadequate implementation of PE and poor health scores (physical activity levels and nutrition) (Draper *et al.*, 2014 & 2019).

Life skills/Life orientation

PE that encapsulates and bridges PA and health-related outcomes with a sport-based participation approach aims to build physical and health literacy for life-long active living (Stroebel, *et al.*, 2016). Health professionals in South Africa engaged with teachers for implementing health-based physical activity that links to the Life Skills/Life Orientation framework (DBE, 2011a, 2011b). This approach envisaged social change in terms of sustainable knowledge transfer and shaping behaviour beyond the classroom.

Hybrid models

Hybrid models emerged within the PE space linked to the increasing involvement of external agencies inclusive of the education business sector (Sperka & Enright, 2018). The outsourcing of PE and school sport became a standard practice where generalist teachers lack the content knowledge and competencies for implementing complex curricula and assessments (Williams *et al.*, 2011). This approach contributes to multi-stakeholder involvement that is also evident in a whole school approach and constitutes ecological holism (Fletcher *et al.*, 2018; Lawson, 2018).

PE IN SOUTH AFRICA: POLICY REFORM AND RESEARCH

In the South African public school system, the policy restructuring witnessed major PE curricular changes. Firstly, PE had stand-alone subject status (prior to 1994) and then became one of eight learning outcomes (Human Movement and Development) in 1997 within Outcomes-based Education (OBE) in the new politically informed Curriculum 2005 (Van Deventer, 2011; Du Toit & Van der Merwe, 2013). The failure of OBE became evident and in 2009 it was replaced by the Revised National Curriculum Statement (R-NCS) (Grades R to 12), which in turn were restructured in 2010 as the National Curriculum and Assessment Policy Statements (CAPS) (Stroebel, *et al.*, 2016).

CAPS as the current curriculum maintained the learning areas with the positioning of PE within Life Skills and Life Orientation (LO) to be implemented over four school phases (Van Deventer, 2000; 2012). In the Foundation Phase (Grades R to 3), Life Skills features PE as a learning area where children learn and experiment with basic motor skills linked to games, body movement and free play. The Life Orientation learning area in the Intermediate Phase (Grades 4 to 6) features PE composed of multi-activities linked to games (invasion games), sport (athletics), dancing (rhythmic movement) and swimming (water safety). These activities

provide the basis for the Senior Phase (Grades 7 to 9) where the manipulation of objects, motor performances, fitness and outdoor adventure activities are included as progression for active living and social outcomes. These are linked to active citizenship in the Further Education and Training Phase (FET for Grades 10 to 12) (Du Toit & Van der Merwe, 2013; Stroebel, *et al.*, 2016).

Compulsory time allocation for PE is two hours per week for the Foundation Phase and one hour per week for the other three phases that may be limited to one class period of about 40 minutes per week in the following three phases (Van Deventer, 2012). Life skills teaching dominate CAPS, where theory and practice are not linked and gender-mixed settings evident in large classes, compromises effective teaching and learning (Stroebel *et al.*, 2017 & 2018). Public health and prevalent disease profiles associated with physical inactivity provided a further emphasis on PA and fitness, rather than broader educational outcomes (Draper *et al.*, 2019; Tian, *et al.*, 2017).

As South African researchers continued to report the barriers to ineffective PE practices with an ideal model of QPE as a stand-alone subject taught by specialists, but less attention is paid to actionable strategic insights in the short to medium terms (Stroebel *et al.*, 2016; Perry, *et al.*, 2012). Most research addresses systemic challenges associated with the socio-economic inequality between differentially resourced schools - from lower quintiles (Quintile 1, 2 and 3) to higher quintiles (Quintile 4 and 5) with the latter being the relatively better resourced former Model C schools (Van Deventer, 2011 & 2012). However, in the post-Apartheid era, socio-economic influences dominated as 77.2% South African children attend lower quintile (no-fee) schools and are dependent on a national nutrition scheme (Ndebele, 2017:483).

A partnership between UNICEF and the Department of Basic Education (DBE) paved the way for a national research project that aimed to produce robust evidence and an in-depth analysis of the physical education space in South African public schools (Burnett, 2018). This article draws on the data from the national study with the focus on strategic information obtained from local voices and offer realistic recommendations for implementation.

