ENRICHING THE PHYSICAL EDUCATION PEDAGOGICAL CONTENT KNOWLEDGE OF FOUNDATION PHASE TEACHERS

Samantha Andrea Kahts-Kramer

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Promoter: Prof Rosa du Randt

Co-promoter: Prof Lesley Wood

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To my husband who continuously demonstrates to me the importance of character. The consistency in the unconditional love and kindness you have shown me in my most vulnerable moments, has helped me build the courage to continuously face my fears. *"So ought men to love their wives as their own bodies. He that loveth his wife loveth himself." Ephesians 5:28*.

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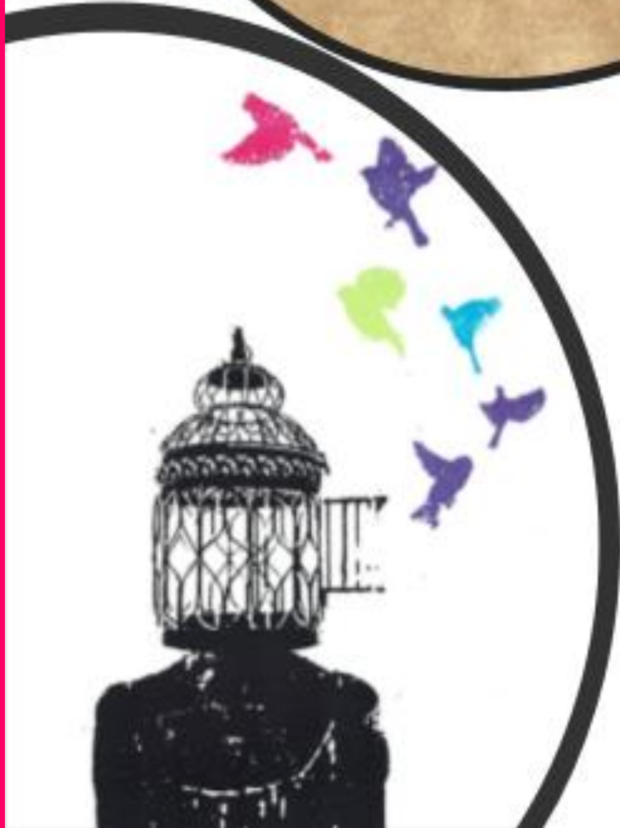
I am grateful for my journey with each of you.



Thank you for being part of my curiosity for life.

May our lives be blessed with the quest for understanding.

NELSON MANDELA
UNIVERSITY

DECLARATION BY CANDIDATE

NAME: **Samantha Andrea Kahts-Kramer**

STUDENT NUMBER: **205055206**

QUALIFICATION: **The degree Doctor of Philosophy**

TITLE OF PROJECT: **Enriching the Physical Education Pedagogical Content Knowledge of Foundation Phase Teachers**

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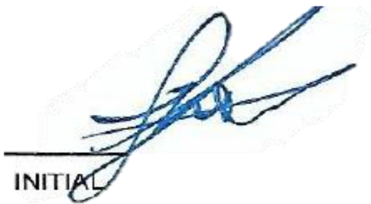

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LIST OF ABBREVIATIONS

CAPS	Curriculum Assessment Policy Statement
CPTD	Continuing professional teacher development
DBE	Department of Basic Education
ECDOE	Eastern Cape Department of Education
FAS	Fetal alcohol syndrome
FMS	Fundamental movement skills
IPA	Interpretive phenomenological analysis
NQF	National Qualifications Framework
NGO	Non-governmental Organisation
PALAR	Participatory Action Learning and Action Research
PCK	Pedagogical Content Knowledge
PE	Physical Education
PEISA	Physical Education Institute of South Africa
QPE	Quality Physical Education
SASCOC	South African Sports Confederation and Olympic Committee
SAUPEA	South African University Physical Education Association
SRSA	Sport and Recreation South Africa[1]
TGFU	Teaching and Learning Support Material
TLSM	Teaching Games for Understanding

[1] SRSA changed to the Department of Sport, Arts and Culture (DSAC) in February 2020.

ABSTRACT

Physical Education (PE) is vital for the holistic development of Foundation Phase learners. Foundation Phase teachers working in low resource contexts, however, being generalists rather than specialists, struggle to teach PE effectively, even when supplied with programmes by external experts. I was interested in finding out why, and what could be done to help them integrate Fundamental Movement Skills (FMS) into their teaching, to benefit their learners. I proceeded from the hypothesis that teachers should play an active part in their own development, otherwise any Continual Professional Teacher Development (CPTD) would not bring about the change desired. I argued that if CPTD training and support is embedded within their context and based on teaching philosophies that foster teacher transformation, empowerment, and advocacy, then teachers might be more likely to commit to teaching PE. My aim in this study was thus to develop a collaborative process of CPTD with Foundation Phase teachers in low resource schools to enrich their pedagogical content knowledge (PCK) of PE and FMS within their contexts of social disadvantage. I initially adopted a qualitative design, but during this study, I realised that a more participatory approach was needed. I therefore present my study in two phases

In Phase One, I answered the question: ***What are Foundation Phase teachers' experiences of implementing PE in low resource schools?*** I did so to inform the design of an appropriately suited CPTD model for Phase Two of this study. I used a qualitative research design situated within the interpretive paradigm. I purposively sampled 24 Foundation Phase teachers to partake in semi-structured interviews. Thematic analysis revealed three broad themes, namely, personal, and systemic barriers to PE, as well as positive responses to challenges. The overlap between themes was significant, highlighting the complexity of teachers' experiences and perceptions of PE. Teachers' positive responses emphasised that they possess the creativity and advocacy to overcome challenges posed and necessitated that I adopt a participatory design to work with teachers to develop a collaborative form of CPTD.

Phase Two of this study was guided by the questions set by the participating teachers. Ten Foundation Phase teachers from two schools volunteered to be part of the study. In Cycle One they asked: ***What do we need to learn to be able to effectively implement PE?*** The findings of Cycle One led them to ask the following question in Cycle Two: ***How can we improve our confidence to teach PE within our school contexts?*** Participants did so through

collaboratively creating PE lessons which they then implemented and evaluated. The findings of Phase Two highlighted how Foundation Phase teachers can be guided to empower themselves to overcome the barriers to teaching PE that they face in their low resource schools.

Based on teachers' CPTD experiences, I then addressed the third question of this study: ***What CPTD guidelines can be generated to enable Foundation Phase teachers to improve on and to implement their PCK of PE and FMS at low resource schools?*** Five CPTD guidelines aimed at collaborative and transformative PE-based CPTD focused on whole school transformation were identified. I provide a graphic depiction of the CPTD guidelines that explains how it can be operationalised. These CPTD guidelines and process model provide valuable knowledge to inform CPTD policy and practice of PE in the Foundation Phase in low resource schools.

Keywords: Continuing Professional Teacher Development, Foundation Phase, Fundamental Movement Skills, Participatory Action Learning and Action Research, Pedagogical Content Knowledge, Physical Education.

CHAPTER ONE: STUDY OVERVIEW

***"Take action! An inch of movement will bring you closer to your goals than [kilometres] of intention"* (Steve Maraboli)**

1.1 INTRODUCTION

My journey towards collaborating with Foundation Phase[2] teachers in the New Brighton and Northern Areas of Nelson Mandela Bay in the Eastern Cape, South Africa, commenced during my lecturing years at the Nelson Mandela University. As a Physical Education (PE) lecturer, I aimed to bridge the rich and poor school divide that characterise the South African education context (Veriava, 2012). To do so, I worked with Intermediate Phase teachers, whilst implementing a PE-based Non-governmental Organisation (NGO) programme in Quintile Three schools[3] in socio-economically challenged areas (Ncanywa, 2015). I soon noticed that when teachers and I teamed up, they tended to avoid PE, despite the cognitive, social, affective and physical developmental benefits thereof for their learners (Bailey et al., 2009). This avoidance of PE meant that their learners had less (or no) opportunities to develop their perceptual-motor and fundamental movement skills (FMS) proficiencies or sport-based movement abilities to an acceptable degree (Haywood & Getchell, 2014). I observed that the learners struggled to competently perform FMS such as locomotor, non-locomotor and object control skills (Stodden et al., 2008). That is, movements such as running, skipping, galloping, dodging, rolling, balancing, throwing, kicking, catching, dribbling and volleying activities, to name but a few. My observation of the lack of motor proficiency in learners was corroborated by conclusions reached in one of my earlier studies (Kahts, Du Randt & Venter, 2017) and by the findings of other South African researchers in this field (Pienaar, Visagie & Leonard, 2015). It seemed as if the critical phases of motor development that should have been fostered in Intermediate Phase learners' early childhood and Foundation Phase years (Barela, 2013) had been missed out on.

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[2] In the South African education system, the Foundation Phase consists of Grades R to Three learners, aged six to nine years old. The Intermediate Phase consists of Grades Four to Six learners, aged ten to twelve years old. The Senior Phase consists of Grades Seven to Nine learners aged thirteen to sixteen years old. The Further Education and Training Phase consists of Grades Ten to Twelve learners aged sixteen to eighteen years old (Department of Basic Education: Republic of South Africa, 2011).

[3] Quintile Three (or less) schools are defined by the South African government as "no fee schools", as parents or primary caregivers cannot afford school fees (Ncanywa, 2015). Quintile Three (or less) schools, are also referred to as historically disadvantaged or low resource schools (Veriava, Thom & Hodgson, 2017). Quintile Three (or less) schools are predominantly situated in socio-economically challenged urban or rural areas and are the products, in part, of the erstwhile Apartheid regime.

Accordingly, my attention shifted to developing better insight in Foundation Phase teachers' PE teaching in low resource schools, and how I could support teachers in this endeavour. To provide depth of understanding on the reasons why I decided to undertake this study, I commence this chapter by explaining the background and rationale thereof. Thereafter, I provide an overview of the conceptual and theoretical frameworks and a justification of my research choices and measures to enhance trustworthiness. I conclude the chapter with a summary of my ethical considerations and an outline of the chapters to follow.

1.2 BACKGROUND AND RATIONALE

Research shows that PE is ineffectually implemented in South African schools (Draper et al., 2018; Uys et al., 2016). Van Deventer (2005, p. 143) emphasised the poor status of PE in South African schools over a decade ago, by sharing that "the profession has failed to articulate PE in terms which are readily understandable to parents, politicians and children" (Van Deventer, 2007, p. 131). Hence there is a debate and 'tug of war' between key stakeholders invested in PE, with limited consensus on what PE is and when and how it should be implemented. These key stakeholders include the South African University Physical Education Association (SAUPEA), the Department of Basic Education (DBE), the Physical Education Institute of South Africa (PEISA), the Sport and Recreation South Africa (SRSA), the South African Sports Confederation and Olympic Committee (SASCOC) and different Non-profit organisations (NPOs) and NGOs (Goslin, 2017). The evidence of this PE dilemma and 'tug of war' can be seen in the United Nations Educational, Scientific and Cultural Organisation's (UNESCO) South African-based Quality Physical Education (QPE) Policy (Goslin, 2017). The absence of consensus between key stakeholders over the past decades has translated into a PE policy that relegates PE to a non-prioritised study area, due to its non-stand-alone status (Stroebel, Hay & Bloemhoff, 2016).

Barriers affecting PE teaching in all schools in South Africa tend to include the low priority status of PE when compared to other subjects, lack of resource provision to source PE-based infrastructure and equipment, inadequate time allocation to PE, and a dearth in PE specialist training or of specialist teachers (Burnett, 2018a). This situation particularly affects South African schools located in historically disadvantaged areas, which must contend with a myriad of financial, infrastructural, and human resources challenges that continue to constrain the implementation of PE. Learners in disadvantaged communities, for example, may have

developmental delays due to exposure to infectious diseases, psychological stresses and malnutrition (Jensen, Berens & Nelson, 2017). Therefore, when compared to teaching PE in more advantaged areas, teachers in low resource schools need to take into consideration a more diverse group of learners' needs and their accompanying health, psychological, and nutritious food interventions. Large and gender-mixed classes and/or parents unaffordability of PE clothing magnify these concerns (Burnett, 2018a).

Research shows that when learners in low resource schools are exposed to different types of physical activity, benefits such as improved academic performance (Gall et al., 2018) and school readiness (Erasmus, Janse van Rensburg, Pienaar & Ellis, 2016); a reduction in cardiovascular risk factors (Müller et al., 2019) and augmented aerobic fitness (Brusseau, Hannon & Burns, 2016), are observed. Participation in PE and sport also tends to divert learners from negative social behaviour such as gangsterism and violence, although these findings relate predominantly to High School settings (Mandigo, Corlett & Ticas, 2016). Therefore, supporting teachers in low resource schools with implementing PE is justified.

When referring to PE within the Foundation Phase, the focus of this study, a concern is the volume of subjects teachers are required to teach, as prescribed within the Curriculum Assessment Policy Statement (CAPS) documents (Dixon et al., 2018). For example, there are four Foundation Phase subjects, namely Life Skills; Home Language; First Additional Language; and Maths (Steyn, Schuld & Hartell, 2012). The Life Skills subject is furthermore divided into four study areas, specifically PE; Creative Arts; Beginning Knowledge; and Personal and Social Well-being (Department of Basic Education: Republic of South Africa, 2011). Not only are there time constraints in achieving all the learning outcomes for these study areas (Dixon et al., 2018), but specialist subjects, like PE, are taught by generalists teachers. According to Breslin et al. (2012), a so-called "generalist PE teacher" can be defined as someone who is a qualified teacher, but who has "limited training in PE, has insufficient expertise and finds PE with its distinctive content difficult to develop competence in" (p. 2). Therefore, even though policy guidelines require that PE in the Foundation Phase be implemented two hours per week – with a focus on developing learners' perceptual-motor and FMS through play, sport and indigenous games (Department of Basic Education: Republic of South Africa, 2011) – this rarely happens.

The lack of PE teaching in the Foundation Phase is a concern as the benefits of PE are especially important for Foundation Phase learners aged six to nine years old. This is a critical phase for their motor development in which the foundation of their motor skills is laid (Barela, 2013); that is, the development of their FMS (Haywood & Getchell, 2014; Stodden et al., 2008). Other benefits to Foundation Phase learners include improved motor proficiency and its positive correlation to later academic achievement, with the role thereof especially being necessary for learners living in lower socio-economic communities (de Waal & Pienaar, 2020). Foundation Phase learners perceptual-motor skills can furthermore be developed during PE, aiding them in improving their academic performance in reading and spelling (Botha & Africa, 2020). PE also provides Foundation Phase learners with the opportunity to engage in different types of active play (such as functional, sociodramatic, associative, cooperative and socio-affective play) (Mulovhedzi, Mudzielwana & Makhwathana, 2017). With the many benefits of PE to Foundation Phase learners, teachers need to be supported with exploring how PE teaching can be improved in low resource schools.

The Eastern Cape, where I conducted this study with a group of ten Foundation Phase teachers, is one of the poorest provinces in South Africa (Chitiga-Mabugu et al., 2014). It consists of predominantly Quintile Three (or less) schools within communities with high poverty rates (Ncanywa, 2015). Furthermore, the services delivered to these schools by the Eastern Cape Department of Education (ECDOE) are subpar (Kota, Hendricks, Matambo & Naidoo, 2017). School staff therefore have to raise funds from parents who often do not have the required financial resources and have to cope with inadequate facilities and infrastructure (Equal Education, 2016). These difficulties with implementing quality education are commonly found in the New Brighton and Northern Areas of Nelson Mandela Bay of the Eastern Cape Province, where I collaborated with teachers working in Quintile Three schools for the purpose of this study. The New Brighton township consists of a predominantly Black residential community, established under British colonial rule (Baines, 2002). The Northern Areas are historically Coloured residential areas, established as part of the Apartheid philosophy to separate different ethnic groups (Abrahams, 2015)[4]. These areas regrettably have high rates of poverty and crime, coupled with low education levels, hijackings and robberies (Nelson Mandela Bay Municipality, 2017). School closures often take place due to violence in the community or

[4] Colonisation by Europeans dated from 1652, with Apartheid under Afrikaner rule commencing in 1948 and eventually ending in 1994 (Oliver & Oliver, 2017). Both areas were created as part of a segregation agenda to keep White, Coloured, Indian, and Black people separate.

protests from parents demanding improved service delivery from the ECDOE (Mbabele, 2015; Raahil, 2016; Zisonke & Daniels, 2016). Finding ways to support teachers, particularly Foundation Phase teachers, in implementing PE in these types of communities is therefore important if learners are to experience the benefits PE has to offer (Bailey, 2018).

When consulting research on teacher-led physical activity and/or PE programmes conducted in low resource schools in South Africa, limited success in improving the implementation thereof has been found. I expected the reason to solely be the characteristic poverty of the communities surrounding low resource schools, but this was not the case. Even when physical activity interventions took place: 1) Within the PE lessons stipulated by the South African education curriculum; 2) Providing generalist teachers with teaching and learning support material (TLSM); 3) Providing PE equipment, some infrastructural upgrades; and/or 4) Professional development aligned with the already established PE programme, the adoption thereof by teachers was generally not as expected. For example, after Draper's et al. (2010) HealthNutz intervention, the authors concluded that the reasons for the lack of uptake were that teachers lacked motivation, had inadequate training, possessed low levels of confidence in their skill abilities, and perceived themselves as being overweight and inactive. Their avoidance of PE was compounded by their difficulty in controlling large groups when there was insufficient equipment and space due to the inadequate infrastructure characterising low resource schools. The authors concluded that training and support to teachers should therefore be non-judgemental and empowering. In Hill's et al. (2015, p. 1) HealthKick intervention, it was found that “time constraints, teachers’ heavy workload, and their reluctance to become involved in non-compulsory activities” and the priorities of the teachers “not necessarily [being] those of the researchers”, affected the teachers’ implementation of PE. Salvini's et al. (2018) 20-week physical activity intervention implemented in Nelson Mandela Bay (as part of a larger Disease, Activity Schoolchildren’s Health (DASH) study), was not successfully adopted by teachers. The reason, according to the authors, was “the downgrading of the subject to the Life Skills’ study area, where it has lost its standalone status due to time constraints, teacher workloads, [and the] perception of PE as an insignificant subject etc.” (para. 27). Aebischer's (2018) findings, as part of a larger KaziBantu project implemented in Nelson Mandela Bay, was also not as successfully embraced by teachers as anticipated. The researchers found that most teachers took a cursory look only at the PE manual provided and did not execute the envisioned lesson plans as effectively as planned by the programmers. The researchers attributed this to teachers lacking the skill for “well-executed PE” (p. 30). Additionally, sometimes the planned

PE lesson did not take place at all, due to the low priority status (and thus secondary role) afforded to PE at schools, extreme cold/hot weather and the "public holidays and vacations [which] interrupt[ed] the periods of the sporting activities" (p. 30). These findings highlight several important implications for my study and point towards the need for appropriate CPTD initiatives, particularly for Foundation Phase PE teachers working in low resource schools.

When considering Foundation Phase teachers' CPTD needs, firstly their competence to implement PE would need to be explored (Aebischer, 2018; Draper et al., 2010; Hill et al., 2015). Secondly, teachers' perceptions, motivation and priorities would need to be addressed (Draper et al., 2010; Hill et al., 2015; Salvini et al., 2018). Thirdly, ways to implement PE with little or no equipment would need to be learnt by teachers (Draper et al., 2010; Mchunu & Le Roux, 2010), or equipment would need to be sourced from the ECDOE or alternative sources. Fourthly, teachers' workloads are high, and they would need to either learn how to integrate PE in a crowded timetable, where other examinable subjects tend to take preference (Hill et al., 2015; Salvini et al., 2018), or they would need to find ways to explore alternative curricula that are not as excessively content-laden as the CAPS document (Dixon et al., 2018). Fifthly, the way in which teachers prioritise PE in school and community contexts characterised by poor service delivery from the ECDOE, limited parental support, the effect of poverty on their learners, the violence and crime and the infrastructural shortages characterised as "an outright violation of the law" (Equal Education, 2016, p. 2) necessitate further exploration with teachers.

Regrettably, and regardless of the CPTD implications I have shared thus far, teachers' opportunities to experience relevant, empowering and advocacy based CPTD are hindered by South Africa's CPTD policy. For example, Ebersöhn (2014), Gallant (2012) and Zinn, Geduld, Delport and Jordaan (2014) attest to the lack of relevancy of pre- and in-service teacher training regarding low resource schools situated in poverty contexts. Limited situated learning opportunities (that is, context-specific learning) exists for teachers to explore how they can adapt their teaching to their low resource school needs. Dixon, Excell and Linington (2014, p. 140) note that Foundation Phase teachers feel "workshopped" during CPTD training, attributing this to teachers' experiencing minimal (if any) interactive group collaboration, a lack of practical application of content to school settings, and absence of opportunity to reflect on their own pedagogical gaps. The prevalent model of training in South Africa, according to Botman (2016) and Dixon et al. (2014), seems to be transmission based, rather than involving

the teachers themselves in determining their needs and how to meet them. The prospect for teacher empowerment and advocacy in CPTD is consequently stifled (Dixon et al., 2014). Brown, Wilmot and Ash (2015, p. 191) support Dixon's et al. (2014) claims, advocating for the inclusion of a "model of teacher professional development that is located in reflexive practice" and coupling this with a strong orientation to practice and teachers' understanding of children's development. Steyn (2008) adds to the South African CPTD recommendations by suggesting that CPTD includes "more collaboration and interaction between teachers, continuous support to teachers in schools, more longer-term programmes and feedback on teachers' development" (p. 27). I came across doctoral research focusing on re-skilling Foundation Phase PE teachers (Visagie, 2016); the main take-home message was that CPTD programmes for PE should include expert support, long-term and ongoing provision, scaffolded and practically applied PE experiences, workshops adapted to teachers' needs and contexts, participatory and collaborative engagements and cognisance, and the inclusion of the socio-political context in which PE takes place. Including participatory and collaborative CPTD that encourages key stakeholders involved in PE to work together is therefore justified (Gaudreault, Richards & Woods, 2018). In this study, I hence aimed to adopt these CPTD guidelines advocated by researchers, whilst exploring how Foundation Phase teachers would enrich their PE learning experiences at their low resource schools.

When considering PE-based CPTD, I believed it is important to focus on teachers' pedagogical content knowledge (PCK). PCK refers to "how particular topics, problems or issues are organised, represented, and adapted to the diverse interests and abilities of learners, and presented for instruction" (Yidana & Lawal, 2015, p. 47). According to Karaman (2012, p. 56), "PCK…[is] one of the most critical elements of improving teacher quality"; therefore warranting its development in CPTD. I also decided that FMS should be the focus of teachers and my engagements. As research on pedagogical approaches to FMS development is limited, and FMS forms a vital part of learners' growth and development (Lander, Eather, Morgan, Salmon & Barnett, 2017; Tompsett, Sanders, Taylor & Cobley, 2017), I deemed it an important learning component of Foundation Phase teachers' CPTD. The South African research initiatives I explored, tended to be focusing on teachers or their learners and did not directly include participatory and collaborative experiences with teachers or their learners (Du Toit & Van Der Merwe, 2011; Stroebel, Hay & Bloemhoff, 2017; Van Deventer & Van Niekerk, 2009; Visagie, 2016). Collaborative research among teachers, or teachers collaborating with each other during PE-based CPTD, furthermore seemed to be limited to international contexts

(Dyson, Colby & Barratt, 2016; Martin, McCaughtry, Kulinna & Cothran, 2009). I therefore decided to adopt a collaborative and transformative form of CPTD (Kennedy, 2014) for the purpose of this study. Collaborative engagements result in the development of teachers' self-confidence in PE implementation, especially when considering "time, space and institutional barriers to physical activity" (Martin et al., 2009, p. 525). Collaborative and situated (real world and at school) learning has also been found to improve PE teachers' "self-confidence, pedagogic content knowledge, communication skills and behaviour management strategies" (Nash, 2009, p. 1). Dyson et al. (2016) similarly note that through collegial engagements between them, generalist PE teachers are facilitated with changing their pedagogical approaches within their PE classes to a more collaborative approach.

These findings, and my own experience, led me to explore how I could help Foundation Phase teachers learn how to better implement PE within their low resource schools in socially disadvantaged community contexts through a collaborative, reflexive approach. I decided to focus on working with teachers to improve their teaching of FMS. I believed that through adopting this process, teachers would experience enriched CPTD learning, grounded in values of shared unity and action, focused on equality, liberation and empowerment.

1.3 PHASES ONE AND TWO'S RESEARCH PURPOSE AND QUESTIONS

The primary purpose of this study was to explore and develop a collaborative process of CPTD to enrich Foundation Phase teachers' PCK for teaching PE and particularly FMS within contexts of social disadvantage. The primary research question to be addressed in this study was: ***How can a collaborative and transformative CPTD approach assist Foundation Phase teachers in enriching their PCK of PE and FMS in low resource schools?*** To achieve the purpose of this study and to answer the primary research question, I conducted two phases of research.

In Phase One, I addressed the following research question: ***What are Foundation Phase teachers' experiences of implementing PE in low resource schools?***

The findings of Phase One, and my reflection on them, led teachers and me to collaboratively devise and answer the following two research questions in Phase Two: 1) ***What do we need to***

learn to be able to effectively implement PE?; and 2) ***How can we improve our confidence to teach PE within our school contexts?***

Based on teachers' CPTD experiences, the third research question I posed was: ***What CPTD guidelines can be generated to enable Foundation Phase teachers to improve on and to implement their PCK of PE and FMS at low resource schools?***

1.4 CONCEPTUAL FRAMEWORK

A conceptual framework is defined as a synthesis of the main abstract ideas (also known as concepts) that comprise a given phenomenon (Imenda, 2014). No explanation or predictions are derived from a conceptual framework, as it is a derivative of inductive reasoning and is used to explore, interpret and explain data or identify discrepancies in the constructs comprising a given phenomenon within a given study and context (Imenda, 2014). In this study, I employed Yidana and Lawal's (2015) proposed teacher competency-based model for teacher identity and adapted it to PCK of FMS in low resource schools to explore how teachers navigated their PE learning experiences. This competency-based model suggests that teachers should master professional knowledge, values, skills, and the capacity for reflective practice, which I discuss in detail in Chapter Two. This framework provided me with a guideline for possible strategies to enrich teachers' PCK for teaching FMS. It also provided Foundation Phase teachers with an opportunity to identify discrepancies in what PCK of FMS they chose to explore (or not to explore), and to explain why. Teachers could use this information for collaborative debate and to deliberate how their learning journeys would unfold within their given context.

1.5 THEORETICAL FRAMEWORK

A theoretical framework is defined as a blue-print or a guide for modelling a structure that aims to explain and/or make predictions regarding a given phenomenon and the relationships that may present within (Imenda, 2014). A theoretical framework has a systemic point of view; sense is made of a given phenomenon through deductive reasoning (Imenda, 2014). For example, a psychologist, social worker, neurologist and physiologist will use different theoretical lenses to explain and/or predict why children move the way they do. A theoretical framework should be able to be applied to many different phenomena, other than only the study at hand. In this study, I used the critical theory approach (Brookfield, 2005) to identify,

challenge and change the socio-political aspects of my engagements with teachers in their CPTD planning and implementation experiences and their PCK of FMS development for their low resource school context. This political lens helped me explain why PE implementation did or did not take place or why teachers and I collaborated in the manner we did. I used the transformative learning theory (Mezirow, 1997) to comprehend the changes in teachers' values, beliefs, assumptions and attitudes regarding their teaching of PE and PCK of FMS. The transtheoretical model of cognitive-behavioural change (Prochaska & DiClemente, 1983) was employed to understand the impact of teachers' professional development on changing their teaching of PE and PCK of FMS behaviours. The choice of these theories is discussed in detail in Chapter Three.

1.6 RESEARCH METHODOLOGY

The research methodology selected for a study stems from the researcher's paradigm, ontology, epistemology and axiology (Killam, 2013). In the following section, I discuss each of these constructs in more detail. Furthermore, I provide an overview of the research design adopted for the purpose of this study and the sampling techniques, data collection and analytical methods and procedures implemented and followed, as well as the measures taken to ensure trustworthiness and ethical conduct. Chapter Four provides a more in-depth explanation of the research methodology implemented.

1.6.1 Paradigmatic choices

My research journey towards conducting two separate research phases within this study, each with different research paradigms and therefore methodologies, can be traced back to my research origins. My previous research focused on learners' FMS proficiency status in low resource schools (Kahts et al., 2017) and I was therefore situated in the positivist paradigm (Killam, 2013). I employed objective and quantitative methodology in the positivist paradigm (Killam, 2013), and accepted this approach as best suited to my study. However, I quickly came to realise that to gain an in-depth understanding of Foundation Phase teachers' PE experiences and their PCK of FMS in low resource schools' needs (and therefore the status of their learners' FMS proficiency), I would need to position myself within a different research paradigm. Consequently, for the purpose of Phase One of this study, I situated myself within the interpretive paradigm (Scotland, 2012) and employed an interpretive phenomenological

analysis approach (IPA) (Smith, Flowers & Larkin, 2009) to answer the research question I had posed.

An IPA provides a researcher with the opportunity to explore and understand the experience of others (Smith et al., 2009). Adopting IPA therefore awarded me the opportunity to capture Foundation Phase teachers' multiple experiences regarding the problems they faced in implementing PE; the relevance of their pre-service and in-service PE training; their experience of teaching PE in the context of poverty; their thoughts on the CAPS Life Skills PE study area; and their recommendations on what is needed to improve PE. I decided to conduct Phase One of my study through using individualised interviews to create what I believed would be a "safe space" in which teachers would feel confident to share their stories. My experiences of politics at schools, corroborated by research findings in South Africa (Msila, 2011, 2012), and in implementing a PE-based NGO programme with Intermediate Phase teachers, led me to believe that I needed to create this "safe space" for teachers. Also, my inexperience in (and therefore avoidance of) dealing with the socio-political aspects of life in general, led me to believe that I was making the best possible choice for both the teachers and myself. Focus groups and collaboration were initially not part of how I believed I could facilitate teachers with navigating PE implementation in their low resource school contexts.

On conclusion of the research conducted in terms of Phase One, which I discuss in Chapter Five, I came to realise that to transform and change the PE status that teachers experienced, collaborative and socio-political forms of engagements within school contexts were exactly what I would need to explore. I therefore adopted a critical and participatory paradigm in Phase Two of this study (Kemmis, McTaggart & Nixon, 2014) and aimed to learn how to improve my collaboration with others. Brookfield (2005, p. viii) explains what it means to adopt critical theory in adult education: "…thinking critically…[includes] being able to identify, and then to challenge and change, the process by which a grossly iniquitous society uses dominant ideology to convince people this is a normal state of affairs". In this study, I engaged in a form of counter-politics from the dominant CPTD ideology employed in which teachers are viewed as consumers of knowledge created by experts and provided with pre-packaged and standardised PE-CPTD experiences (Webb, 1996). I instead located teachers as "capable, reflexive and resourceful practitioners and decision-makers" (Charteris, 2015, p. 1) and as agents of change in their CPTD experiences. I, furthermore, afforded teachers opportunities to

identify, challenge and change their PE practice through a process based on their individual and collective critical reflections.

The transformation in how I viewed teachers' PE development was based on a growing belief that teachers themselves were more than capable of directing learning initiatives to understand and improve PE in their respective schools and with their learners. I was also convinced that a critical and participatory approach would enable teachers to deepen their understanding of "the self", of key stakeholders with whom they interacted and/or the context in which they taught. Teachers, therefore, did not work in isolation and instead were presented with an opportunity to collaborate with key stakeholders invested in PE that they deemed appropriate and could gain access to (such as government, learners, NGOs, colleagues, community volunteers and/or parents). The inclusion of the socio-political contexts in which teaching took place, was necessary, as change does not take place in isolation (Gaudreault et al., 2018). Brookfield (2005) supports this claim, cautioning against the myth that "everything depends on the teacher", as it can result in teachers easily falling prey "to the danger of unjustified self-laceration", failing to see "how many of [their] private troubles are produced by systemic constraints and contradictions" (p. 5). Adopting the critical and participatory paradigm therefore countered teacher isolation and blame, focusing instead on teacher equality, empowerment, liberation, advocacy, social justice and emancipation within their CPTD experience. It also gave teachers the opportunity to explore their PCK of FMS with their learners and in their classroom, school, and community contexts, thereby negating the standardised and one-size-fits-all CPTD experience.

My empowered view of teachers helped me to build the confidence I needed to not only transform my thinking, but to activate my transformation from a positivist to an interpretive and eventually critical and participatory paradigm researcher. Through adopting the critical and participatory paradigm (Zuber-Skerritt, 2011) for Phase Two of this study, I situated myself within the relational ontology, dialectical epistemology and qualitative methodology (Wood, 2020). I also embraced a liberation and emancipation axiology innate to the critical paradigm (Killam, 2013). I elaborate on each of these constructs in more detail in Chapter Four.

1.6.2 Phase One: Research methodology and methods

This section provides an overview of the research design for Phase One, explaining the sampling techniques, data collection and analysis procedures followed in this study, and the measures taken to ensure trustworthiness and ethical conduct.

Study Design: In Phase One's research process, to answer the question: ***What are Foundation Phase teachers' experiences of implementing PE in low resource schools?*** I employed IPA (Smith et al., 2009).

Sampling: I used purposive and convenient sampling (Patton, 2014) involving 24 Foundation Phase teachers working in eight different Quintile Three schools in the New Brighton and Northern Areas of Nelson Mandela Bay. The New Brighton teachers were from the PE-based NGO programme I had been involved in for a three-year period. New Brighton teachers often mentioned that children left their schools to go to Northern Areas schools. I therefore decided to include Northern Areas teachers to facilitate with data saturation (Saunders et al., 2018), as I reasoned that there might be more to learn about PE teaching in other low resource schools and communities. I wanted to be thorough and to explore whether there would be an emergence of more themes and categories in my qualitative research if I were to also include Northern Areas teachers.

Data Collection Methods: In this phase, I conducted semi-structured interviews (Galletta, 2013).

Data Analysis: I used Braun and Clarke's thematic analysis (Clarke, Braun & Hayfield, 2015) to analyse the qualitative data gathered.

Measures to Ensure Trustworthiness: I ensured neutrality (confirmability/objectivity) via a confirmability audit with two independent assessors (Guba, 1981; Krefting, 1991; Loh, 2013). Foundation Phase teachers verifying findings and peer examination with experts in the qualitative field helped me improve the truth value (credibility/internal validity) of my research findings (Krefting, 1991). My engagements with my reflexive journal (Meyer & Willis, 2019) and critical friends assisted me with enhancing the truth value (credibility/internal validity), applicability (transferability/external validity), consistency (dependability/reliability) and

neutrality (confirmability/objectivity) of my findings (Krefting, 1991; Loh, 2013). For an in-depth overview of Phase One's methodology, I refer the reader to Chapter Four.

1.6.3 Phase Two: Research methodology and methods

This section provides an overview of the research design for Phases Two, explaining the sampling techniques and data collection and analysis procedures followed when employing a Participatory Action Learning and Action Research (PALAR) study design. The measures taken to ensure trustworthiness and ethical conduct are also conveyed.

Study Design: PALAR was well suited for Phase Two of my study, as it includes a value system based on "participation, collaboration, communication, community of practice, networking, and synergy" (Zuber-Skerritt, 2015, p. 6). The action research part of PALAR requires iterative and recursive cycles of planning, action, observing and reflecting, which teachers in this study adopted as they critically reflected on their PE implementation in their school contexts. Zuber-Skerritt (2011) depicts these cycles as follows:

> In all phases of this model there is a cyclical process of planning (including situation and problem analysis), taking action (or implementing the plan), observing (watching and evaluating the action), reflecting (on the ongoing process of planning, acting, observing and evaluating) and as a result, revising the plan for a new cycle of action research. (p. 41)

I believed these continuous iterations and recursive problem-solving cycles were appropriate for the adaptive (complex problems with a solution) or wicked (complex problems with no foreseeable solutions) scenarios (Lawson, Caringi, Pyles, Jurkowski & Bozlak, 2015), Foundation Phase teachers shared in Phase One. Through adopting reiterative cycles of learning, teachers could engage in both action learning and action research. The action learning part of PALAR, according to Zuber-Skerritt (2011), means:

> …learning from and with each other in small groups or 'sets' from action and concrete experience in the workplace or community situation. It involves critical reflection on this experience, as well as taking action as a result of this learning. It is a process by which groups of people address actual workplace issues or major real-life problems in complex situations and conditions. (p. 5)

The action learning element of PALAR was well suited to this study, as teachers critically reflected on their PCK needs for PE and FMS implementation in their low resource schools. Action took place based on their collaborative learning experience.

The action research part was different from action learning, as it had to be "systematic, rigorous, scrutinisable, verifiable, always made public... and grounded in a certain methodology and rigorous research methods of collecting, analysing and verifying data" (Zuber-Skerritt, 2011, p. 6). Therefore, throughout the research process with teachers in terms of Phase Two, I aimed to apply stringent research methods and procedures to collect and share the findings that emerged whilst I collaborated with teachers.

Advocacy and emancipation were aims of this study, and therefore emancipatory action research was the focus (Zuber-Skerritt, 2003). As a facilitator, my goal was to create a platform for enlightenment and to maintain power neutrality between all key stakeholders so that the multiple realities of all involved could be captured (Zuber-Skerritt, 2013). My goal as a facilitator was also to position myself as an insider researcher (Dwyer & Buckle, 2009), which entailed experiencing Foundation Phase teachers' multiple PE realities through the planning and interpretation of CPTD and data with them. My reflections on how successful I was at achieving these outcomes, and why, I share in my "personal reflections" sections at the end of Chapters Five to Eight.

Participants, Participant Selection and School Setting. To initiate Phase Two of my study, I invited the Principals and Foundation Phase teachers from the eight schools that participated in Phase One of my study to a two-hour session, in which I: 1) Shared Phase One's findings; 2) Shared stories of Foundation Phase teachers' resilience, problem solving and creativity within PE that emerged from Phase One's findings; and 3) Explained the continuation of my doctoral study in Phase Two. I shared that for Phase Two of my research study, I would like Foundation Phase teachers to participate in a PALAR journey. I also shared that teachers were welcome to extend invites to colleagues at their schools whom they believed would be interested in a PE-based PALAR journey with me. Ten Foundation Phase teachers from two Northern Areas schools volunteered to participate in the PALAR journey. Regrettably, teachers from the New Brighton Area schools decided that as they had international students implementing PE at their schools and were struggling with heavy workloads and other priorities and commitments, they would not be joining the PALAR journey. Phase Two of my research therefore only represents Northern Areas teachers' experiences of PE at their low resource schools.

Data Generation. The goal of data generation techniques in PALAR is to foster "the generation of knowledge that is useful, culturally appropriate and thus more likely to be sustainable" (Wood, 2020, p. 158). It is also meant to foster "democratic, authentic, trusting and supportive relationships; the process of continual critical reflection in a collaborative learning context; and recognition of the achievements of all participants" (Wood, 2020, p. 33). To generate data for analysis with teachers, I used different strategies during each session. That is, I included different forms of democratic dialogue, namely, Nominal Group Technique (Hardina, 2012) and the Circle of Voices, Conversational Movers, Hatful of Quotes, affirming and challenging verbatim quotes, and Newsprint Dialogue (Brookfield & Preskill, 2016). For example, a Conversational Mover question that I often used to promote democratic dialogue included, "given our learning journey today, are there any burning questions or anything you would like to share?" I also used transcriptions of our video recorded conversations aimed at democratic dialogue to critically reflect with teachers on their learning journey thus far (Zuber-Skerritt, 2011). I refer the reader to Chapter Four for an in-depth overview.

I used visual arts-based approaches to provide teachers with a different platform from which to express their PE journeys. According to Zuber-Skerritt (2011), learning entails more than just an accumulation of knowledge and should include auditory, kinaesthetic and visual learning styles and encompass "drawing pictures, diagrams and mind maps, and pursuing whatever other expressive paths are useful" (p. 5). I therefore provided teachers with an opportunity to visually display and explain their PE journeys through mainly collages (Leavy, 2018).