METHODOLOGY

Aim and objectives of research

The national study entailed a situation analysis of the state and status of PE in the South African public school system that offer meaningful insights on which the current paper is based. Nine public South African universities collaborated as 27 researchers conduct research in all nine provinces, travelling within a 150 kilometre range from the university or airport (in two provinces where there were no participating university).

Research phases

The research followed the processes proposed by Kloeppel *et al.* (2013) with three distinctive phases. The methodology was developed and pilot tested, followed by the training of researchers. Then researchers collected data with the leading university managing the research and ensuring progress and standardisation whilst submitting all the questionnaires for statistical analysis. Due to several unforeseen delays (funding and access), the study stretched over three years (2016 to 2018). By the end of 2018, qualitative provincial reports were published, followed by the national report that was presented to key stakeholders in 2019.

Ethical clearance

This author took the responsibility to obtain ethical clearance from the leading university after having defended the research proposal successfully at the level of the Department and Faculty levels. The study received ethical clearance (REC-01-131-2016) from the Faculty of Health Sciences of the leading university and all researchers were trained to uphold a high level of ethical conduct throughout the research process. Signed informed consent were obtained from all adult research participants, whilst all principals provided proxy consent for learners whose parents were requested by him/her for permission to take part in the research. The Department of Basic Education provided written permission for access to all schools. Conversations were only taped as per signed agreement and taped on password-protected devices, as well as deleted after transcription. Only the lead university oversaw the capturing of questionnaire data to ensure anonymity, whilst codes for school types protected identification of all sample schools.

Research design, methods and sample

The study followed a descriptive and evaluative design positioned in a strategic and social justice framework with a focus on knowledge generation and critical reflection. After consultation with key representatives from DBE, UNICEF South Africa and university representatives, the national in-depth research sampled four school types based on socio-economic categories (Quintiles 1-3, Quintiles 4-5 – primary and secondary schools), geographical distribution (rural and urban settings) and students with special educational needs (LSEN) (UNICEF, 2000). The research made use of a purposive and non-probability sampling as proposed by Leedy and Ormrod (2013) to afford clustered comparison as per school type.

A mixed method research (MMR) approach was followed by utilising the Sport in-Development Impact Assessment Tool (S·DIAT) adapted to ensure a synergy between quantitative and qualitative methodology (Burnett, 2014). MMR integrates two forms of data concurrently via theme-integration of issues and local context, and allows for multi-layered triangulation (Creswell, 2013).

Qualitative data entailed semi-structured protocols that allowed the researchers to pitch interviews at the strategic level for different research cohorts through interviews with decision-makers (school principals) and focus group discussions with teachers and learners. Observations (PE lessons, school documentation, physical resources and context) were digitally recorded for generating descriptive data for triangulation. Quantitative data consists of biographical data, perceptions and experiences of physical education, identifying challenges and recommendations. A 3- and 4-point Likert Scale delivered nuanced responses, whilst feedback on open-ended questions to teachers requesting them to offer recommendations, were coded for thematic clustering.

Some deviations in initial purposive sampling projections (8 schools per province) occurred due to contextual realities, such as flooding and the availability of types of schools within rural areas where a local university served as centre. Ultimately, the research included 72 schools across the selected prototypes. In addition to document analysis, techniques used included:

Interviews with 112 Heads of Departments (HODs) of the learning area Life Skills (n=67) and Life Orientation (n=45), as well as 28 School Governing Body (SGB) members and/or community representatives;

- *Focus groups* incorporated 232 HODs and teachers, as well as 601 learners with 274 primary school learners, 251 secondary school learners and 76 learners with special educational needs (LSEN);
- *Questionnaires* were completed by 56 HODs, 175 Life Skills (n=103) and Life Orientation teachers (n=72), as well as 1333 primary school and 1348 secondary school learners.

The data sets were merged to report the current situation analysis with reference to the main issues that draw insights from current discourses, policy frameworks and lived realities.

Data analysis

For the qualitative data analysis, researchers used the coding phases emanating from the work of Strauss and Corbin (1990). Firstly, they sorted and categorised transcripts into significant units of meaning, followed by line-to-line coding followed by axial and selective coding to identify sub- and main themes. For the quantitative data analysis, the Statistical Package for the Social Sciences (IBM SPSS 21) generated descriptive statistics, including means, standard deviations and frequencies. For inter-group comparisons, a cluster analysis and cross-tabulation applied.