Finally, I employed a reflexive journal for my own introspection and to explore how and why I engaged with teachers, critical friends and others in the manner that I did (Meyer & Willis, 2019). This process afforded me the opportunity to experience my own transformative learning journey, especially since I knew I was grappling with transitioning from a positivist to a critical and participatory paradigm (Killam, 2013). I discuss this technique in-depth in Chapter Four.

Data Analysis. In PALAR, data analysis is meant to be a collaborative endeavour with participants (Wood, 2020). To foster collaborative data analysis, I used a two-pronged approach in this study. Firstly, within the action learning group, where we analysed the data on a practical level. Secondly, I conducted data analysis on a theoretical level and shared these

findings with teachers for further reflection. A more in-depth overview of the data generation process used in Phase Two of the study is presented in Chapter Four.

Data Trustworthiness. To ascertain the trustworthiness of my research findings, I employed numerous validity techniques. For outcome validity, I asked myself the question: *"Did the actions resolve the initial PE-based problem posed or was the PE-based problem reframed and understood from a different perspective, resulting in a new set of actions and research questions?"* Process validity included posing the question: *"Are the PE-based findings a result of a series of reflective cycles that included the ongoing problematisation of participants' PE practices, and the inclusion of various qualitative and/or quantitative perspectives?"* Democratic validity included querying whether the research was conducted collaboratively and whether various key stakeholders invested in PE got an opportunity to solve problems and overcome obstacles. When ensuring catalytic validity, I asked myself and the teachers whether the research process had reoriented, focused, and energised them towards knowing the reality of their PE experiences in their classroom, school and community contexts in a different way, therefore transforming it. Dialogic validity refers to a process of peer review, in which specialists in the field identify the trustworthiness of findings presented (Herr & Anderson, 2014). I included critical friends (those who are experts in the field) and the Foundation Phase teachers who were part of the PALAR journey, in peer reviewing the research process. Finally, legitimacy deficits were assessed through identifying when teachers and I perceived that "something is not quite right about what is going on" (Kemmis et al., 2014, p. 34). We did so through reflecting on our elements of practice (that is our sayings, doings and relatings) and our practice-architecture (such as our practice landscape, cultural-discursive, material-economic, socio-political arrangements and practice traditions) (Kemmis et al., 2014, p. 96-97). In so doing we could identify our ideological distortions (Meylahn, 2017) to maintain the trustworthiness of the research findings.

1.6.4 Ethical considerations

Ethics clearance was obtained from the University's Research Ethic Committee (Human) (H14-HEA-HMS-015). Permission to conduct the study was requested and provided by the ECDOE. The relevant School Principals provided permission for Phases One and Two of this study to be conducted (Addenda A, B, C and D). Subsequently, Foundation Phase teachers who volunteered to participate gave informed written consent for Phases One and Two of this study to be conducted (Addenda A, B, E and F). Ethical requirements associated with qualitative

research studies were upheld, including guidelines related to non-maleficence, justice, beneficence and anonymity (Miller, Birch, Mauthner & Jessop, 2012).

For Phase Two of this study, the same ethical considerations were adhered to as in Phase One; however, as the study included PALAR cycles, I also considered Kemmis et al. (2014), McIntyre (2008) and Wood's (2020) ethical guidelines for participatory research. In PALAR, ethics is negotiated with teachers and not implied. Thus, at each cycle of our PALAR journey together, I aimed to reflect on our ethical conduct. I found Wood's (2020) 7Cs and 3Rs of action research useful for the practical application of and adherence to ethical conduct within my PALAR journey, and these were my reflection on teachers and my communication, collaboration, commitment, coaching, critical attitude, critical reflection, competence, and character building. I did the same when considering reflections, relationships and recognition processes. I explain these processes in-depth in Chapter Four.

1.7 PRACTICAL, THEORETICAL AND METHODOLOGICAL CONTRIBUTIONS OF THIS STUDY

From a theoretical perspective, this study deliberated findings related to the use of a collaborative and transformative CPTD model in the Foundation Phase and in low resource schools situated within socio-economic areas of disadvantage. It yields a conceptual understanding, in the form of guidelines, of how to implement CPTD for PE teaching in low-resource schools. This study therefore adds to CPTD knowledge, providing insights into the use thereof. No study, to my knowledge, has explored this domain in Foundation Phase PE.

From a practical perspective, this study answered a practical question that arose in the literature, namely: "How [should] the Re-skilling Programme… be presented best to teachers to capacitate them to effectively implement PE" (Stroebel, 2018, p. 165). However, instead of a Re-skilling Programme, which lends itself to a technical skills-based approach, this study provides an alternative approach through exploring a PE-based CPTD experience that is empowering and transformative, and is based on teachers' values, beliefs, assumptions and attitudes towards PE. This study, therefore, also explored one example of "innovative in-service teacher training models and strategies to enhance the quality of PE teaching in South African public schools", as proposed by Burnett-Louw (2020, p. 9). The findings emanating from this study culminate in step-by-step guidelines on how to operationalise a collaborative

and transformative CTPD model. These guidelines can assist researchers, facilitators, NPOs/NGOs or teachers aiming to implement PE at school with implementing CPTD that is based on teachers' needs, therefore improving the quality of CPTD practice.

From a methodological perspective, this study is the first within South Africa and internationally, to show how PALAR can be used as a means of Professional Development with a group of Foundation Phase teachers of PE working in low resource schools located in the context of poverty and socio-economically challenged areas.

1.8 CHAPTER OUTLINE FOR REST OF STUDY

The following is a brief overview of the chapter outline for this study:

- Chapter Two – A critical and contextual discussion of concepts informing the study, namely PE, pre- and in-service PE training, the Foundation Phase and Foundation Phase CPTD, CAPS, FMS and PCK.
- Chapter Three – A critical discussion of theories governing this study, namely, critical theory, transtheoretical model of cognitive-behavioural change, and transformative learning theory, and in relation to PE-CPTD.
- Chapter Four – A theoretical justification of the research methodology used in this study.
- Chapter Five – A critical discussion of the findings of Phase One in response to the research question: ***What are Foundation Phase teachers' experiences of implementing PE in low resource schools?***
- Chapter Six – A critical discussion of the findings of Phase Two in response to teachers' collaboratively decided on research questions, namely: 1) ***What do we need to learn to be able to effectively implement PE?***; and 2) ***How can we improve our confidence to teach PE within our school contexts?***
- Chapter Seven – A critical discussion of the third research question is conveyed, which was: ***What CPTD guidelines can be generated to enable Foundation Phase teachers to improve on and to implement their PCK of PE and FMS at low resource schools?***
- Chapter Eight – Through answering Phases One and Two's research questions, I answer the primary research question of this study, which was: ***How can a collaborative and transformative CPTD approach assist Foundation Phase teachers in enriching their PCK of PE and FMS in low resource schools?*** A summary and synthesis of research

findings, and the implications for key stakeholders and for future researchers to consider, are also conveyed. The envisaged contributions of the study for the body of knowledge and the conclusions of this study are shared.

CHAPTER TWO: MAIN CONCEPTS UNDERLYING THIS STUDY

"If you can't fly, then run, if you can't run, then walk, if you can't walk, then crawl, but whatever you do, you have to keep moving forward" **(Martin Luther King Jr)**

2.1 INTRODUCTION

Chapter One provided a broad background to this study. This chapter offers a critical discussion of the central concepts to locate the study within the broader field of PE. Drawing from relevant literature, I provide an in-depth overview of PE in the context of South Africa, particularly concentrating on the Eastern Cape and how the context may affect PE teaching. Thereafter, I discuss Foundation Phase PE teacher education (also known as pre-service training) and CPTD (also known as in-service training), establishing how Foundation Phase teachers can best be developed for the South African context. As the focus of my study was on in-service training, I provide an overview of CPTD models and explore how a collaborative, transformative and critically reflective CPTD model could be used when teaming up with Foundation Phase teachers working in low resource school contexts. Next, I discuss how PE as a component of the Life Skills subject within the CAPS documents is meant to be implemented by Foundation Phase teachers. I identify the importance of PE to Foundation Phase learners, with the emphasis on FMS development. I then turn to the concept of PCK, arguing its importance for the improvement of the teaching of Foundation Phase PE and learners' FMS proficiency. In so doing, I validate my claim that limited research in this field exists, and accordingly endorse the choice of focus of this study.

2.2 PHYSICAL EDUCATION (PE) WITHIN THE SOUTH AFRICAN CONTEXT

Many structural and curricular changes within the South African education system have affected what PE curriculum and teaching strategies have been employed by teachers, and what challenges teachers face daily. The challenges within low resource school contexts are particularly concerning.

2.2.1 Structural and curricular changes to PE

The ongoing challenges in teaching PE in South Africa have been well captured in literature, both during and after the Apartheid era (Rajput & Van Deventer, 2010; Van Deventer & Van Niekerk, 2009; Van Deventer, 2007, 2008 a & b, 2009, 2011, 2012, 2014). In the Apartheid era, that is, before 1994, PE was a stand-alone and specialist-led subject (Stroebel et al., 2016). However, regardless of PE's status within the curriculum, it not optimally implemented across a range of socio-economically different schools (Cleophas, 2015; Van Der Merwe, 1999). This was, in part, due to teachers and learners perceiving the PE curriculum as too difficult. For example, compulsory physical activities, such as gymnastics, were regarded as hard to teach and participate in (Van Der Merwe, 1999). Furthermore, the limited time allocated to the subject, equipment shortages and the perception that other subjects took priority over PE, negatively affected the status of PE in schools.

Post-apartheid, curriculum transformation took place to nullify the inequality, social injustices and oppression that characterised the education system during Apartheid (Fiske & Ladd, 2004). This process of transformation resulted in Curriculum 2005 (C2005) being implemented in 1997, followed by the Revised National Curriculum Statement (R-NCS) in 2002, then the National Curriculum Statement (NCS) in 2007, and thereafter, from 2012, the CAPS (Govender, 2018; Stroebel et al., 2016). During these curriculum changes, PE transformed from being a stand-alone and specialist-led subject to becoming one of many study areas within one subject that has many focal points. That is, PE became part of Life Skills and Life Orientation[5] (Van Deventer, 2007). The incorporation of many study areas into one subject resulted in generalist teachers having to teach several specialist subjects, which had been taught by subject specialists in the past (Dixon et al., 2018).

[5] In the Foundation Phase, for Grades R to Three, there are four subjects. These include Life Skills (which consists of learning outcomes PE, Creative Arts, Beginning Knowledge and Personal and Social Well-being); Home Language; First Additional Language; and Mathematics. In the Intermediate Phase, for Grades Four to Six, there are six subjects. These include Life Skills (Creative Arts, PE and Personal and Social Well-being); Home Language; First Additional Language; Mathematics; Natural Sciences; and Social Sciences. In the Senior Phase, for Grades Seven to Nine, nine subjects present. These include Home Language; First Additional Language; Mathematics; Natural Sciences; Social Sciences; Technology; Economic Management Sciences; Life Orientation and Creative Arts. The Further Education and Training, for Grades Ten to Twelve, consists of seven subjects: Home Language; First Additional Language; Mathematics; and Life Orientation, with three additional subjects selected by the learner (Department of Basic Education: Republic of South Africa, 2011).

2.2.2 PE curriculum models and teaching style approaches

A number of PE curriculum models can be implemented by teachers (Kulinna, 2008). However, I could not find literature highlighting which are being used in the CAPS; neither is there literature available on the viability of certain curricula being prescribed for a low resource school context. A curriculum model can be defined as a blueprint for teachers to follow. It guides how the purpose, goals and objectives of the content will be developed, how the pedagogical approaches will be organised, structured, sequenced and assessed and, ultimately, how the content will be experienced by the learners (Marsh, 2009, p. 4). Each curriculum model also reflects different philosophical and value orientations (Kelly & Melograno, 2014). My reflections on the possibility of varying curriculum models being used within the CAPS and being adapted within schools are similar to the findings in Burnett's (2018a) nation-wide assessment on the status of PE in South Africa. That is, a combination of curriculum models being implemented within CAPS comprise mainly sport-, health- and value-based approaches and self-learning, supported by an assessment-driven approach and/or self-learning (non-teaching) (Burnett, 2020). What effect the curriculum model a given school is choosing to implement within the South African context, is not known.

Complementing the array of curriculum model choices available to teachers, are the numerous teaching styles (Gallahue & Donnelly, 2007). Although the function of the CAPS is not to dictate how teachers teach, but to provide a list of activities to follow, I could not identify research assessing teachers' teaching styles. Teaching styles affect how teachers and learners experience PE. As teachers in South Africa tend to be generalist teachers (Burnett, 2020), what teaching styles they are choosing, and why, are not evident. For example, teachers can choose direct teaching styles, such as command, practice, reciprocal, self-check and inclusion (Gallahue & Donnelly, 2007), which are also known as reproductive teaching styles. Furthermore, indirect teaching styles are accessible, such as the guided, convergent, divergent and discovery teaching styles, which are also known as productive teaching styles (Gallahue & Donnelly, 2007). The former is teacher-centred, whereas the latter is learner-centred. Alternatively, teachers can employ a combination of teaching styles (Cuellar-Moreno, 2016) or a non-linear pedagogical approach (Moy, Renshaw & Davids, 2015). The non-linear approach is learner-centred and provides students with many movement choices, based on their perceived readiness level and willingness to explore. Minimal feedback is provided by the teacher when non-linear pedagogy is employed, and the goal is for learners to explore how they

are meant to achieve the movement goal. A non-linear pedagogy could be thought of as employing an inclusive reproductive teaching style.

It is important to know what teaching styles are being used as each affect learners differently. For example, and according to Syrmpas, Digelidis, Watt and Vicars (2017), the type of teaching style chosen by teachers is dependent on a myriad of factors. Reproductive teachings styles tend to be employed by teachers who are focused on discipline, time management, safety concerns and maximum exposure to physical activity and/or motor proficiency development opportunities. Productive styles tend to be used by teachers who want to provide learners with an opportunity for autonomy and personal responsibility. Jayantilal and O'Leary (2017) share that the teaching styles selected by teachers are also influenced by their years of experience in PE teaching, their sporting experiences, how they have been socialised into PE via their undergraduate experiences, mentors or colleagues and their beliefs or expectations of their learners. That is, the expectation that their learners will be well behaved or misbehaved or good or bad and thus trusted with responsibility, autonomy, or self-exploration. In Chatoupis' (2018) literature review on the teaching styles employed by PE teachers, of the 15 countries included in the research, the reproductive styles, namely, command, practice and inclusion, tended to dominate. Similar results were noted by SueSee and Barker (2018) in their research on Swedish teachers and by Syrmpas, Digelidis and Watt (2015), who conducted their research among Greek teachers. The use of mainly reproductive styles is a concern, as student responsibility, autonomy and self-exploration is negated by teachers' control ideologies (Jayantilal & O'Leary, 2017). What teaching styles teachers are employing in South Africa and whether this is in alignment with meeting the CAPS learning outcomes, is not clear, and will require exploration among teachers.

2.2.3 Challenges to implementing PE

The 2018 Healthy Active Kids South African (HAKSA) Report Card awarded PE implementation in South Africa a "D" score (Draper et al., 2018). The score of "D" persisted for consecutive years within the 2010, 2014 and 2016 HAKSA Report Cards, indicating that for the past decade, PE implementation in South Africa has not improved (Draper, Basset, De Villiers & Lambert, 2014; Sport Science Institute of South Africa, 2010; Uys et al., 2016). A score of "D" refers to "practice which is insufficient to adequately promote health and prevent chronic diseases, which may be due, in part, to lack of reach or adoption and impact" (Sport

Science Institute of South Africa, 2010, p. 2). There are numerous problems and challenges facing PE in South Africa. These include:

i. The perceived low priority, non-stand-alone and non-examinable status of PE (Stroebel et al., 2016), resulting in academic subjects being prioritised and the implementation of PE being compromised.

- Curricular constraints with minimal time allocations due to four specialist study areas being curdled into one subject, namely Life Skills or Life Orientation (Burnett, 2018a; Dixon et al., 2018). Consequently, prioritised subjects and work priorities take precedence over PE.
- The adoption of assessment and physical activity driven curriculum models versus holistic models for PE (Burnett, 2018a). This has caused teachers to focus mainly on keeping children physically active during PE versus adopting a QPE curriculum and teaching styles that develop learners' cognitive, social, affective and physical domains in a progressive and age-appropriate manner (UNESCO, 2015). The same can be said for the adoption of predominantly sport education models in which competition dominates, which can result in lower skilled learners feeling marginalised and developing the perception that selected sports are irrelevant or boring (Ennis, 2016).
- Poor infrastructure and limited equipment have negatively affected teachers' perceptions of their own ability to implement PE, consequently reducing the implementation thereof (Burnett, 2018a; Van Deventer 2012).
- Lack of PE specialist training or specialist teachers, which affects teachers' self-confidence in implementing PE and their ability to implement QPE; resulting in limited PE (Burnett, 2018a; Rajput & Van Deventer, 2010; Stroebel, 2018; Stroebel et al., 2017; Van Deventer, 2012, 2014).
- PE CAPS documents lack clarity due to unclear discipline-specific content (Dixon et al., 2018), such as which PE curriculum and teaching styles to employ, resulting in teachers not knowing what to teach and how to teach it.
- Lack of alignment between organisations that are involved in determining PE practices in schools negatively affect PE teaching (Goslin, 2017). Examples of such organisations are SAUPEA, the DBE, PEISA, the SRSA and SASCOC (Goslin, 2017).
- In the CAPS, the requirements for PE during the Life Skills' timetable is stipulated. However, in other key policy documents, PE is implied. This is done by using the terms "physical activity, school sport, mass sport or sport", versus the word PE (Goslin, 2017,

p. 16). This, in effect, nullifies PE as an important subject due to its lack of representation in all key documents related to sport and/or mass participation in physical activity.

Although many barriers exist, positive, creative and resourceful findings regarding PE teaching in South Africa were presented in a recent nation-wide situational analysis conducted by SAUPEA (Burnett, 2018a). That is, silver linings such as using different curriculum approaches (sport-, health-, value- and self-learning-based) and resourceful ways to overcome PE barriers (Burnett, 2018a). Examples include creative initiatives in teaching PE, such as scheduling PE to align with school sport timetables and employing didactical flexibility and integration of value-based education. Also, providing a wide variety of physical activities that meet the interests of diverse learners, negotiating and including the use of community facilities and sharing the school sport budget, are noted (Burnett, 2018a). These optimistic findings indicate that it is possible to overcome the PE barriers that present. Unfortunately, this adaptability was primarily noticeable in affluent areas and not in low resource schools, where less PE is being implemented due, in part, to a lack of basic physical resources and trained and knowledgeable PE educators, large classes, lack of funding, an inability to raise funds, and learners not being able to afford physical activity based clothing for PE (Burnett, 2018a).

2.2.4 Challenges to implementing PE within low resource schools

In the Eastern Cape, high poverty rates prevail (World Bank Group, 2018). Ncanywa (2015) believes that the high poverty rates in the Eastern Cape are validated by the prominence of predominantly Quintile Three (or less) schools. The risk of children in lower socio-economic communities developing developmental delays due to exposure to infectious diseases, psychological stresses and malnutrition is higher than that of learners in higher socio-economic communities (Jensen, Berens & Nelson, 2017). Teachers often need to cater for learners with foetal alcohol syndrome (FAS) (May et al., 2016) or who suffer from malnutrition (Gresse, Nomvete & Walter, 2017), who are exposed to violence at home and unsafe recreational facilities (Prinsloo & Wilson, 2017) and/or those who live in child-headed households[6] (Children's Institute at the University of Cape Town, 2009). Catering for a diverse group of learners in PE can therefore be challenging for teachers.

[6] Child-headed households are those in which children take on the parental role and look after siblings, due to the absence of parents or primary caregivers (Mturi, 2012).

A general lack of finances and support from the ECDOE in these communities exacerbates barriers to providing quality education in general, let alone finding funds to support PE teaching. For example, parental financial support to historically disadvantaged schools for improvement and maintenance of infrastructural and educational and human resource capacity when compared to Former Model C schools[7], is diminished (Languille, 2016; Veriava, Thom & Hodgson, 2017). The lack of financial support from parents means that low resource schools rely heavily on Government funding. Unfortunately, service delivery from the ECDOE is poor and characterised by "chronic leadership instability, politicisation and financial mismanagement" (Kota et al., 2017, p. 1). In the report by Equal Education (2016) titled "Planning to Fail", the ECDOE's lack of accountability and delivery was attributed to "poor governance, disorganisation and incapacity… political contestation, ANC [African National Congress] factionalism, and corruption" (p. 13-16). The inefficiency in service delivery has resulted in Eastern Cape schools having "the worst-affected [infrastructure] in terms of the number of schools built using inappropriate material" and a "lack of basic services" (Phakathi, 2018, para.1). Consequently, it can be surmised that the priorities set forth by staff in low resource schools would typically emphasise investment in infrastructure, human resources, poverty mitigation (for example, providing learners with adequate nutrition) and crime alleviation (such as ensuring that learners are safe from crime that predominates in communities with high poverty rates) (Fengu, 2019).

2.2.5 Benefits of PE to learners in low resource schools

PE is a non-prioritised learning outcome due, in part, to its non-examinable and non-stand-alone status (Stroebel et al., 2016), financial investments in PE are not necessarily at the top of low resource schools' agendas. For PE implementation in low resource schools to progress, the myriad of human and infrastructural resource characteristics innate to these lower socio-economic communities would need to be considered. The lack of PE is a concern, as sport and extra-mural physical activities (such as playing in the park) often do not feature in historically disadvantaged communities (Mchunu & Le Roux, 2010; Prinsloo & Wilson, 2017). Since children who live in poverty face a high degree of adversity, they are in greater need of learning competencies to help buffer the environmental risk factors that impact negatively on their development (Jensen et al., 2017). Hence, exploring how PE can be implemented in these

[7] Model C schools "were schools situated predominately in former white areas and are seen as schools situated in more affluent and better resourced areas" and are now referred to as Quintile Five schools (Veriava et al., 2017).

contexts is paramount if learners are to experience the positive cognitive, physical, affective and social development outcomes innate to PE (Bailey, 2018). Furthermore, learners can achieve the benefits of improvements in academic performance, fitness levels, perceptual-motor or FMS proficiency, self-esteem and social skills when participating in PE (Hills, Dengel & Lubans, 2014).

Research has confirmed the positive benefits of different types of physical activity for learners residing in disadvantaged communities, and that can be implemented during PE. For example, studies on learners from low resource schools have found that physical activity contributes to the maintenance of learners' academic performance (Gall et al., 2018) and that there is a positive link between their school readiness and perceptual-motor development (Erasmus et al., 2016; Loubser, Pienaar, Klopper & Ellis, 2016; Pienaar, Barhorst & Twisk, 2014). Likewise, learners from deprived communities have shown a reduction in their cardiovascular risk factors, such as the onset of obesity, with an increase in physical activity during PE (Müller et al., 2019). In addition, improvements in their cardiovascular endurance with augmented object control skill proficiency (such as striking, dribbling and catching) have been noted (Brusseau et al., 2016). Joubert and Chetty (2018) established significant improvement in gross motor skills together with augmented self-esteem, positive attitude, motivation and class attendance in learners from low resource schools who had regular periods of PE. Finally, with the high prevalence of FAS in South Africa, encouraging results regarding the beneficial effects of physical activity on FAS learners have been established (Orr, Keiver, Bertram & Clarren, 2018). Also, researchers have provided recommendations for PE classes when accommodating for FAS learners (Loftus & Block, 2013; Roth, Pyfer, Zittel & Auxter, 2017), providing generalist teachers in low resource schools with opportunities to fully incorporate their differently abled learners.

2.3 FOUNDATION PHASE PRE- AND IN-SERVICE TRAINING FOR PE IN SOUTH AFRICA

Foundation Phase teachers were the focus of this study. In this section, I concentrate on what training is available to transit teachers from generalist to specialist status. I specifically focus on whether the training available aligns with the low resource school contexts of the Eastern Cape and empowers teachers with the competencies needed to teach PE so that their learners can experience the numerous benefits it has to offer.

2.3.1 Training available in public higher education institutions

On a review of relevant South African studies, it becomes evident that universities are not aiding in the achievement of: 1) The DBE's policy guidelines of "one appropriately qualified PE educator in each school" (Goslin, 2017, p. 5); 2); the SRSA's white paper policy guideline on teachers being "empowered to deliver PE and school sport" (Sport and Recreation, 2012, p. 29); and 3) The National Sport and Recreation Plan of "appointing educators qualified in PE… [and] assessing the capacity of educators to deliver PE and sports specific training" (Sport and Recreation South Africa, 2014, p. 24).

When considering pre-service courses available in South Africa, Steyn et al. (2012) have identified that the credit value and year of study of pre-service PE training at six South African universities are not comparable and limited. Depending on the university, between five to eleven credits are awarded to PE. Furthermore, PE takes place in either students' first or third year of study, which encompasses different National Qualifications Framework (NQF)[8] levels, and therefore how students can be challenged academically. According to Steyn's et al. (2012) reflections on the inconsistency between the credit and NQF values of PE modules at universities within South Africa, this implies that limited collaboration takes place between universities and that a different priority is allocated to PE. This is a concern as, depending on the province, PE pre-service training will either provide teachers with the opportunity to transit from generalist to specialist status, or not. A specialist PE teacher, according to Spence (2004 In Faulkner et al., 2008, p.408) is someone who has "either majored or minored in PE (often 3-5 years) before completing their Bachelor of Education degree or has received specialized and intense training during pre-service education".

Goslin (2017) suggests there is a need to standardise pre-service training across all universities. This may be a feasible option, as it means that universities will need to collaborate and aim for improved quality pre-service PE training with credit and NQF values that align with the specialist nature thereof. However, limited qualitative or quantitative data are available on the effectiveness and experiences of PE pre-service courses, making it difficult to identify best practice pre-service PE training in the South African context. I could identify only two such studies (Du Toit, 2019; Du Toit & Van Der Merwe, 2011) that investigated the needs and

[8] "The NQF is a comprehensive system, approved by the Minister of Higher Education and Training, for the classification, registration and publication of articulated and quality-assured national qualifications and part-qualifications" (SAQA, 2018)

experiences of Foundation Phase teachers during their involvement in on- and off-campus PE-based modules. Du Toit and Van Der Merwe (2011) found that success for pre-service PE teachers was dependent on students having appropriate materials (such as videos, slides and pictures), practical application, which include safety regulations, and the management and organisation of large groups, culturally diverse learners and equipment and facilities, and being mentored by a more experienced teacher. Du Toit's (2019) exploration of 140 pre-service teachers' PE training established that exposure to once per week school-based applications of content and the construction of PE equipment (as many schools do not have these basic resources in South Africa) was beneficial. This type of exposure resulted in an improvement in teachers' PE competence and their ability to overcome equipment barriers in low resource schools. Du Plooy et al. (2016), in their systematic review on pre-service training, shared that limited research was available on how to design training programmes for Foundation Phase teachers. I concur that this lack of research includes Foundation Phase PE-based pre-service training. If PE is meant to be a specialist course, finding ways to challenge students appropriately through well designed pre-service training programmes at higher credit and NQF levels is justified.

In the Eastern Cape, I could not identify any pre-service training opportunities for teachers to specialise in PE, nor any research exploring their experiences with or the effectiveness of the PE-based pre-service courses. With the limited opportunities available to engage in pre-service training that facilitates teachers transiting from a generalist to specialist status in PE in the Eastern Cape, PE-based CPTD training opportunities are important. Paradoxically, I could also not identify any CPTD courses allowing teachers to transit to specialist status in the Eastern Cape, nor any research on their experiences or the effectiveness of the training.

2.3.2 Training available in private higher education institutions, colleges or NPOs/NGOs

I could only identify PEISA's endorsement of Embury's Institute for Higher Education and the two-day and six-months' PE-based CPTD courses provided (Embury, 2019). The latter course consists of 40 hours contact time distributed across five Saturday classes, with both courses hosted in Durban, Pretoria, and Johannesburg. These courses are valued at up to 132 credits, awarded for a one year (full-time) or two year (part-time) advanced PE diploma. Other short learning courses I could identify were presented by the Sports Science Institute of South Africa (SSISA) or Volunteer and Work Integrated Learning Programmes (such as Projects Abroad) (Goslin, 2017, p. 50).

Teachers could also opt to adopt the training and programmes that many NPOs/NGOs provide within different provinces of South Africa, such as the Healthnutz, United Through Sport, Nike's Designed to Move, Waves for Change and Peace Players South Africa, to name but a few (Laurens Sport for Good, 2018).

In the Eastern Cape, I could identify two PE-based programmes being researched, namely the DASH and KaziBantu. Research on the effectiveness of these PE-based programmes in the Eastern Cape exists (see list of research at the DASH scientific results (2018) and KaziBantu (2018) websites). Research undertaken by the Healthnutz (Draper et al., 2010) and HealthKick (De Villiers et al., 2018) in the Gauteng and Western Cape provinces respectively, also provides insight into the effectiveness of these programmes. However, the research mostly reports on the challenges experienced by the teachers, versus teachers' experiences with and the effectiveness of the PE-based CPTD components of these programmes. As a result, I found it difficult to identify which CPTD guidelines to follow that include teachers' experiences thereof, and their needs, especially within the Eastern Cape context.

When it comes to Foundation Phase PE-based CPTD, the research has mostly revealed a need for change in the way and how teachers are educated (Stroebel et al., 2017; Stroebel, Hay & Bloemhoff, 2019). In the following section, I explain this in greater depth.

2.4 FOUNDATION PHASE TEACHERS' CONTINUING PROFESSIONAL TEACHER DEVELOPMENT (CPTD) IN SOUTH AFRICA

Of the Foundation Phase studies sourced, I could identify only two doctoral studies focused on Foundation Phase PE-based CPTD. That is, Stroebel's (2018) and Visagie's (2016) doctoral studies, together with Stroebel's et al. (2019) published research. Other relevant studies I identified with either CPTD guidelines or stages/phases of implementation included Kakoma (2012), Morake (2014) and Tsotetsi's (2013) South African-based research findings. Edwards, Bryant, Morgan, Cooper, Jones and Keegan's (2019) findings from Wales (England) were relevant as they focused on developing primary school teachers' physical literacy skills, which include FMS development. Physical literacy "is a metaphor that gives name to the innate human capacity for embodied communication with the physical environment" (Jurbala, 2015, p. 379). As FMS are foundation motor skills that support children's engagements in future recreational and sporting endeavours, they form part of physical literacy development.

In the following section, I provide an overview of these CPTD guidelines/findings and stages/phases of CPTD programming by discussing the main elements of CPTD covered in these studies. To provide clarity on which CPTD approach should be employed for the South African context, I refer to Botman's (2016) philosophical analysis. I also include Kennedy's (2014) CPTD models to support the identification of the most suitable teacher training approach within a South African context.

2.4.1 Learner- or facilitator-centred approach

When considering the employment of a qualified facilitator and whether the facilitator should adopt a learner- or facilitator-centred approach, there are differences in the studies I explored (Edwards et al. 2019; Kakoma, 2012; Morake, 2014; Stroebel et al., 2019; Tsotetsi, 2013; Visagie, 2016). For example, Stroebel's et al. (2019) recommendations tend to be facilitator-driven, technocratic in nature, with limited learner-centred initiatives focused on enabling teachers to drive their own CPTD learning processes and create their own PE-based experiences. Stroebel's et al. (2019) guidelines are based on interviews conducted with ten subject head advisors and thus did not involve the teachers themselves. Stroebel's et al. (2019) study is a valuable starting point for investigating whether the CPTD guidelines she presents can be implemented with teachers. Stroebel (2018) does acknowledge that a central question that remains from her investigation is: "How the Re-skilling Programme should be presented best to teachers to capacitate them to effectively implement PE?" (p. 165). Burnett-Louw (2020, p. 9) also stresses the need for research to answer this question when she states: "innovative in-service teacher training models and strategies to enhance the quality of PE teaching in South African public schools" require further exploration. In my study, I attempted to answer Stroebel's (2018) question and explore Burnett-Louw's (2020) in-service research need.

Visagie's (2016) CPTD guidelines also place the facilitator as driver of the process, rather than the teachers being involved in developing their own learning journey. In Visagie's (2016) study, trained sports coordinators implemented Foundation Phase PE whilst engaging in a year-long CPTD programme. Her guidelines add valuable insights, as they are based on what emerged from an actual CPTD intervention. Edwards' et al. (2019) investigation into how to support the development of physical literacy skills in primary school teachers employed a facilitator-centred approach, with the facilitator identifying the needs of teachers through conducting interviews with them and observations of their classes. A six-months' school-based

CPTD programme was then implemented and improvements in teachers' physical literacy knowledge and practice were noted.

In contrast to the facilitator-driven CPTD experience, Kakoma (2012) shared that "a professional development programme for teachers will mostly succeed and be sustained if teachers play a central role from its inception, implementation to the evaluation" (p. 373). Similarly, Morake (2014) concludes that a constructivist approach to CPTD training is better than employing a transmission based CPTD approach (such as the cascade model). Through teachers identifying "what they need to learn and [being involved] in the development of the learning experiences" (p. 170), ownership and sustainability of their project can be fostered.
Based on these findings, a transformative CPTD approach is better suited to the South African context. Botman (2016) provides some important insights and clarity in this regard. According to Botman (2016), the current South African teacher training policy does not align with the 2030 National Development Plan focused on transformation (National Planning Commission: Republic of South Africa, 2012) in that there is limited philosophical grounding for transformation in teacher education policy. Botman (2016) believes that Freire's (1993) philosophy for teacher education would be well suited to the South African education system due to its democratic, empowering and transformative approach to teacher training. Freire's (1993) five principles for CPTD capture these sentiments as follows:

> First, teachers are the subjects of their own practice, in the creation and recreation thereof. Second, the programme should provide teachers with the tools needed for creating and recreating practice based on continuous reflections on daily practices. Third, because the educational practice is always in the process of transformation, the educator should also be in constant, systematic education. Fourth, an understanding of the discovery process and origin of knowledge required by pedagogic practice should be developed. Fifth, the teacher education programme should provide the ability to reorientate the curriculum of the school. (p. 50)

The guiding assumption of CPTD should be that teachers are capable of and have a desire to learn, to be reflexive and to be creative, because only then will they be able to transform their thinking and practices. It is also therefore the inclusion of humanising interactions that gives teachers a voice and an opportunity to empower themselves through engaging with their values, beliefs, attitudes, behaviours and actions in a holistic manner (Roberts, 2000). Through being empowered by being provided with a platform to share their voices and choices, teachers can transform their PE teaching.

According to Botman (2016), several repercussions stem from the current CPTD policy and the lack of adopting a transformative teacher education philosophy. Firstly, teachers' social, affective and cognitive development is hampered. Secondly, the principles of "action/reflection/action as part of the reconstructing practice of transformative education" (p. 61) and the engagements of "key agents in the success of any schooling system" are denied (p. 55). Thirdly, the participatory nature of teacher education focused on democratic practices with key stakeholders (such as other teachers, learners and parents) is not recognised. I would also add that the lack of adoption of an empowered and transformative philosophy does not honour UNESCO's (2015) QPE policy regarding teacher education. Since UNESCO's guidelines regarding a "flexible, and open to adaptation" curriculum approach is not being used. Teachers are therefore not being "empowered to tailor provisions to suit the diverse needs of the young people they are working with… through consultation" (UNESCO, 2015, p. 42).

Kennedy (2014) advocated for a democratic approach to CPTD versus a managerial perspective, as depicted in Table 2.1. A democratic perspective on professional development negates the use of pre-packaged 'teacher-proof' materials.

Table 2.1: "Analysis of aspects of CPTD policies against perspectives on professionalism" (Kennedy, 2014, p. 695)

CPD policy aspect [a]	**Managerial perspective on professionalism [b]**	**Democratic perspective on professionalism [c]**
Overall purpose	Deficit (to remedy weaknesses)	Developmental (enhancing specific strengths and interests)
Unit of focus Individual Collective Teacher engagement with policy	Compliance with policy directives	Contribution to policy development and considered enactment of policy directives
Dominant underpinning perspective on teacher learning	Behaviourist (instrumental learning)	Social constructivist
Focus of teaching	Development of technical, role-focused knowledge and skills	Acknowledgment and articulation of values and beliefs that inform, support, or inhibit acquisition and application of knowledge and skills
Motivation and accountability	Externally imposed. Measured against externally prescribed standards	Internally driven and measured against context-specific and negotiated desirable outcomes
Notes: [a] Features of policy that can be analysed against perspectives on professionalism.		
[b] Teacher as a compliant, efficient worker.		
[c] Teacher as a change agent and proactive advocate of social justice.		

The differences between these approaches to professional development are furthermore highlighted by Freire (2018):

> ... the scientific preparation of teachers, a preparation informed by political clarity, by the capacity of teachers, by the teachers' desire to learn, and by their constant and open curiosity, represents the best political tool in defence of their interest and their right. These ingredients represent, in truth, real empowerment. Empowerment includes, for example, teachers' refusal to blindly follow pre-packaged educational materials produced by some experts... The development of the so-called teacher-proof materials is a continuation of experts' authoritarianism, of their total lack of faith in the possibility that teachers can know and can also create. (p. 14-15)

It therefore becomes clear that a learner-centred approach focused on teachers' needs is supported in CPTD literature (Botman, 2016; Dixon et al., 2014; Draper et al., 2010; Kakoma, 2012; Morake, 2014; Tsotetsi, 2013), and better suited when considering the transformative goals of South Africa's National Development Plan (National Planning Commission: Republic of South Africa, 2012). Providing teachers with a platform for transformation and empowerment through building their agency is therefore justified through a learner-centred approach as it gives them a voice and a choice.

2.4.2 The Duration of the programme

There was consensus in the literature I reviewed that long-term CPTD programmes with follow-ups were ideal (Edwards et al., 2019; Kakoma, 2012; Morake, 2014; Stroebel et al., 2019; Tsotetsi, 2013; Visagie, 2016). For example, Visagie (2016) shares that her year-long CPTD programme with follow-ups helped develop participants' confidence and motivation, and the relationship with her (the facilitator) assisted in clarifying misunderstandings and reinforced teachers' learning. Stroebel (2019) recommends that the duration of the programme must accommodate the practical nature of PE, but does not elaborate on how long a CPTD programme should be. In Kakoma's (2012) literature review, the author advocates for teachers to decide on the time they need to improve their teaching of PE. Edwards et al. (2019) recommend that the programme should be as long as it takes to attain sustainable outcomes. I can therefore conclude that once-off and short-term CPTD courses are not conducive to teachers' learning and transformation at school, and that the timeline should rather be dictated by teachers' needs.

2.4.3 PCK and development thereof

Practical training is required to enable teachers to improve their knowledge and skill sets for PE (Stroebel, 2018; Visagie, 2016). This should include offering model lesson plans for teachers to explore, convincing them of the importance of PE (Visagie, 2016), including the curriculum requirements (Stroebel et al., 2019), encompassing "what learners are to learn and how to address the different problems learner may have in learning the material" (Morake, 2014, p. 169) and including instructionally-focused content knowledge and PCK that consider that physical literacy development in children is not a linear process and requires reiterative learning opportunities (Edwards et al., 2019).

Teachers should be enabled to form teams with a shared vision, do a context analysis, and set, implement and evaluate action plans when developing their PCK (Kakoma, 2012; Tsotseti, 2013). This means that pre-packaged CPTD should not be considered, and instead teachers should be given the opportunity to decide on their PCK needs. Petrie and Clarkin-Phillips's (2017) believe that pre-packaged PE-CPTD has resulted in teachers having to adopt the philosophy of the individual(s) who created the package, negating teachers' capacities to approach curriculum implementation with a critical lens. In a similar vein, Landi, Fitzpatrick and McGlashan (2016) state that the incorporation of pre-packaged PE programmes resulted in a variety of curricular aims not being addressed through thoughtful and well-planned programmes. Teachers should have the opportunity to identify their content knowledge and PCK needs for PE.