Multiply ways of triangulation (Kimchi *et al.*, 1991) contributed to significant depth, reliability, validity and trustworthiness, which in this study addressed: (i) different methods; (ii) different settings and clustered samples; (iii) different time and space over a two-year period; (iv) different levels – from individual to school and community.

Research participants

Of the 53 HODs who completed questionnaires, 47.2% were males and 52.8% females compared to teachers of whom 31.4% were males and 68.4% females. The gender spread for primary school learners was 52.3% boys and 47.7% girls, and for secondary school learners it was 42.4% boys and 57.6% girls for the secondary school. In the sample, more than half (58.5%) of the primary school research participants were from Quintile 4-5 schools, 32.3% were from Quintile 2-3 schools and 9.2% were from Quintile 1 schools. In the secondary schools, 50.2% research participants were from Quintile 2-3 schools and 10.8% were from Quintile 1 schools.

RESULTS

The results focus on the main challenges as reported by different research cohorts with associated current good practices and recommendations for different stakeholders. Some themes overlap and exist in a highly interrelated way.

Status of PE

Qualitative data show that because PE is a non-examinable status in public schools, is awarded a relatively low status in the vast majority of public schools, specifically in most lower quintile schools where parents, school management and teachers emphasise the importance of academic subjects, such as mathematics, science and languages leading to preferred professional career pathways. For most rural and township schools, the low status relates to poor access to physical resources and appropriately qualified teachers. Teaching large mixed-gender classes are challenging for classroom teachers of whom many focusing mainly on assessments. Former Model-C schools that prioritise sporting success, acknowledge the importance of (practical) PE as a space for sport talent identification. However, limited time allocation and lack of qualified coaches limits the development of sporting talent. In schools for LSEN, PE follows a highly valued rehabilitative approach even when PE cannot adequately support therapists.

Approaches of implementation

Multi-activity and sport-focused approach

Most schools follow a multi-activity and sport-focused approach along a continuum of mass participation or sport-for-all (inclusive participation). The content offered consist of sport-type activities ranging from a very small repertoire (athletics, soccer and netball) in lower quintile schools to a broader spectrum in higher quintile schools (in some cases offering up to 36 different sports and physical activities).

Health-focused approach

A health-focused approach ranges from offering physical activities by making use of curriculum time (relatively short periods and large groups) to improve 'general fitness and health'. Although health-related outcomes are valued, health-optimising PE remains abstract without evidence that it translates into (positive) quality of life choices and behaviours. Limited time allocation did not meet the required frequency, duration and intensity or health-related outcomes as advocated by the World Health Organisation (WHO, 2020). The theory of PE focuses on life skill acquisition and health without real synergy to the practical application, whilst in schools for LSEN health-inducing physical activities is the dominant paradigm.

Life-skill/value-based approach

The underpinning of a corrective or rehabilitative approach underpins the framing of PE as a means for preventing or addressing socially deviant behaviours. This is particularly true in some township and rural schools, where communities experience high rates of poverty and associated forms of deviant behaviour. In such schools, external agencies (NGOs) deliver physical activities aligned with life skill education where peer-educators act as role models.

Self-learning or non-teaching

Teachers reported that PE does not take place in 9.1% primary and 13.2% secondary schools, whereas regular implementation is compromised by theory-only classes, doing homework, catching up on other subjects or free play. Non-teaching happens across all school types and measures 9.1% for primary and 13.2% for secondary schools.

Qualified teachers as a key human resource

In some cases, a classroom teacher may take her/his own class and that of some other teachers where there is an informal arrangement, or it could be formally slotted in on the timetable (Figure 1). Additional data indicate that in most schools (62.3%), classroom teachers implement PE, compared to PE specialists offering classes (25.1%) or external service providers (14.7% schools outsourcing to coaches or NGOs).

In almost all lower quintile schools, class teachers teach PE compared to higher quintile schools where PE specialists, coaches or external service providers deliver PE. In some cases, PE is scheduled for a specific day (within a cycle) to afford external service providers





Figure 1. PROPORTIONAL DIVERSITY OF PRESENTERS IMPLEMENTING PE PER SCHOOL TYPE

Teacher profiles

Most HODs (67.3%) and teachers (43.0%) have five years or more teaching experience in the field, which should count for in-service learning. A relative high percentage of teachers (39.1%) have three or less years of experience in teaching PE and 71.2% of this proportion coach sport at their schools of which 52% have done so for four years or more and have obtained different levels of sport coaching qualifications (Table 1).