2.4.4 The teaching context

It is important to consider the context in which teaching takes place for CPTD to be successful (Edwards et al., 2019; Kakoma, 2012; Morake, 2014; Stroebel et al., 2019; Tsotetsi, 2013; Visagie, 2016). This is especially important when it occurs in low resource schools (Ebersöhn, 2014; Gallant, 2012; Zinn et al., 2014). Access to little or no equipment (Draper et al., 2014; Mchunu & Le Roux, 2010; Walter, 2014); the integration of PE into the timetable with workloads and a densely packed curriculum (Dixon, et al., 2018; Hill et al., 2015; Salvini et al., 2018); and the ability to deal with different types of learners from disadvantaged communities (Jensen et al., 2017) are important contextual considerations for CPTD.

When considering the school context, Visagie (2016) recommends that members of the community, the District education officials in which the school resides, HODs and School

Principals be involved in the CPTD process, as they are well positioned to offer support to those implementing PE at school, to improve the status of PE, and to create and enabling environment for PE teaching. Consequently the context of teaching includes not only the types of learners, infrastructure and equipment present, but also the collegial domain and the effect of change on each key stakeholder involved, such as the Principal, colleagues, parents, children, government officials, NPOs/NGOs and anyone invested in education.

2.4.5 Key stakeholder collaboration

Collaboration is regarded as a vital component in CPTD (Morake, 2014; Tsotetsi, 2013; Visagie, 2016). An improved understanding of and ability to teach PE has been noted when teachers collaborate (Dyson et al., 2016; Martin et al., 2009; Nash, 2009).

Although teacher collaboration at school is deemed important, Tsotetsi (2013) emphasises how important it is to include other key stakeholders invested in CPTD, such as "the School Governing Body, Learning Facilitators, School Management and Governance Developers, Integrated Quality Management System coordinators and teacher union representatives" (p. viii), to ensure that the CPTD programme is successfully implemented with sustainable outcomes. That is, internal stakeholders within the school context.

Stroebel et al. (2019) adds the need for collaboration between the DBE and Higher Education Institutions so that nationally accepted guidelines for PE-based CPTD are put in place. That is, external stakeholders, which can also include sponsors and NPOs/NGOs.

2.4.6 Programme evaluation

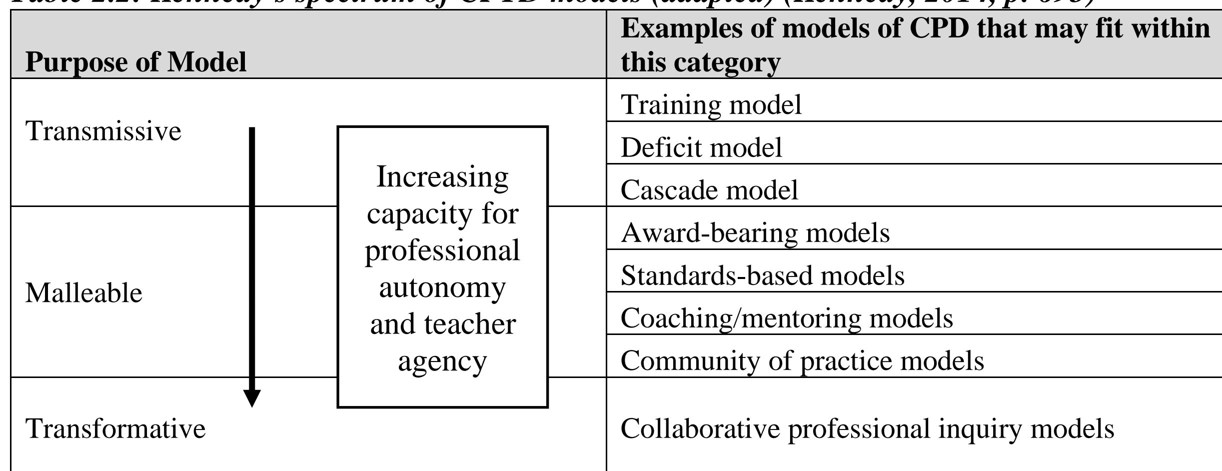
All programmes should be evaluated following a systematic research process (Kakoma, 2012; Morake, 2014; Tsotetsi, 2013; Visagie, 2016). When team members set up plans, performance indicators should be created to monitor each person's progress (Tsotetsi, 2013). Considering Botman's (2016) philosophy on democratising CPTD for transformation within the South African context, exploring how monitoring and assessment can be employed within the context of CPTD to empower teachers, requires further analysis.

In summary, the type of CPTD guidelines to consider for Foundation Phase PE-based CPTD includes: 1) A learner-centred approach (and the inclusion of teachers' holistic needs); 2) A long-term CPTD programme with feedback cycles; 3) Pedagogical content and processes based

on teachers' needs; 4) The inclusion of the context; 5) Collaboration between key stakeholders involved in PE teaching at schools; and 6) Some form of programme assessment and monitoring.

What these studies unfortunately do not provide, are the theoretical or philosophical CPTD models that encompass the guidelines within the research discussed (Edwards et al., 2019; Kakoma, 2012; Morake, 2014; Stroebel, 2018; Tsotetsi, 2013; Visagie, 2016). Their insights can, however, be used to motivate for and identify the type of CPTD model for the South African context. Kennedy's (2005, 2014) overview of the many CPTD models available for teacher education can assist in identifying which CPTD approach is best. Table 2.2 provides an overview thereof.

Table 2.2: Kennedy's spectrum of CPTD models (adapted) (Kennedy, 2014, p. 693)



Purpose of Model	Examples of models of CPD that may fit within this category
Transmissive	Training model
	Deficit model
	Cascade model
Malleable	Award-bearing models
	Standards-based models
	Coaching/mentoring models
	Community of practice models
Transformative	Collaborative professional inquiry models

As can be noted in Table 2.2, transmissive, malleable and transformative CPTD models exist. Transmissive CPTD refers to forms of training in which an expert instructs, and teachers absorb information for subsequent implementation at schools (Kennedy, 2014). The focus is on achieving an already established curriculum or reforming to an already set standard of teaching (Kennedy, 2005, 2014). Teachers' cognitive, behavioural and affective engagements are mostly excluded (Kennedy, 2005, 2014). Within transmissive CPTD, the training, deficit and cascade CPTD models present and can be used when skills-based and delivering technocratic information is the focus. Normally, an expert manages these CPTD programmes and he/she focuses on enacting a pre-determined curriculum during short-term interactions with teachers (Kennedy, 2005). The CPTD sessions are normally implemented at venues that are not school-based. Deficit models focus on what teachers do not know in terms of the policy and curriculum standards set, aiming to improve teachers' shortfalls, often negating system malfunctions that

may be affecting their teaching performance (Kennedy, 2005). The cascade model includes teachers being trained by an expert to implement a set curriculum, and then the trained teachers continuing to share what they have learnt with other colleagues at their schools. Sayed (2018) warns that the use of these models in Sub-Saharan Africa is contested and the models are proven to be ineffective, as they do not take in to account the time needed for learning, teachers' individual needs, the context and the on-going follow-up support teachers require.

When Kennedy (2014) refers to a malleable CPTD model, this encompasses the opportunity for teachers to engage with their cognitive, behavioural and affective engagement at school regarding the subject of the CPTD programme. Through engaging these domains of learning, how teachers view, implement and feel about a given subject can be changed. Within the malleable CPTD section, award-bearing, standards-based and mentorship/coaching programmes present. Award-bearing models refer to CPTD training in which a certificate, diploma or degree present, for example, and which are bestowed after the teachers complete a standardised programme (Kennedy, 2005). Standards-based models refer to linking teacher effectiveness and competency to student learning through providing evidence of achievement, mostly negating collaborative engagements between teachers, and instead focusing on individuality and uniformity (Kennedy, 2005). The mentoring/coaching CPTD model is a one-on-one approach that includes either skills-based training or professional friendship and can be power neutral or hierarchical in nature (Kennedy, 2005). These models are malleable, as they can be either transmissive or transformative, depending on the outcome of the programme. If the programme is focused on adherence to norms and standards, then transmissive CPTD is taking place. If the programme is focused on empowerment or contributing to policy, then transformative training is the emphasis (Kennedy, 2005, 2014).

Transformative CPTD encompasses changing an individual and the system's normal way of doing things, and fully engaging with teachers' cognitive, behavioural and affective learning so that they may change how they view, implement and feel about a given subject (Kennedy, 2014). Teachers are the primary drivers of their own change in collaboration with others. An expert becomes a facilitator, and standardised approaches or policy are critically reflected on, versus accepted. According to Kennedy (2014), collaborative professional enquiry models are "all models and experiences that include an element of collaborative problem identification and subsequent activity, where the subsequent activity involves inquiring into one's own practice and understanding more about other practice" (p. 693). To facilitate the process of

change and educational reform that may take place due to the action plans being implemented by teachers, Kennedy (2014) recommends that in collaborative engagements, a process of reflecting on one's own practice and that of others through cyclical forms of inquiry or instructional rounds is important. In so doing, and as depicted in Table 2.2, knowledge building, transformation, teacher autonomy and advocacy can emerge throughout the CPTD process.

When comparing the CPTD guidelines/findings that emerged from the studies reviewed thus far (Edwards et al. 2019; Kakoma, 2012; Morake, 2014; Stroebel et al., 2019; Tsotetsi, 2013; Visagie, 2016), and Botman's (2016) philosophical discussion on South African CPTD, a collaborative and transformative CPTD seems justified. I therefore advocate for the use of a collaborative and participatory CPTD model for Foundation Phase teachers learning experiences.

Regardless of the CPTD model chosen, what exactly Foundation Phase teachers are supposed to be learning during their CPTD experiences requires further exploration. The CAPS document is what Foundation Phase teachers are meant to implement (Department of Basic Education: Republic of South Africa, 2011) and therefore in the following section I examine the PE component thereof in-depth.

2.5 FOUNDATION PHASE PHYSICAL EDUCATION CURRICULUM ASSESSMENT POLICY STATEMENT (CAPS)

2.5.1 What is the CAPS?

The CAPS is the South African national curriculum policy, developed for Grades R to Twelve learners, providing teachers with an overview of what should be taught each term and, briefly, how it should be assessed overall. In the CAPS, there are four Foundation Phase subjects, namely Life Skills; Home Language; First Additional Language; and Maths (Steyn et al., 2012). The Life Skills subject is divided into four study areas, specifically PE; Creative Arts; Beginning Knowledge; and Personal and Social Well-being (Department of Basic Education: Republic of South Africa, 2011). Work schedules and textbooks supplement the CAPS curriculum, providing teachers and learners with week-by-week programming guidelines. When applied to Foundation Phase PE, the CAPS Life Skills document divides PE teaching into four terms, with 20 hours of teaching time being allocated to a term, as depicted in

Addendum G. The CAPS document therefore provides teachers with a list of guidelines to follow in order to achieve pre-determined and standardised outcomes. According to the CAPS, learners are meant to develop their "gross and fine motor skills and perceptual development" through different movement activities, games, indigenous games and sport in PE (Department of Basic Education: Republic of South Africa, 2011).

2.5.2 Issues with implementing the CAPS

Whilst exploring the CAPS, many issues present (Dixon et al., 2018; Visagie, 2016). For example, Dixon et al. (2018) share that when a group of experienced teachers and researchers reviewed the CAPS, it took "a long time to make sense of... [a] highly compressed curriculum", resulting in the authors wondering whether teachers "are able to unpack it in ways that go[es] beyond seeing it as a list of topics to be covered" (p. 19). The authors concluded their analysis by stating that "there is just too much" (p. 20) to cover in the curriculum, and that pre-service training would need to explore how teachers can be equipped not only with teaching such an array of subjects, but the discipline-specific knowledge needed to ensure both the breadth and depth of learning by their learners.

Visagie (2016) has noted many flaws with the Foundation Phase PE component of the CAPS, emphasising a poorly designed curriculum. Firstly, it does not clearly identify the movement progression from Grades R to Three as "all four grade overviews are identical" (p. 44). Secondly it misrepresents perceptual-motor learning through displaying terminology and coupling movements in a "bewildering" way through including some constructs and omitting others altogether (p. 44). Thirdly it incorrectly depicts FMS through not incorporating headings such as locomotor, non-locomotor and object control skills; 4) Includes movement activities that lack purpose and focus; 5) Does not consider the context of teaching when prescribing sport activities; 6) Lacks the inclusion of games, and instead provides many sport-specific activities, which is not recommended for Foundation Phase learners who develop through play and fun; and 7) Lacks assessment guidance for the creation of appropriate movement interventions. These findings necessitate serious consideration when developing PE-based pre- and in-service training programmes. In summary, Dixon et al. (2018, p. 15) view the CAPS as an "erosion of the specificity of disciplinary knowledge", while Visagie (2016, p. 48) regards the CAPS as "both inadequate and not theoretically sound".

To provide the reader with an example of why the CAPS' PE component requires upgrading, I refer to Table 2.3. It depicts the different FMS and perceptual-motor components in the CAPS, and the CAPS scoring system employed for PE. Teachers assess a selection of motor skills each term, and either award a "yes" or "no". The final cumulative score is then converted to a one to seven mark allocation, which is then furthermore changed into a percentage allocation (Eastern Cape Department of Education, 2013).

Table 2.3: CAPS point system employed (via ticks) and conversion to percentages (Eastern Cape Department of Education, 2013)

Criteria					Yes	No
Locomotor: Can he/she listen to instructions while moving around? (√)					√	
Can he/she crawl under chairs? (√)					√	
Perceptual Motor: Can he/she pass a ball/beanbag from one member of a group to another? (√)					√	
Can he/she roll a large ball to a partner?(√) Can he/she throw and catch large balls? (√√)					√√√	
Rhythm: Can he/she do rope skipping? (√√)					√√	
Coordination: Can he /she throw and catch beanbags? (√√)					√√	
Balance: Can he/she balance walking on a low-level balancing form? (√√)					√√	
Spatial Orientation: Can he/she navigate body through various obstacles? (√√)					√√	
Total score					14	
1	2	3	4	5	6	7
Not achieved	Elementary achievement	Moderate achievement	Adequate achievement	Substantial achievement	Meritorious achievement	Outstanding achievement
0-4 ticks	5 ticks	6 ticks	7-8 ticks	9 ticks	10-11 ticks	12-14 ticks
0-29	30-39	40-49	50-59	60-69	70-79	80-100

When considering the assessment rubric, how teachers are analysing the movements and what the validity and reliability thereof are, is not evident. This is a valid point, especially when bearing in mind the repertoire of reliable and validated assessments available for PE (Bompa & Carrera, 2015).

The scope of this, the present study, was narrowed down to FMS (gross motor) and not fine and perceptual-motor skills. As shared in Gallahue and Donnelly (2007), PE can include gross motor or perceptual-motor quality programming. The latter normally forms part of either remedial training for those with some form of "sensory, intellectual, physical, neurological, or emotional disability" (p. 117) or learning readiness training for non-impaired children in their pre-school and primary school years. In terms of the CAPS inclusion of perceptual-motor

learning, it seems that the creators were aiming to enhance learners' school readiness in the Foundation Phase, but I could not ascertain this as no research presented. Nor could I find explanations regarding how and why the PE component of the CAPS had been created in the manner it had. The focus of my study is FMS, with the purpose specifically to explore how Foundation Phase teachers would enrich their PCK of FMS for low resource schools. The need for learners to be trained in FMS in the primary school years is supported by both South African research (Pienaar et al., 2015) and international research conducted in Australia (Van Beurden et al., 2003), Brazil (Spessato, Gabbard & Valentini, 2012), Ireland (Kelly, O'Connor, Harrison & Chéilleachair, 2019; O'Brien, Belton & Issartel, 2015) and Wales (Rainer & Jarvis, 2019).

Children are not developing their FMS by the age of seven (Gallahue & Donnelly, 2007) and consequently the exclusion of these FMS from the CAPS for Grades R to Three is concerning. FMS are foundational movements and consist of locomotor, non-locomotor and object control skills, which should be performed at a proficient level by normally developing children by the age of seven years old (Barnett et al., 2016). They also form part of gross motor skills, which are defined as movements that require large muscle groups (Gallahue & Donnelly, 2007). FMS can be thought of as the building blocks to more specialised movements, such as what presents in a range of different sport categories. Figure 2.1 more clearly identifies the FMS categories and which movements are encompassed within.

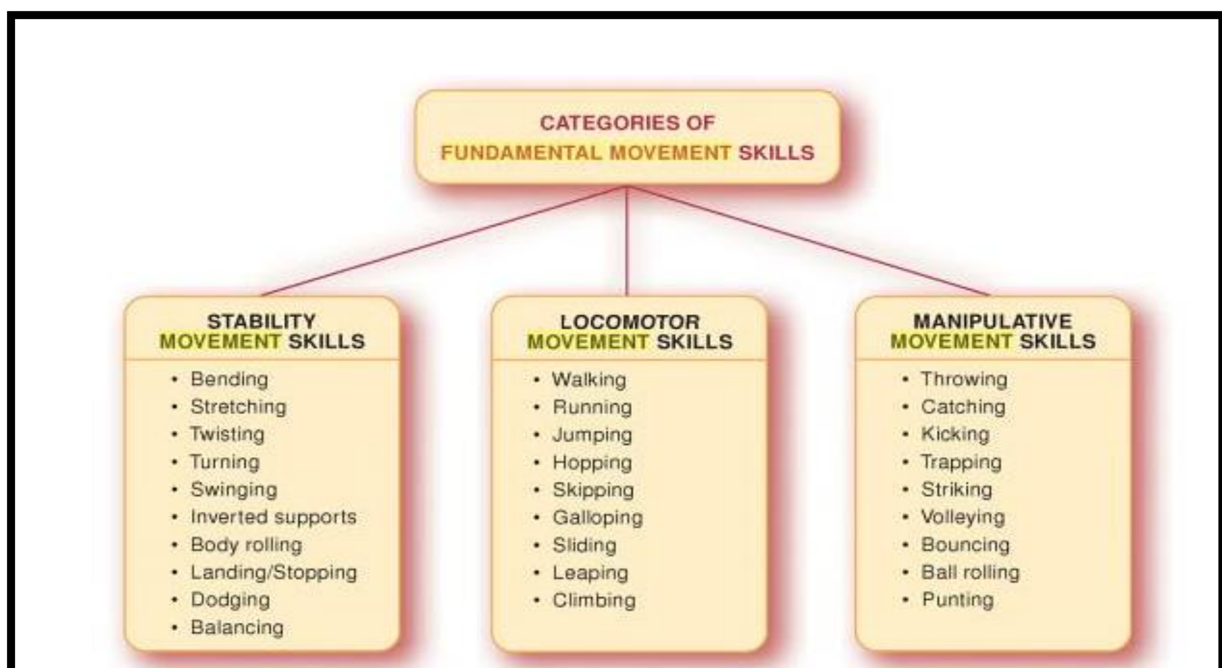


Figure 2.1: Fundamental movement skill categories (Gallahue & Donnelly, 2007, p. 54)

When comparing the FMS presented in Figure 2.1 to the CAPS Term One to Four's list of movement activities, of which an example of Term One is presented in Addendum G (Department of Basic Education: Republic of South Africa, 2011), it becomes apparent that certain FMS are omitted or do not have a stand-alone category as others do. The list of activities to cover also includes the erroneous coupling of perceptual-motor learning and FMS activities when compared to Gallahue and Donnelly's (2007, p. 54-114) depiction thereof. For example, manipulative movement skills (also known as object control skills) are missing from the term planner. Some FMS are placed under perceptual-motor sub-headings in a haphazard manner. In Grade One, for example, FMS such as inverted support, galloping, sliding, punting, volleying, leaping, swinging, trapping, and striking activities are not mentioned in Terms One to Four. Omitting certain FMS from the CAPS means that learners' transition to the specialised movement phase (which refers to the phase of motor development where movements learnt in previous years are applied in game- and sport-based activities) is not being addressed (Gallahue & Donnelly, 2007). Figure 2.2 shows the progression of motor development from the reflexive to specialised movement phases and provides the hypothesised age of onset for these motor skills.

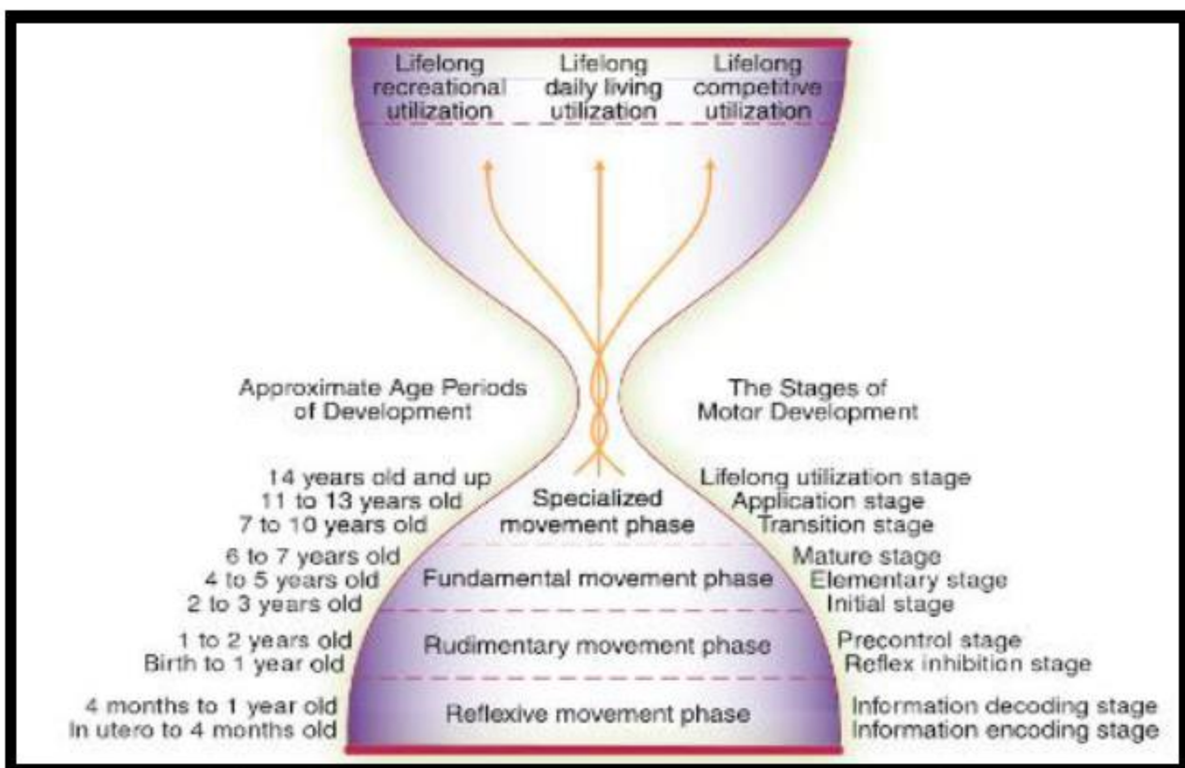


Figure 2.2: Descriptive overview of the phases and stages of motor development (Gallahue, Ozmun & Goodway, 2006, p. 50)

By the time children enter Grade R (that is, at age six or seven years old), they should have progressed through their reflexive movement (which includes grasping, sucking and walking reflexes) and rudimentary movement (which comprises movements such as rolling, crawling, sitting and standing) phases (Gallahue, Ozmun & Goodway, 2006). By Grade R, learners should have transitioned from the initial and elementary stages of FMS development to the mature stage, that is the FMS phase, thereof.

In the Foundation Phase, learners should be exposed to the refinement and integration of their FMS, which encompass the specialised movement phase where game and sport-like applications occur, such as in modified and age-appropriate games (cricket, rugby, netball, soccer, hockey and so forth) (Gallahue et al., 2006). However, for learners to be able to apply their motor skills to game and sport settings, they need to experience FMS in the first place. The random omission of some skills from the CAPS does not aid this endeavour. Furthermore, specifically referring to learners in disadvantaged communities, they often do not even have the opportunity to play, due in part to safety concerns, lack of access to play-based resources and parental support (Prinsloo & Wilson, 2017). Therefore, by the time learners get to Grade R, they may have been minimally exposed to motor skill stimulation due to their environmental contexts. Foundation Phase teachers therefore play an integral role in helping learners "catch up" on their motor development skills. The inclusion of all FMS from Grades R to Three is therefore justified and the application thereof in term programming should be in an age-appropriate manner.

2.5.3 Content shortfalls to address

From the literature reviewed thus far, it seems evident that PE training is inadequate in the Eastern Cape and that limitations in how the PE component of the CAPS is constructed, affect the quality of PE teaching. From the literature I have shared, there are four implications to consider for FMS-based PE training, namely:

- Teachers would need to be made aware of how and why the CAPS is constructed in the manner it is, and the shortcomings that present when considering FMS. For example, why certain FMS are excluded and why their inclusion is important, need to be shared with teachers. Omitting certain FMS during Grades R to Three because the CAPS does not include them can result in learners missing an opportunity to develop FMS proficiency (Barnett et al., 2016; Gallahue & Donnelly, 2007; Logan, Robinson, Wilson & Lucas, 2011).

- It is important to provide teachers with a comprehensive overview of: 1) What FMS entail (Haywood & Getchell, 2014); 2) How they can be taught through the use of various teaching styles (Drost & Todorovich, 2013; Mosston & Ashworth, 1990); 3) How FMS are developed within different PE curriculums (Kulinna, 2008); 4) How a variety of FMS activities can be created to develop learners' movement abilities (Graham, Holt/Hale & Parker, 2012); and 5) What literature is available on successful FMS interventions (Dudley et al., 2011; Lai, Costigan, Stodden, Salmon & Barnett, 2014; Riethmuller, Jones & Okely, 2009; Veldman, Jones & Okely, 2016; Wick et al., 2017). However, this information teachers would need to reflect on and apply to their low resource school contexts, developing their own strategies to align with their contextual and learners' needs. Considering that FMS were the focus of this study, the Teaching Games For Understanding (TGFU) or Game Sense (Austin, Haynes & Miller, 2004; Miller et al., 2016; Smith, 2014) and movement education curriculum (also known as the skill theme approach) (Abels & Bridges, 2010; Ross & Butterfield, 1989) can be shared with teachers when the aim is to develop FMS in primary school learners.
- The incorporation of games and sports from Grades One to Three in the CAPS is not erroneous (Department of Bassic Education: Republic of South Africa, 2011), as some motor development researchers believe that the application of individual FMS should be within age-appropriate games and sport activities (Smith, 2014). However, how FMS, perceptual-motor skills, games and sports are meant to be integrated and implemented is not clear in the CAPS. The structure and terminology within do not align with any theoretically and conceptually sound PE-based discipline knowledge I have come across (Visagie, 2016). Foundation Phase teachers would therefore need to be made aware of the different PE curriculum approaches (Kulinna, 2008) and teaching styles (Gallahue & Donnelly, 2007) available to develop their learners' FMS and in low resource teaching contexts and integrate these into their teachings, where applicable.
- As the CAPS mainly presents content knowledge, Foundation Phase teachers would need to explore what PCK they need for their teaching context.

In the following section, I unpack the PCK of FMS that Foundation Phase teachers would need to be made aware of and explore.

2.6 PE PEDAGOGICAL CONTENT KNOWLEDGE (PCK)

The definition of PCK is a highly debated construct, with many in the field not reaching consensus (Kincheloe, 2005). Key authors who contributed to the field of teacher competency and what knowledge teachers should possess, include Liakopoulou (2011), Shulman (1986) and Turner-Bissett (1991). Seven teacher competencies are identified by Liakopoulou (2011) and Shulman (1986). Turner-Bissett (1991) identifies 12 teacher competency components, each directly or indirectly including PCK. Similarities found between the authors include teachers having to possess knowledge on the subject (also known as subject matter knowledge, common content knowledge or content knowledge), curriculum, learner, context and PCK. Differences between the authors' teacher competency knowledge include teaching methodology, the educational ends, values and purposes and knowledge of self, and beliefs about the subject. Although the authors depict PCK as a separate construct within the teaching competencies expected, when referring to PCK within the field of PE, Capel and Whitehead (2012), Parrott (2016), You (2011), Visagie (2016) and Ward and Ayvazo (2016) identify PCK as a derivative of subject matter knowledge. On reviewing Parrot's (2016) doctoral research reflection on PE-based PCK, I noted that Grossman (1990) and Marks (1990) believed that PCK emanated from subject matter and that the two were therefore intractably connected. According to Parrot (2016), the definition of PCK is "knowing what to teach, how to teach, and how students learn in a variety of conditions. The ability to discern student knowledge, learning preferences, and to provide accurate assessment with appropriate remediation of task representations" (p. 19). Consequently, PCK can be thought of as a culmination of the different types of knowledge (curriculum, student, teaching methodology, self, and so forth) that need to be used within the real-world setting.

For more clarity regarding PCK within PE, I turned to Ward and Ayvazo's (2016, p. 196) reflections thereon and their analysis of Ball, Thames and Phelps (2008) subject matter and PCK definitions. Applied to PE, Ward and Ayvazo (2016) contend that subject matter includes the following:

- Common Content Knowledge (CCK), which is the discipline specific knowledge needed to understand a subject. An example regarding FMS would be knowing what the components of a proficient catch, run, jump, hop, skip and other relevant variations are.

- Specialised Content Knowledge (SCK), which refers to the "knowledge needed to teach CCK". Ward (2009) adds to this definition by stating it is the ability to differentiate CCK for application in respect of the different developmental needs of learners and learning environments (Ward, 2009). In terms of FMS, this would include knowing how to create an age-appropriate game to develop, for example, learners' catch, run, jump, hop, skip, and other FMS as well as relevant variations.
- Horizontal Content Knowledge (HCK), which refers to the knowledge of the systemic and progressive nature of content and how one year relates to the next. When referring to FMS, it entails knowing how Grades R to Three learners will perform, for example, the catch, run, jump, hop, skip, and other relevant variations differently and how training in either year will affect learners' proficiency.

In addition to subject matter knowledge, PCK is included as a derivative thereof and comprises the following:

- Knowledge of Content and Students (KCS), which is "student's understanding of the content, their prior knowledge, and what they are likely to misunderstand about the content" (Ward & Ayvazo, 2016, p. 196). When applied to FMS, this refers to knowing learners' FMS proficiency status, what they have experienced regarding FMS, and what difficulties they may experience with certain FMS.
- Knowledge of Content and Teaching (KCT), which is the "design of instruction or teaching method" and knowledge of instructional models (Ward & Ayvazo, 2016, p. 196). When referring to FMS development, this includes knowing how to use Metzler's (2017) instructional models and Mosston and Ashworth's (1990) teaching styles to develop a specific group of learners' abilities within a given context.
- Knowledge of Content and Curriculum (KCC), which refers to "how the content develops and is presented in the curriculum" (Ward & Ayvazo, 2016, p. 196). In terms of FMS, this refers to how it is presented within the CAPS curriculum from Grades R to Three (Department of Basic Education: Republic of South Africa, 2011).

Figure 2.3 provides a graphic depiction of Ward and Ayvazo's (2016) portrayal of Ball's et al. (2008) subject matter knowledge and PCK as it relates to PE. It is clear that subject matter knowledge and PCK are intricately linked and should therefore be developed in unison in pre- and in-service education.

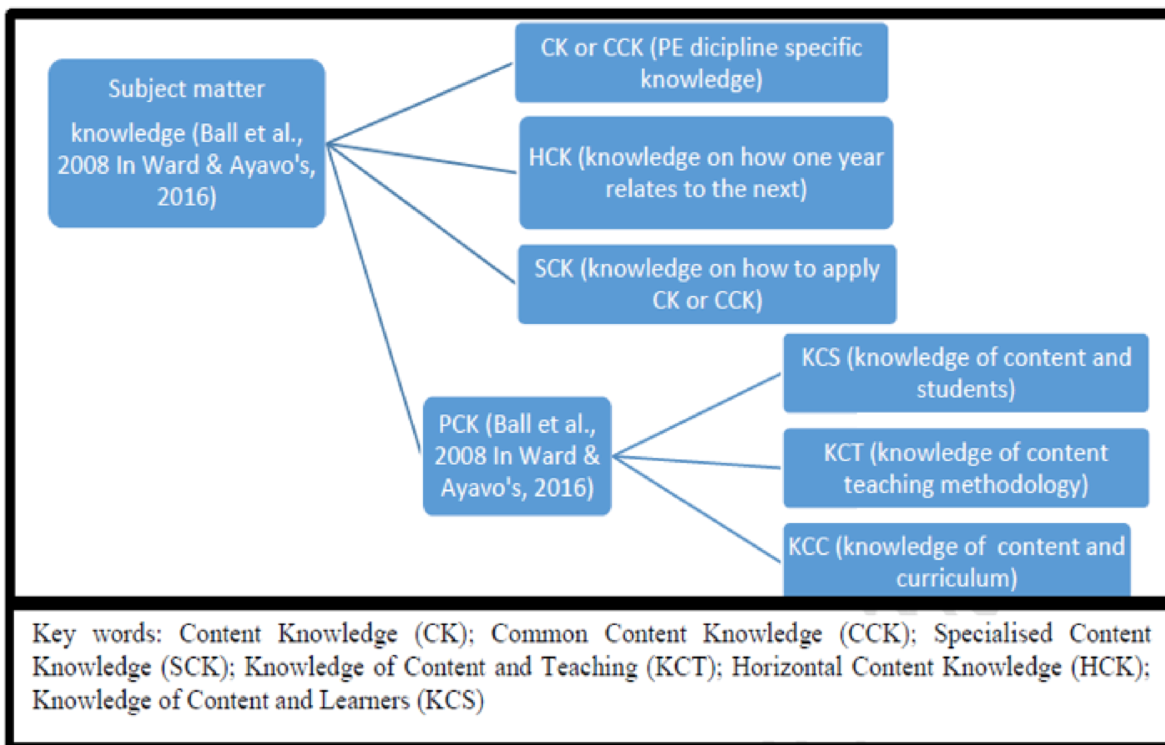


Figure 2.3: Subject matter knowledge and PCK link

You (2011) defines PE-PCK by dividing it into six sections, which are defined in Table 2.4. I also relate You's (2011) concepts to those of Capel and Whitehead (2012), Iserbyt, Ward and Li (2015), Ward (2009) and Ward and Ayvazo (2015) in Table 2.4.

Table 2.4: You's (2011, p. 104) definition of PCK of PE and in relation to other authors

Knowledge of PE subject
You (2011) shares that knowledge of PE refers to knowing PE as a discipline and as a school subject. Discipline specific knowledge refers to knowledge specific to the discipline and specialist area. Therefore, You's (2011) definition could encompass Ward's (2009) notion of PE CK, which is knowing the rules, etiquette, safety, techniques and tactics, common learner errors, instructional tasks (e.g. tasks to teach motor skills) and instructional representation (how the task is presented or verbally and visually displayed) of PE. CCK is also referred to as PE knowledge required to understand the subject (Ward & Ayvazo, 2016). According to Iserbyt et al. (2015), instructional tasks and representation can refer to SCK, which is knowing how to verbally and visually display content knowledge to learners. PE lesson plans could therefore be thought of as representations of CCK and SCK.
Knowledge of PE instructional environment
According to You (2011), knowledge of PE instructional environment is knowing how to use the context in which PE takes place to appropriately organise, manage, instruct, guide and correct learners. It should be noted that the term "pedagogical knowledge" seems to be synonymous with this construct. In Capel and Whitehead (2012, p. 110), pedagogical knowledge comprises "class organisation and management… discipline and behaviour management techniques… motivating pupils to participate… [and] conveying instructions successfully and providing appropriate behaviours, corrective and skill feedback".

Knowledge of PE teaching methods
You (2012) refers to knowledge of PE teaching methods as knowing the different teaching methodologies (models, strategies, styles, techniques) available to teach PE. Ward and Ayavo's (2016, p. 196) KCT can be added here as it is defined as knowledge related to the "design of instruction or teaching method" and knowledge of instructional models.
Knowledge of PE curriculum
You (2011) shares that knowledge of the PE curriculum refers to knowing the different types of PE curricula (Kulinna, 2008). Ward and Ayavo's (2016) HCK could also be added to You's (2011) definition as it refers to the knowledge of the systemic and progressive nature of content and how one year relates to the next. For example, knowing how Grade R compares to other Grades' PE curriculum and how these Grades are inter-related.
Knowledge of PE assessment
You (2012) refers to knowledge of PE assessments as knowing what, how and why a PE lesson is being assessed. This could also include knowing the positives and negatives of the assessments being used.
Knowledge of learner learning
You (2012) refers to knowledge of learner learning as knowing the learners and their learning processes (how they learn). Ward and Ayavo's (2016, p. 196) KCS can be included here, as it refers to knowing "learner's understanding of the content, their prior knowledge, and what they are likely to misunderstand about the content". To know one's learners could also infer knowing them individually and what motivates them and knowing their developmental levels. This also includes learners who are differently abled (Capel & Whitehead, 2012).
Key words: Content Knowledge (CK); Common Content Knowledge (CCK); Specialised Content Knowledge (SCK); Knowledge of Content and Teaching (KCT); Horizontal Content Knowledge (HCK); Knowledge of Content and Learners (KCS)

Knowing how to package the different types of knowledge presented in Table 2.4 to different learner and contextual needs is therefore considered as PCK (You, 2011).

With the definition and conceptualisation of PCK now established (Table 2.4 and Figure 2.3), it becomes clear that subject matter knowledge and PCK are inter-linked, but that there is more to teacher competency than only these two constructs. Consequently, the development of these two constructs with CPTD will require a broader understanding of teacher competency. Yidana and Lawal's (2015) conceptualisation of these different types of teacher knowledge into a teacher competency-based framework provides this broader understanding. As depicted in Figure 2.4, teacher competency does not include professional knowledge (subject matter knowledge and PCK) only, but additionally professional values, skills and reflective practice.

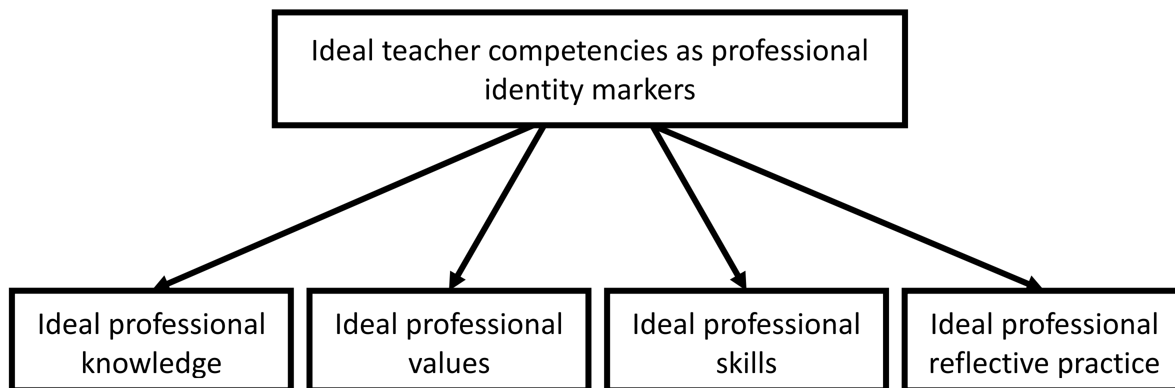


Figure 2.4: Yidana and Lawal's (2015) teacher competency-based model

In Yidana and Lawal's (2015) teacher competency-based model, professional knowledge consists of the discipline-specific knowledge required to understand a subject and additionally extends to the different subject matter and PCK's discussed thus far.

Professional skills align with the PCK shared thus far. More specifically, in Yidana and Lawal (2015), professional skills include: 1) Asking good questions; 2) Classroom management skills; and 3) Communicating effectively. When compared with the definition and conceptualisation of PCK (as established in Table 2.4 and Figures 2.3 and 2.4), these constructs are incorporated into "knowledge of teaching methods" (You, 2011) or KCT (Ball et al., 2008) and "knowledge of instructional environment" (You, 2011).