Table 1. SPORT COACHING QUALIFICATIONS AND TRAINING OF TEACHERS IMPLEMENTING PE

	Yes	No	Total
Qualification	n (%)	n (%)	n
Formal qualification (Diploma, Degree)	42 (47.7)	46 (52.3)	88
Level 1 from a sport federation	34 (43.0)	45 (57.0)	79
Level 2 from a sport federation	8 (14.0)	49 (86.0)	57
Level 3 from a sport federation	8 (14.5)	47 (85.5)	55
Short course/s	47 (54.0)	40 (46.0)	87
Informal training	54 (60.7)	35(39.3)	89
Non-formal training (Experience)	54 (60.0)	36 (40.0)	90

Despite the transferability of knowledge and skills between coaching and teaching, the expertise of PE teachers lies within specific specialist training compared to mixed training profiles of existing teachers (Table 2).

Qualifications	Unmarked n (%)	Marked n (%)	Total (N)
Formal qualification (Diploma, Degree)	78 (61.9)	48 (38.1)	126
Short course/s	97 (78.2)	27 (21.8)	124
Informal training	78 (61.9)	48 (38.1)	126
Non-formal training (Experience)	76 (60.3)	50 (39.7)	126

Table 2. PE-RELATED QUALIFICATION PROFILES OF EDUCATORS IN SAMPLE SCHOOLS

It is evident that a minority (38.1%) of teachers have obtained a formal qualification compared to other *ad hoc* trainings or having only teaching experience. This profile repeats itself among HODs of whom only 22 (40%) have formal qualification in PE that inevitably influences the capacity, aptitude and attitude for teaching PE.

Attitude of teachers towards PE

The triangulation of self-identification of attitudes by teachers and HODs shows high levels of agreement and only three factors of slight differences regarding nine underlying components relating to teachers' attitudes (Figure 2).



Figure 2. ATTITUDES OF TEACHERS TOWARDS TEACHING PE

Most teachers (63.6%) regards PE as a valuable subject and 61.3% expressed their willingness to teach it. Whereas 52.3% are interested and 53.3% motivated to teach PE, only 42% feel equipped to teach PE. Negative responses relate to a perceived heavy workload and 'too frequent assessment and lots of administration', which leaves them 'little time to teach' (focus group discussions with teachers). At the time of the research, only 65.3% of HODs taught PE that may pose a challenge for providing mentorship and guidance.

Challenges for implementation of PE

Research participants from all schools remarked on the lack of recognition (status) and poor resource provision (funding, equipment, facilities and specialist posts) to schools. Teachers mentioned curricular constraints related to limited time allocation and the theory-practical divide. Lower quintile school representatives criticised the lack of monitoring and evaluation by unqualified subject advisors, the lack of a supportive school sport culture, and assessment-driven approach of CAPS, unqualified teachers, large gender-mixed classes and learners not being able to afford practice clothing or elicit parental support.

Higher quintile schoolteachers commented on resource constraints and inappropriate ranking of schools, whilst advocating for PE to be a stand-alone subject taught by qualified teachers in gender-segregated settings. Teachers from LSEN schools commented on inadequate curriculum content and lack of guidelines for unqualified teachers to adapt prescribed activities. Teachers and HODs identify teacher training (51% and 47.8% respectively) as the major 'problem' for implementing PE.

Most secondary school respondents are negative ('not liking') the curriculum content (59.3%) due to a lack of variety (53.1%), and too much emphasis on theory (49.5%). Most primary school learners (50.7%) did not like competitive sport and 60.5% commented on the lack of equipment. Relatively more girls than boys 'dislike' competitive activities – 65.1% compared to 34.9% for primary school learners and 74.7% compared to 25.3% for secondary school learners.

Most primary and secondary school learners (>60%) fear injury, whilst relationships (peer-to-peer=52.3%; teacher-learners=27.4%) and big classes (40.9%) contribute to negative experiences. Most learners feel that they are not good or successful (52.4%), which has a bearing on assessments seen as not fair (36.3%). The latter may reflect negative perceptions of teacher conduct, such as viewing them as 'not good' (24.9%). Shared negative experiences cut across all quintile ranked schools and show the relative lack of provision and dissatisfaction with curricular content and its implementation. Secondary school learners from higher quintile schools also criticised the type of activities (71.6%) in which they are not successful or 'not good at' (71.1%), which inevitably result in negative perceptions.