Teacher competency does not include knowing information and being able to implement it only; it also includes knowing your own professional values and being able to engage in reflective practice. Professional values are defined as teachers' understanding of their values, beliefs, assumptions, feelings, likes and dislikes and behaviour towards teaching and how each affects their teaching and student success (Yidana & Lawal, 2015). Furthermore, professional reflective practice refers to teachers' ability to critically reflect on "all activities carried out during instructional sessions in classrooms" (Yidana & Lawal, 2015, p. 49). Zwozdiak-Myers (2012) extends the definition of reflective practice in PE to descriptive reflection, comparative reflective conversation, and critical reflective conversation. Descriptive reflection involves teachers critically reflecting on their own strengths and weaknesses in presenting PE lessons. Comparative reflective conversation encompasses teachers reflecting on their "personal assumptions, beliefs, theories, values and conceptions of teaching to that of others" (p. 142-

143). Critical reflective conversation between teachers refers to teachers reflecting on how their choice of "objectives, learning outcomes, and teaching strategies reflect the cultural, ethical, ideological, moral, political and social purposes of the[ir] school" (p. 142-143).

Given the teacher knowledge shared thus far, I now apply the latter to the discipline-specific knowledge of this study, which is FMS, in Table 2.5.

Table 2.5: PCK applied to FMS and low resource schools in this study

PCK	FMS-based application examples
Subject matter knowledge (also known as CK or CCK)	What are FMS, why are they important and how do they relate to other physical activities and contribute to motor development? What rules and etiquette, techniques and tactics and common errors should be considered for Grades R to Three learners in low resource schools? What are the phases and stages of FMS development (Graham et al., 2012; New South Wales Department of Education and Training, 2000) and how do they apply to learners in low resource schools?
Knowledge of curriculum (also known as KCC)	Where do FMS feature within the CAPS and how are they presented from Grades R to Three in terms of physical activities, games, perceptual-motor activities and/or indigenous games (Department of Basic Education: Republic of South Africa, 2011)? How do these relate to learners in low resource schools?
Knowledge of teaching methods (also known as KCT)	How can FMS be taught to Grades R to Three learners in low resource schools when using Mosston's teaching styles (Mosston & Ashworth, 1990) and Metzler's teaching models (Metzler, 2017)?
Knowledge of student learning (also known as KCS)	What are learners' social, physical, affective, and cognitive developmental levels in low resource schools and how does this affect how learners will be able to perform FMS on their own and with other learners in pairs or group settings (New South Wales Department of Education and Training, 2000)?
Knowledge of PE assessment	How are FMS assessed? The most common assessment tool employed is the Test of Gross Motor Development (TGMD- I, II or III) (Webster & Ulrich, 2017). How are they assessed in the CAPS document and why?
Knowledge of instructional environment	What does the low resource school environment entail and how does this context affect how a teacher will organise, manage, instruct and guide students? How will this context affect how the teacher gives appropriate feedback and motivation whilst developing learners' FMS? How is discipline maintained and the intended outcomes of a session met?
Horizontal content knowledge (HCK)	How does FMS development and PE programming change from Grades R to Three and how does learners' development change from one year to the next in low resource schools?
Knowledge of "self" and beliefs regarding subject	What are teachers' beliefs, assumptions, attitudes and values towards PE and FMS programming regarding subject matter, KCC, KCT, KCS, FMS assessments, the instructional environment and HCK?
Knowledge of reflective practice	How do teachers critically reflect on "the self" in relation to KCC, KCT, KCS, FMS assessments, the instructional environment and HCK? How do teachers include descriptive reflection, comparative reflective conversations and critically reflective conversations (Zwozdiak-Myers, 2012)?
Key words: Content Knowledge (CK); Common Content Knowledge (CCK); Knowledge of curriculum (KCC) Specialised Content Knowledge (SCK); Knowledge of Content and Teaching (KCT); Horizontal Content Knowledge (HCK); Knowledge of Content and Learners (KCS)	

It should be noted that I added knowledge of "the self" and personal beliefs, together with knowledge of reflective practice to my conceptualisation of PCK of FMS (Table 2.5). According to Capel and Whitehead (2012) and Yidana and Lawal (2015), teachers should know how their own perceptions affect their choices in teaching PE. I also incorporated critical reflection and reflexivity as having knowledge of "the self"; not being able to identify, challenge and change certain behaviours is not conducive to learning and improving teaching practice whilst implementing PCK (Capel & Whitehead, 2012; Yidana & Lawal, 2015). Finally, I also considered the inclusion of the low resource school context and how Foundation Phase teachers would need to incorporate the disadvantaged context into their decision-making processes. Table 2.5 does not constitute an extensive list of FMS-based PCK related questions and is merely a starting point for Foundation Phase teachers to unpack as they navigate the implementation of PE in their low resource school settings.

When considering the learner (that is, KCS), teaching methodology (that is, KCT), how to progress and regress FMS programming from one PE session to the next and one year to the next (that is, HCK), how to align this with the school's PE curriculum (that is, CCK) and how all these aforesaid components are merged to meet learners' needs (that is, SCK), limited consensus in research exists regarding FMS development. For example, in systematic reviews on FMS interventions, the duration, frequency and how FMS are to be implemented are inconclusive (Dudley et al., 2011; Lai et al., 2014; Riethmuller et al., 2009; Veldman et al., 2016; Wick et al., 2017). General guidelines for FMS programme creations do present in research undertaken by Gallahue and Donnelly (2007) and Graham et al. (2012), and indicate the importance of ensuring: 1) Age-appropriate training programmes; 2) The employment of skills-based training (that is, drill- or game-based focused sessions); 3) The correct progression and regression of training; and 4) Teachers employing the correct pedagogical approach. Chow, Davids, Button and Renshaw (2015) believe that the correct pedagogical approach is to include a nonlinear pedagogy; that is, pedagogical practices that do not include verbal instructions and feedback on how to do something, nor prescriptive movement solutions. The authors contend that feedback that encourages the exploration and use of learning strategies to allow natural self-organisation processes to take place, is appropriate for FMS development. The TGFU approach to FMS development, which includes playing games, participating in drills and asking learners tactical and technical questions to develop their FMS (Drost & Todorovich, 2013), is an alternative option. Incorporating games into FMS development is advocated for by Smith (2014), while keeping skills-based training and games separate is negated. Other

general guidelines for PE classes include Rovengo and Bandhauer's (2016, p. 77) recommendation that learners should be physically active 50% (or more) of the time. Furthermore, Graham et al. (2012) advocate that a teacher should have at least ten to fifteen tasks prepared, depending on the nature of the task and the length of the lesson.

Only two hours per week are dedicated to Foundation Phase PE teaching at schools (Department of Basic Education: Republic of South Africa, 2011). This is the duration available to teachers for FMS instruction. In terms of the frequency of FMS programming, this could equate to a 30-minutes' (or less), or a 45- or 60-minutes' session, depending on teachers' timetables at schools. What exactly is done within each timeslot will depend on the Foundation Phase teachers' reflections on the PE curriculum and teaching styles, their learners' needs, and the environmental context at their schools.

It is not clear how FMS programming should take place. Therefore, for the purposes of my study, I provided teachers with the relevant content knowledge discussed up until this point. Their exploration and implementation thereof into their low resource school context dictated what could or could not take place. Exploring how teachers empowered themselves to implement PE within their low resource schools where many barriers to PE present, was a focus of my study. My assumption is that if teachers are empowered to implement PE, and have the advocacy to do so, their learners will experience meaningful PE. Research shows that improvements in FMS proficiency can take place in learners attending low resource schools if they are given the opportunity to do so (Burns, Fu, Hannon & Brusseau, 2017). Foundation Phase teachers therefore need to explore the different PCK constructs at their respective schools to identify the best way forward. The platform where this awareness can be fostered is either in Foundation Phase teachers' pre- or in-service training.

2.7 SUMMARY

PE within the South African context is not being successfully implemented in low resource schools, and this is especially true for the Eastern Cape, where most schools fall in the Quintile Three (or less) category. The lack of PE implementation is especially a concern in the Foundation Phase, where learners' (approximately 6 to 9 years old) motor development and movement proficiency is meant to be fostered. Learners living in disadvantaged communities often do not experience extra-mural activities for fear of violence and danger, lack of parental

involvement and infrastructural deficits. Supporting Foundation Phase teachers in these contexts with developing their PCK for FMS development of their learners is therefore justified, especially since PE can serve as one of the buffers to the negative side effects of residing in poverty. As the CAPS does not adequately support generalist teachers to implement QPE and pre- and in-service PE training is inadequate, supporting Foundation Phase teachers through adopting a collaborative and transformative teacher training model may yield the empowerment and advocacy results needed by Foundation Phase teachers working in a low resource school context.

In the next chapter I provide an in-depth overview of the theoretical framework that I adopted for the purpose of achieving the primary aim of this study, namely to explore and develop a collaborative process of CPTD to enrich Foundation Phase teachers' PCK for teaching PE and FMS within the context of social disadvantage.

CHAPTER THREE: A CRITICAL DISCUSSION OF THE THEORIES UNDERPINNING THIS STUDY

"If you truly want to understand something, try to change it" **(Kurt Lewin)**

3.1 INTRODUCTION

In this chapter, I provide an overview of the theoretical foundations central to this study. I chose a transformative and collaborative CPTD model for the purpose of this study, and therefore empowerment was one of my primary outcomes when working with teachers. To foster teacher equality, advocacy, social justice and empowerment within the CPTD experience, I adopted the critical theory approach (Brookfield, 2005) as a vehicle. To understand how teachers identified, challenged and changed their PE practice through a critically reflective process, I implemented the transformative learning theory (Mezirow, 1997). For teachers to collaboratively reflect and understand the changes that took place, I used the transtheoretical model of cognitive-behavioural change (Prochaska & DiClemente, 1983). In the following sections, I unpack each theory in detail and in relation to the primary aim of this study, namely the enrichment of Foundation Phase teachers' PCK of FMS for their low resource school contexts.

3.2 CRITICAL THEORY

According to Brookfield (2005), the following encompasses being a critical theorist: "Being able to identify, and then to challenge and change, the process by which a grossly iniquitous society uses dominant ideology to convince people this is a normal state of affairs" (p. iii). Applied to this study, employing critical theory included teachers collaboratively identifying, challenging and changing their PE practice, based on their individual and collective critical reflections, versus being provided with a pre-packaged and standardised PE-based CPTD experience created by me. The latter approach to CPTD was advocated against over a decade ago when considering teacher education (Webb, 1996). Locating teachers as the agents of change in their teaching and learning context was deemed as a form of counter-politics within CPTD, as teachers were not viewed as consumers of knowledge created by experts, but were instead positioned as "capable, reflexive and resourceful practitioners and decision-makers" (Charteris, 2015, p. 1).

Mogashoa (2018, p. 23) believes that the integration of critical theory in CPTD can "assist teachers in realising that political and social reality is not fixed, but that these concepts can be changed and transformed by those living in that society or environment". Furthermore, Hill et al. (2018) argue that creating a platform for critical consciousness in teacher education is key to helping teachers identify the social injustices that may present whilst implementing PE. In South African PE, critical consciousness regarding equality and social justices should be constants in teacher development, given our history of exclusion based on sex, race, sexuality, class and education, level of physical or mental disability, religion and culture (Amusa & Toriola, 2010; Burnett, 2018b; Conchar, Bantjes, Swartz & Derman, 2016; Francis, 2017; John, 2018). According to Brookfield (2005), the goal of critical theory in adult education is for adults to learn how to "develop agency - the capacity to exert influence on the world through the exercise of individual and collective power" (p. 48). Therefore, through providing teachers with a voice within their CPTD experiences, I assumed a platform could be created for their individual and collective advocacy to be exerted so that PE could be integrated into their school contexts.

There are key attributes to critical theory that need to be considered to ensure that equality, empowerment, liberation, advocacy and social justice are fostered in adult learning experiences. Firstly, the individual and collective motivation and needs of a team of teachers need to be encompassed versus an agenda enforced by those in power (Webb, 1996). Teachers would therefore choose to join a given cause, identify that they have a common interest with their colleagues (or others), and realise that what affects their day-to-day practice lies within their own hands to change. Brookfield (2005) adds to this analogy by sharing that the validity of the application of critical theory can be proven by how the outcomes of a project capture the hopes and dreams of the people involved. Mokhele and Jita's (2012) use of critical theory in a South African-based CPTD programme attests to these sentiments by concluding that the inclusion of teachers in the planning process facilitates the alignment of teachers' personal circumstances and motivation with CPTD outcomes. This process, in return, ensures that teachers have meaningful CPTD experiences, characterised by sustainable, transformative, and life-changing outcomes. As teachers are most familiar with the problems they encounter in their school contexts, they are best suited to debate the direction of their CPTD experiences.

A second element to the critical theory facilitating the first element (identifying oppression) is aiming to be liberated from it through changing the way one thinks about a given phenomenon (Webb, 1996). Therefore, action is an important part of the critical theory. Critical theory is focused on a vision of what a social system could be, versus stating what it currently is (Brookfield, 2005). The outcome of the social change that takes place should be to re-construct the political system towards a more rational existence, where everyone within a social construct contributes equally (Brookfield, 2005). Applied to this study, depending on how PE is implemented at a school and which socio-political factors affect the implementation thereof, teachers would need to first realise that they can change, and then decide to challenge and change their reality. The degree of advocacy that can be fostered by teachers, according to Biesta and Tedder (2007, p. 137), will depend on the "interplay between individual effort, available resources and contextual and structural factors". Each factor would need to be unpacked collectively by teachers and other key stakeholders for transformation to transpire.

A third element to critical theory is the inclusion of critical reflection and reflexivity (Brookfield, 2005). Perception is the culmination of values, beliefs, assumptions and attitudes and therefore each individual and team would need to determine whether their perceptions are valid. The notion of stopping to think critically during academic development is supported by Sutherland (2013), who explains it as follows,

> Critical reflection requires us to ponder our practices, processes, and identities. It also requires us to look beyond our own circumstances to the external factors, policies, and people that might influence the choices we make and the actions we take. (p. 111)

Kemmis et al. (2014, p. 34-36) furthermore recommend that the team-based critically reflective process includes questions such as: *What is our focus, why is this our focus? How will we achieve this focus? How will we monitor our achievements? Who do we need to involve in achieving our focus and why? By when do we want to achieve our focus, and where will this take place and why?* Kemmis et al. (2014) believe that once the collectively decided plan of action is in place, the team should ask whether the implemented plan resulted in outcomes that are "more rational and reasonable, more productive and sustainable, and more just and inclusive" (p. 142-143).

When applying critical reflection to the PE construct, Zwozdiak-Myers (2012) finds critically reflective conversations assist teachers in learning how their choices (for example "objectives, learning outcomes, and teaching strategies") can reflect their school context's "cultural, ethical, ideological, moral, political and social purposes" (p. 142-143). The authors furthermore include descriptive and comparative reflective conversations as part of critical reflection. Descriptive reflection refers to identifying one's strengths and weaknesses in presenting PE lessons, while comparative reflection refers to identifying how one's "personal assumptions, beliefs, theories, values and conceptions of teaching compare to that of others" (p. 142-143).

A fourth element to critical theory is the inclusion of critical dialogue. This type of dialogue encompasses no one-way communication, with everyone having an opportunity to talk, everyone being encouraged by fellow participants to talk, status and power being nullified, disagreement being integrated into the conversation, and the conversation fostering joint action (Kemmis et al., 2014). The power of a person's argument therefore carries the day, versus a particular person or group being in power (Webb, 1996). PE is socially constructed and therefore what it is, how it is implemented and why, is affected by the individuals within a given social context (Coulter & Chróinín, 2013). Teachers do not work in isolation. They work within a community that includes society, government, learners, colleagues and parents' perceptions and needs (Gaudreault et al., 2018). Applied to the study context, critical debates may include the lower perceived value of PE when compared to academic subjects (such as Mathematics) and thus the marginalisation thereof within the educational curriculum (UNESCO & North Western Counties Physical Education Association (UK), 2014). Also, and as Evans and Penney (2002) established in their book called "Politics, Policy and Practice in Physical Education", PE may be marginalised for other political agendas, such as sport. The improvement of elite sport versus the health of the general population through mass participation programmes has been often contested in discussions (Bailey & Talbot, 2015; Grix & Carmichael, 2012; Jacobs, De Bosscher, Venter & Scheerder, 2019). Teachers who implement PE will therefore need to be empowered to know what is best for their school context and their learners and understand the implications thereof. Identifying ideologies that do not serve quality education and instead are based on maintaining social injustices, inequality and oppression is a critical element in adult education (Brookfield, 2005).

The fifth element to critical theory is providing individuals with the knowledge and understanding they need to free themselves from oppression (Brookfield, 2005). Within a CPTD experience, providing teachers with the opportunity to identify their own subject matter and PCK needs, based on their collective critical reflections and contextual factors, can be considered as a starting point to action initiation, behavioural change and advocacy. The importance of subject matter knowledge for the improvement of teachers' PCK development and confidence and learners' achievement improvements has been illustrated in research (Iserbyt et al., 2015). Mokhele and Jita's (2012) exploration of critical theory in adult education moreover demonstrates that teachers believe that the inclusion of content and application in context is key to their learning experience. It should be kept in mind that the knowledge and understanding teachers require to advocate for what they believe in may supersede subject matter and PCK. Depending on the situation, other forms of knowledge (such as financial, human resources, law, politics, psychological, organisational, and so forth) may be warranted for teacher empowerment and a change within the system.

When the key elements to critical theory discussed thus far are implemented with a team of teachers, the differences between technical, practical and emancipatory action research should become clear (Zuber-Skerritt, 2013). Action research consists of cycles of planning, acting, observing and reflecting, and the outcome of these interactions dictates what type of action research project it is and how the researcher/facilitator will position her-/himself within the project (Zuber-Skerritt, 2013). As summarised by Zuber-Skerritt (2013) and when applied to teachers, in technical action research, teachers are viewed as consumers and supporters of innovation and participate in a project to reach a level of effectiveness perceived by the researcher/facilitator. Therefore, the researcher/facilitator is in charge and guides the decision-making process. Practical action research refers to teachers being co-designers of innovation and identifying problems, their causes and solutions. A process of Socratic questioning and self-reflection is initiated by the researcher/facilitator, and collaborative engagement ensues. Emancipatory action research includes the goals of practical action research but goes further to critique the socio-political constraints that affect education or the focus of education altogether. The facilitator's goal is to create a platform for enlightenment and to maintain power neutrality between all key stakeholders so that the multiple realities of all involved are captured. If critical theory is the adopted lens for an action research project, then emancipatory action research is the focus. In this study, to capture the learning process of teachers whilst applying critical theory, I applied the transformative theory to understand teachers' learning journeys.

3.3 TRANSFORMATIVE LEARNING THEORY

Transformative learning is defined as "learning that transforms problematic frames of reference to make them more inclusive, discriminating, reflective, open and emotionally able to change" (Mezirow, 2003, p. 59). Within this transformative journey, our meaning schemes (namely our personal paradigms that encompass our values, beliefs, feelings, expectations, interpretations and subsequent actions, also known as points of view) may be changed (Kitchenham, 2008; Mezirow, 2003). Our meaning perspectives (the structures of our assumptions based on our past experiences and how these transform new experiences and include a number of meaning schemes) (Kitchenham, 2008; Mezirow, 1991) may also be changed in order to affect our interpretation of life and our actions. Meaning perspectives are also known as habits of the mind or frames of reference and affect our day-to-day understanding and experience of life.

Dependency-producing assumptions or distorted meaning schemes and perspectives can emerge from childhood socialisation processes and how the economy, religion, politics, an occupation, bureaucracy, psychology, education and technology contribute to how our meaning schemes and perspectives develop (Mezirow, 1985). When applied to PE, teachers develop meaning schemes and perspectives regarding PE implementation from their life experiences in childhood, adolescence and adulthood (Capel & Whitehead, 2012). Furthermore, the process of implementing PE changes (such as changing the timetable, funding distributions, equipment procurement, colleague engagement, pedagogical content knowledge or teaching style) within a given context can be affected by teachers' dependency-producing assumptions of what they believe can be challenged and changed within the education system. As Mogashoa (2018) shared, helping teachers realise that the "political and social reality is not fixed, but that these concepts can be changed and transformed by those living in that society or environment" (p. 23) will be important if change is to be realised. Supporting teachers in unpacking their meaning schemes and perspectives regarding PE facilitates change.