DISCUSSION

Status of PE in South African public schools

The marginal status of PE is a global phenomenon (Hardman *et al.*, 2014), which has received renewed attention in the re-positioning of the subject by UN agencies and by the African Union as expressed in the Kazan Action Plan (UNESCO, 2017; AU, 2019). The relatively low status is a result of multi-faceted and complex influences stemming from misconceptions of the ontology of the subject, inadequate leadership at all levels, socio-political priorities and the focus on career pathways associated with academic (examinable high profile) subjects and

consequential poor resource provision (Van Deventer, 2011 & 2012; Du Toit & Van der Merwe, 2013; Stroebel *et al.*, 2016, 2017 & 2018).

Major restructuring of PE negatively impacted on curriculum reform – from a stand-alone subject and gender-segregated manageable size classes that was replaced by PE as a learning area with the emphasis on theory and movement performance assessments, without meaningful synergy between theory and practice. Similar conclusions were observed by South African researchers during the different periods of reform up to the current curriculum (CAPS) (Van Deventer, 2011; Perry *et al.*, 2012; Stroebel *et al.*, 2016; Tian *et al.*, 2017). This situation is exacerbated by the lack of resource provision by the government sector and the call of current national leaders for classroom teachers to improvise with limited resources, no central budget or funds to provide adequate infrastructure and equipment (Stroebel, *et al.*, 2016). Possible human justice transgressions and legal liability issues concerning safe participation are obscured in the current political agenda of societal transformation (Van Deventer, 2011 & 2012).

It appears that in higher quintile schools, where there is a vibrant competitive sport culture, resources are shared with PE and the latter enjoy a high level of prominence for reaching all learners. However, the time allocated and the lack of qualified PE teachers diminishes the possibility of nurturing sporting talent.

Approaches to PE and curriculum

In many countries, physical education is shaped by a multi-activity approach with some practices featuring aspects of QPE as per UNESCO's conceptualisation of this domain, augmented by a physical literacy or competency-based approach (Bott & Mitchell, 2015; UNESCO, 2016). In South African public schools, a sport-focused approach is prioritised as supported by curricular content and the existing expertise of particularly classroom teachers and external coaches (Van Deventer, 2011; Stoebel *et al.*, 2016).

In most schools this approach offers minimal opportunities for authentic application as advocated by Green *et al.* (2018), because sport and/or games educational models require extensive teacher training and support (O'Neil & Richards, 2018). Lower quintile schools present a narrow range for sport participation, whilst most learners found the competitive nature of sport activities exclusionary. Such an approach has disadvantaged particularly the girls, which is indicative of the notion of mixed-gender classes as inclusive, being a myth (Dudley *et al.*, 2016). The fact that more than 70.0% of secondary school girls 'do not like' competitive sport activities or are 'not good at it' is a major concern relating to curriculum content design and implementation.

Although health-related outcomes are valued by teachers, multiple constraints inhibit the delivery and impact of health-optimising practices (Larsson & Nyberg, 2017; Kirk *et al.*, 2018). Optimising Health and Physical Education (HOPE) or Physical Education and Health Education (PEHE) approaches requires measurable outcomes and criteria that cannot be achieved within the PE classes only (Harris & Cale, 2018). The uncritical and simplistic adoption of a health paradigm and adherence to concerns reported in Physical Activity Report Cards (Draper *et al.*, 2019) may lead to a fitness monitoring rather than fostering active living. The curriculum restrictions and teachers' lack of content and didactical knowledge does not support such a paradigm and necessitate a different approach to address behavioural change for life-long active living (Kirk *et al.*, 2018; Lawson, 2018).

Access to resources and teacher professional development

Many publications on the state of physical education in different countries address the lack of infrastructure, equipment and poor teaching related to inadequate teacher training and generalists (class teachers) being responsible for teaching physical education (Hardman *et al.*, 2014; Stroebel *et al.*, 2017, 2018; Tian *et al.*, 2017). Lower quintile schools may be relatively adequate for a number of teams of athletes, but inadequate when large classes or numbers need to be accommodated (Kirk, 2013). Poor quality equipment and lack of access to storage facilities add to the current lack of access to physical resources.

Another main challenge that is pivotal to many challenges experienced by teachers and students, constitute the lack of specialist or appropriately qualified teachers (Green *et al.*, 2018; O'Neil & Richards, 2018). This places the professional development of teachers at the heart of reform, as a well-trained teacher component is essential. A minority of teachers in higher quintile schools (43.3%) are formally qualified, with only 15% qualified in lower quintile schools and none in Quintile 1 schools. Only 40% of HODs have formal qualifications in PE despite 67.5% having been in their positions for five or more years. For several years, less teachers teach PE (43.0%) where mostly classroom teachers (62.3%) implement PE compared to 25.1% trained teachers contribute to poor levels of teaching – a situation reported by researchers since 2009 (Van Deventer, 2011; Stroebel *et al.*, 2016).

Outsourcing has become popular as the education business sector emerged in answer to the needs of schools in relation to delivering QPE and school sport (Sperka & Enright, 2018). In South Africa, well-resourced schools often employ trained coaches, whilst poorer schools engage with volunteers or civic society agencies from the sport-for-development sector that is evident in 14.7% of PE classes offered by external agencies without clear norms and standards in place.

It is thus expected that recommendations from teachers and students in lower quintile schools should focus on the professional development of teachers to favour progressive, age and gender-appropriate teaching and learning (Van Deventer, 2011; Stroebel *et al.*, 2016, 2017 & 2018). Upskilling current teachers is not the answer, as it should co-exist with providing an enabling environment – from national advocacy, support for school and community leadership, resource provision and curriculum adaptation. Accredited quality education and training should also be accompanied by pre-service qualifications at higher education institutions, positions for qualified staff where PE is a stand-alone subject and supported by a rigorous system of monitoring and evaluation by qualified human resources at all levels of engagement.

RECOMMENDATIONS

There are multiple levels of recommendations offered by different research participant cohorts. HODs and teachers were concerned about the offering of QPE, different aspects of the curriculum (multiple performance assessments and insufficient time allocation) and the lack of theory-practice integration. School representatives and teachers suggested that qualified staff should be appointed or current teachers offered accredited in-service training and mentorship to counter the current "age-effect" (older qualified teachers). Special positions should be created for qualified staff with such courses being offered at tertiary institutions.

For lower quintile schools, the provision of physical resources (facilities and equipment) for a variety of sports is a priority and a shared responsibility between DBE and the Ministry of Sport, Arts and Culture. This would include building and upgrading of (multi-purpose)

facilities away from classrooms where noise-levels do not disturb other classes, whilst schools should accept the responsibilities to maintain and safeguard (fence) facilities, provide storage spaces and purchase quality equipment to last in harsh conditions. The lack of funding should be addressed by offering a central government budget for PE and offer training to lower quintile schools to enable them to fundraise, purchase and manage facilities and equipment.

Most of the research respondents identified DBE as being accountable for monitoring and evaluation, resource provision, curriculum reform, implementation requirements and the professional development of teachers. DBE in partnership with the Ministry of Sport, Arts and Culture and higher tertiary institutions have a key role to play to "professionalise" PE.

CONCLUSION

As previously stated, the 'industrial age modelling of schooling' as it pertains to QPE is underpinned by neo-colonial beliefs and a normative understanding of what PE, and particularly QPE, should look like (Richards *et al.*, 2018:123). It does not take in consideration contextual realities and systemic barriers in low income countries where 'quality' emerged as a fluid continuum. Good practices across school types share similar characteristics and in some instances show the effective adaptation to multi-dimensional challenges.

The current state and status of PE in the South African public school system shows the absence of educational accountability. A highly valued holistic approach is not evident in the multi-activity approach inherent in CAPS. It is exacerbated by the theory-practice divide and disconnects compromising existing health- and value-based approaches, despite innovative good practices to ensure some level of QPE. Without meaningful policy and curricular revision, the delivery of QPE will remain unachievable. QPE, according to the conceptualisation of UNESCO, is possible where PE is an independent subject with meaningful educational content taught by qualified teachers in an enabling (resource-supportive) environment. Currently, this is not the case in most South African public schools despite existing good practices that resemble key dimensions of quality practices.

Conceptual clarity and demarcated roles and responsibilities of multiple stakeholders are essential to address the current confusion of physical education spaces. For local realities, persisting challenges, such as the professional development of teachers and addressing the issues of outsourcing, meaningful assessment, learner priorities, suitable content and creating an enabling environment remain priorities. Differential solutions should be implemented for the different types of schools in short to medium term whilst focusing on addressing persisting inequalities and offering QPE to all schools in the future.

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