To experience perspective transformation (that is, a meaning scheme and perspective change) when it comes to PE and the context in which PE takes place, teachers would need to engage in three different types of learning, namely instrumental, dialogic and self-reflective (Mezirow, 1985). Instrumental learning, when applied to PE, would include knowing how best to gain knowledge of the PE concepts and constructs and what does (or does not) work (Kitchenham, 2008). This type of learning takes place mainly from a positivist point of view through

identifying cause-and-effect, fact and hypothesis testing and using deductive reasoning (Mezirow, 1985). Dialogic learning would include teachers identifying where and when and with whom they can share their perceptions and interpretation of the PE-based instrumental learning or their PE experiences and how their views are similar or different, and why (Kitchenham, 2008; Mezirow, 1985). Understanding teachers' discourse (what language teachers are using, how and why) within dialogic learning will furthermore facilitate identifying whether what is being said is true, comprehensible, sincere and appropriate to the PE situation within a given school context (Mezirow, 1985). However, the dialogic learning process can be transformative only if teachers are free from coercion, have equal opportunities to talk, power relations are minimised or omitted, listen to each other with empathy, and search for a common goal (Mezirow, 1997). The last and most important form of learning is self-reflective learning, as it is the type of learning in which we understand why our views are similar or different to others, how our choices affect us and others around us, why we choose a specific course of action, and from where our assumptions and actions originated (Kitchenham, 2008). The self-reflective process therefore facilitates us to unlearn dependency-producing assumptions that no longer serve our adulthood-based opportunities for autonomous thinking and self-directed learning (Kitchenham, 2008; Mezirow, 1985).

Kitchenham (2008) and Mezirow and Tayslor (2011) have added to the type of critical reflection needed in the transformative learning journey, sharing that as adults we should: 1) Reflect on what we perceive and feel or what we know and how we used and experienced this state of being in a given context (known as content reflection); 2) How we process what we perceive and feel or what language we and others use within a given field and how we experienced this (process reflection); and 3) Why we perceive and feel and process information in the manner we do or why we differ in relation to others (known as epistemic reflection). When applied to teachers and this study's focus, content reflection could include teachers reflecting on what FMS knowledge they have, how they feel about PE and FMS, and how this makes them react to FMS-based PE programming. Whilst employing process reflection, teachers may reflect on how they use their PCK of FMS within their school context, how their learners respond to it and why and how their colleagues respond to their efforts. Using premise reflection, teachers may start to reflect on why they assume and respond to a given PCK of FMS experience, how this compares to that of others and why, and why they focused on FMS in the first place. In summary, whilst critically reflecting, teachers should ask themselves what do I know, how do I use this information, and why have I used this information and done things

in this way in the first place? According to Kitchenham (2008), premise reflection is the deepest level of transformative learning, because the questioning of why one is doing something in the first place results in a more global view of all factors affecting one's decision-making processes.

Some key elements in transformative learning need to be included whilst collaborating with teachers. These include: 1) Individual experiences; 2) Critical reflection; 3) Dialogue; 4) Holistic orientation; 5) Awareness of context; and 6) An authentic practice (Mezirow & Taylor, 2011). When applied to PE, an adult-based learning session would therefore need to encompass: 1) Teachers' PE experiences; 2) Teachers critically reflecting on what, how and why they implement PE; 3) Democratic dialogue with colleagues and/or key stakeholders involved in PE; 4) Teachers expressing their feelings through numerous artistic (singing, art, dance, posters) endeavours that allow for holistic learning; 5) Contextual awareness of factors that may hinder or foster transformation (such as the time, policy, history and social relations within a given construct); and 6) Authentic learning experiences, including building trust and a genuine interest in meeting each other's needs. These elements, if correctly applied, would work synergistically whilst a team of individuals build trust in a safe learning environment. However, Mezirow and Taylor (2011) warn that as transformation takes place within a social context, political consciousness will automatically become part and parcel of individual and social change; teachers should be prepared to engage in this discourse diplomatically. Within a school setting (where PE takes place), political disputes can emerge when a school lacks a vision adopted by management and staff, resulting in a dysfunctional school (Msila, 2011). Furthermore, conflict being misunderstood, avoided or halted due to Principals and management not being empowered with conflict management training before (or whilst) assuming leadership positions can result in dysfunctional schools (Msila, 2012). I would add that teacher conflict resolution skills should also be considered, as they too must know how to communicate with leadership, parents and other key stakeholders when changing within and when changing their environment to encompass PE.

The catalyst to starting the transformative learning journey, which consists of eleven distinct steps, commences with an experience that provokes an emotional response and awareness of disillusionment, a type of disorientating dilemma or a disruption point. Table 3.1 provides an overview of the transformative learning theory and I provide a fictitious example related to PE to explain the process.

Table 3.1:Transformative learning theory practically applied to fictitious PE example

Theme one: Disorientating dilemma (centrality of experience)		PE-based example
Step 1: Disorientating dilemma	An experience that disrupts an individual's meaning schemes and perspectives and creates ambiguity, uncertainty and doubt regarding how the world is interpreted.	A teacher believes that her learners struggle academically as they cannot write from left to right, see the board to copy notes, do not have the strength to sit upright in their chairs and are lethargic due to sitting the entire day. She believes her learners need PE to develop these skills, but she does not have the time to take them for PE.
Theme two: critical reflection		
Step 2: A self-examination with feelings of guilt or shame	Exploring what emotions are evoked within by the ambiguity, uncertainty and doubt. Starting to question why these feelings exist.	The teacher feels guilty, because she knows her learners need physical development, as they learn through movement and play. She feels like a failure, because she cannot achieve the outcomes of the CAPS. She feels that omitting PE is a disadvantage to her learners.
Step 3: A critical assessment of content/epistemic, process/socio-linguistics or premise/psychic assumptions	Specifically focusing on how the assumption was developed through 1) what knowledge we know and how we use it (content reflection); 2) how language was used in society to bring about the assumption (process reflection); 3) how we view the world based on our own psychology and how this affects our actions (premise).	The teacher starts to question whether she knows enough about PE to teach learners and how the CAPS is structured to save time (content reflection). She thinks about how her colleagues constantly say that PE is a waste of time, but that she believes it to be integral to child development (process reflection). She remembers her childhood and how much she loved PE, because it developed her social, physical, cognitive and affective skills. But now she feels too old and not capable (premise reflection). Are her thoughts justified and valid?
Theme three: rational discourse		
Step 4: Recognition that one's discontent and the process of transformation are shared and that others have negotiated a similar change.	To reflect on content, process, or premise assumptions through dialogue. This is the platform where norms, authenticity, understanding, validity and credibility can be questioned. It is also the platform for reflecting on what, how and why an individual or group of people do specific things. The dialogue should be characterised by the ability to objectively assess information, to have access to all relevant information (transparency), no coercion, empathy towards others, context awareness, an equal opportunity to share thoughts and a willingness to seek understanding and agreement for a decision made by the collective group until a more valid option presents itself.	The teacher decides to share PE assumptions and experiences with others through inviting teachers to express their PE journeys (no coercion). The Principal, HOD and others perceived as in positions of power are debated with to nullify power relations through creating trust and a safe space, grounded in empathy, and seeking understanding and agreement. The team objectively assesses PE information, weighing evidence and measuring insights to PE assumptions and experiences through content, process, and premise reflections. In so doing, the PE norms at the school are reviewed, the authenticity of assumptions are explored, understanding is fostered, and the validity and credibility of assumptions are questioned. Teachers therefore reflect on what, how and why they and their colleagues perceive and implement PE in the manner they do and explore the similarities and differences that present between colleagues' perceptions of PE.
Step 5: Exploration of options for new roles, relationships, and actions.	Through dialogue, new perceptions are fostered and different ways of viewing the world created. New roles, relationships and actions to dissipate the disorientating dilemma are explored.	New timetables to incorporate PE, opportunities for PE teacher training, management of school PE budget, assistance from outside sources (NGOs) and so forth are explored. No action takes place yet, just exploration.
Planning a course of action		

Step 6: Planning a course of action	The plan of action consists of steps 7 to 10. This includes identifying what, when, by whom, how and for what duration and why a specific action plan will be put in place.	Teachers choose a PE plan of action based on the explored options critically discussed. The plan includes, for example, re-arranging the timetable and PE budget and NGOs in assisting teachers with implementing PE.
Step 7: Acquiring knowledge and skills to implement the plan	Acquiring knowledge and skills to implement the plan.	To implement PE, the timetable re-arrangements are discussed with all staff and an NGO that works in the field of PE is sourced to explore what products it offers and whether this aligns with staff's needs. Furthermore, the budget available for PE is debated with key stakeholders. Other sources of money are sourced (e.g. Lotto).
Step 8: Trying out new roles	Trying out new roles.	Teachers try the new timetable, assess the NGOs programme implementations and review whether the budget allocation was sufficient.
Step 9: Negotiating new relationships or renegotiating existing relationships	Negotiating new relationships or renegotiating existing relationships.	Teachers decide that the timetable is not working and hence a redraft is required. The NGOs programme does not align with the CAPS document and hence negotiations on how to align the programme ensue. Budget allocations for staff development at the local university are made so that staff members are more empowered to facilitate NGOs with PE implementation.
Step 10: Building self-confidence in the new role	Building confidence and self-confidence in the new role.	Timetable is working. Staff members and NGOs are working together to develop a PE curriculum. Both groups have organised training at the local university to improve the programme's PE outcomes.
Re-integration into one's life		
Step 11: Re-integrating into one's life	Re-integrating into your life.	PE is an integral part of the school programme and both teachers and NGOs are involved in the process of developing learners' physical, affective, social, and cognitive needs. Teachers and NGOs meet often to discuss the programme for critical reflection.

Activities that can prompt an emotional response to or critical reflection on one's assumptions and world views include individuals sharing their experiences of experiential learning, reading controversial books/texts, writing in reflective journals, participating in value-based course work, debating an emotion-laden topic, experiencing something that challenges one's meaning schemes and perspectives, and/or reflecting on metaphors (to name but a few) (Taylor & Cranton, 2012). This is why transmission mode CPTD experiences minimally affect teachers' transformative learning experiences, as limited to no individual or collective experiences are shared, nor are any assumptions challenged (Kennedy, 2014). Instead, teachers mainly focus on content and reproducing what policy mandates. Therefore, to create a transformative learning experience, three central themes need to be included in CPTD experiences, namely: 1) The individual experience and critically reflecting on assumptions (that is, a centrality of experience); 2) Discourse to validate the critical reflections; and 3) Action (Dochy, Gijbels, Segers & Van den Bossche, 2012).

The goal of transformative learning is that the new meaning scheme and perspectives should result in a superior perspective, which has several features, namely (Mezirow, 1989):

> …[it] is more inclusive, discriminating, and integrative of experience; is based on a wider scope of information available; is freer from coercion and distortion and is less restricted by self-deception; is more open to other perspectives and to the points of view of others; is more rational in assessing competing arguments and substantiation; is more critically reflective; and is more willing to accept an informed and rational consensus of authority for adjudicating conflicting validity claims. (p. 22)

Teachers within a team will need to reflect on whether the transformative journey resulted in a superior perspective. However, each would need to keep in mind that each individual will be at different levels of change and will experience the steps depicted in Table 3.1 within the transformative learning process differently. Understanding which phase of change a teacher is in, and why, can be explained by employing the transtheoretical model of cognitive-behavioural change. Also, with the different types of critical reflection in mind, it is not surprising that a transformative learning journey will take time, consisting of a spiralling process of revisiting a learning area over a long-term period, instead of a linear learning process (Moore, 2005). As meaning schemes and perspectives need to be redefined and re-problematised from different points of view for new meaning to emerge, cyclical revisits are necessary (Mezirow, 1985).

3.4 TRANSTHEORETICAL MODEL OF COGNITIVE-BEHAVIOURAL CHANGE

Through the transformative learning journey, individuals' perceptions and actions can be changed. However, each person will have different change experiences. People will be at different readiness levels for change, have their own timelines for change, stagnate at a specific stage, completely revert to previous stages, or bypass all stages to implement a change almost immediately (Prochaska, Wright & Velicer, 2008). This transformation in perception and behaviour has been captured in the transtheoretical model of cognitive-behavioural change (Prochaska & DiClemente, 1983). Understanding which stage of change teachers are in when considering their PE implementation, can facilitate with comprehending what may affect their change and how and why they do (or do not) change.

Changing meaning schemes and perspectives is not a linear process; it requires cyclical revisits to redefine and re-problematise a scenario (Mezirow, 1985). Figure 3.1 depicts this cyclical process and includes the stages of change within the transtheoretical model of cognitive-behavioural change (Prochaska & DiClemente, 1983), namely the pre-contemplation, contemplation, preparation, action, maintenance and termination stages.

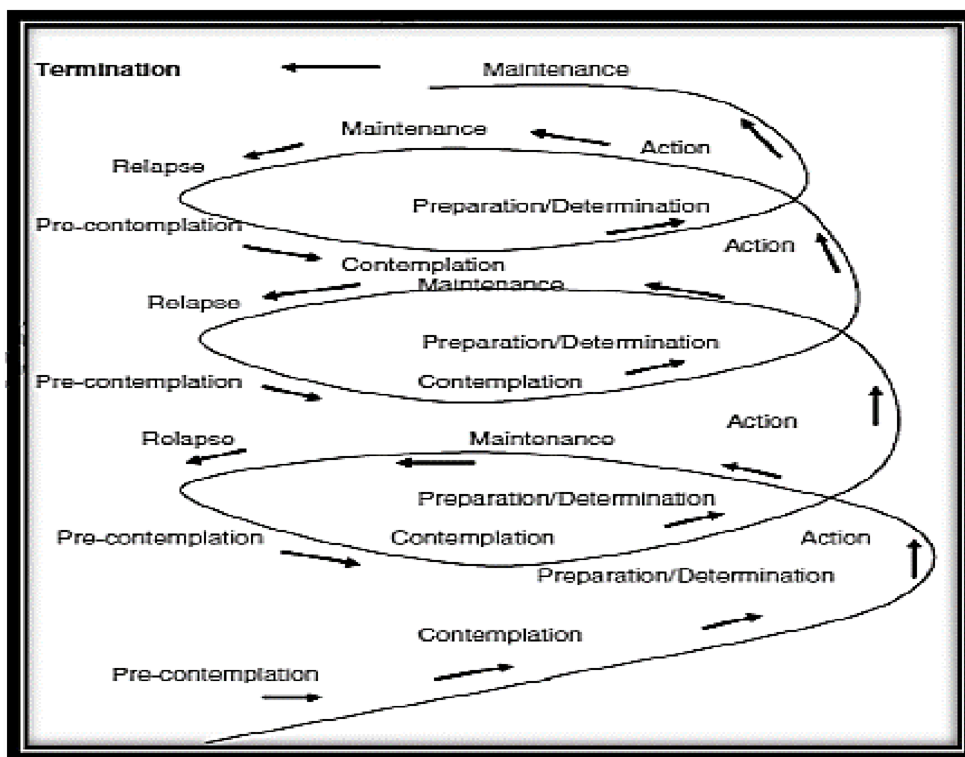


Figure 3.1: Cyclical pattern through the stages of change (Moore, 2005, p. 412)

Applying the stages of change to teachers' transformative learning processes and their decisions regarding their PCK of FMS implementation at their low resource schools can facilitate with understanding the theory in relation to this study (Moore, 2005; Prochaska & DiClemente, 1983; Prochaska et al., 2008). The pre-contemplation stage refers to teachers not having any inclination to change their PE practices within the next six months. If they are in this stage of change, then the teachers will be resistant to change or will implement the change only if they are pressured to do so. If the pressure is removed, they will revert to their normal PE practices. Those teachers who are not coerced into participating in a collaborative and transformative PE-based CPTD process and instead volunteer, can be thought of as teachers in the next stages of change. That is, either in the contemplation, preparation, action, maintenance, or termination stages of change. If teachers are in the contemplation stage of change, they will be wanting to change their PE practices within the next three months, but will not yet be fully committed to changing their practices. Instead, the teachers will be weighing up the benefits and costs of changing and evaluating their self-efficacy to be able to adopt the change. There is hence no action or change in behaviour and only the consideration of change. During a CPTD experience, these teachers will most likely be evaluating the costs and benefits of PE implementation changes, determining their level of self-efficacy regarding PE implementation, and wanting to improve their self-efficacy (if convinced that change is necessary). Teachers who are in the preparation phase will be aiming to change their PE practices within the next 30 days and will be bolstering about the changes they want to make, continuing to find ways in which they can build their self-efficacy for the changes they would like to be making and will be preparing to implement their plan of action. No change will be taking place; instead, plans to change will be the focus of the CPTD experience. Teachers in the action stage will be in the process of modifying their environment, relationships and behaviours and achieving some changes in their PE implementation, which can be seen by others. This stage of change lasts about six months and if teachers join a CPTD course, it may be part of their commitment to continue modifying their environment, relationships and behaviour together with self-efficacy. Those teachers in the maintenance phase, which starts about six months after the action phase and lasts for another six months, will be aiming to prevent relapses to previous phases. Regression can be expected in any of the stages of change. The termination phase will be achieved when teachers have reached their PE goals, are fully confident in their abilities to do so and have no temptation to go back to the normal way they used to implement PE at their school. According to Prochaska, DiClemente and Norcross (1992), the entire cyclical process of change can take up to two years before the termination phase is reached. Adopting the

change is also not guaranteed, as individuals may regress, stagnate, or stop the change process altogether. Those facilitating change with teachers would need to be cognisant of the cyclical process of change and each individual and the team's change needs.

Moore (2005) attempts to integrate the transformative learning theory with the transtheoretical model of cognitive-behavioural change through showing the similarities that exist between each theory. Both theories show how individuals change their perspectives from previously held beliefs, attitudes, values and feelings that have constricted or distorted their life views and have helped them transform and emancipate themselves to be able to change. Of interest within Moore's (2005) research, are the ten change management strategies that can be experienced during the six stages of change within the transtheoretical model of cognitive-behavioural change (Prochaska et al., 1992); namely consciousness raising, self-evaluation, self-liberation, counter-conditioning, reinforcement management, finding helping relationships, participating in dramatic relief, environmental re-evaluation and social liberation (Moore, 2005).

Applying these constructs to PE can aid understanding the definition thereof in relation to this study and what teachers may possibly include in their change processes. For example, consciousness raising is defined as becoming aware of and increasing one's knowledge about oneself and the nature of a problem that exists. It is similar to the step one and step two of the transformative learning theory, which includes the disorientating dilemma (that is, an experience disrupting an individual's meaning schemes and perspectives and creating ambiguity, uncertainty and doubt) and self-examination with feelings of guilt or shame. The latter step refers to teachers exploring what emotions are evoked by the ambiguity, uncertainty and doubt of their PE practices and beginning to question why these exist. An example includes teachers thinking about their PE implementation and how it is not being implemented (and the consequent negative health effects on their learners' development) or how children respond to the type of programming they use, such as command style teaching, which provides children with limited opportunity for self-expression. The feelings that may accompany these thoughts could include confusion, frustration, guilt and/or sadness, evoking a response to reflect.

Self- re-evaluation would involve teachers assessing whether the problem they have identified really exists, what their assumptions are regarding the problem and the costs and benefits of a change in PE practices if they were to adopt a different way of teaching. According to Moore (2005), self- re-evaluation is similar to step two of the transformative learning theory, namely

taking part in critical reflection, which consists of content/epistemic, process/sociolinguistic and premise/psychic reflections. Teachers would therefore ask: 1) What PE knowledge do I know and how am I using it? (content or epistemic reflection); 2) How was language used in my classroom or at school to bring about my assumption? (sociolinguistic or process reflections); and 3) How is my view of the world based on my own psychology affecting my assumptions and actions? (premise/psychic reflections).

Self-liberation includes teachers making a commitment to change their PE practice and believing they can change the situation. No action takes place yet. However, once teachers do commit to change, they may use counter-conditioning, which includes replacing unhealthy habits with healthy habits. In a PE context, this could include completing PE in the morning or just before break to prevent disruption to the academic schedule and to ensure that learners get their morning or mid-day exercise. It could also include planning PE lessons or advocating for a change in how the school sets up its financial budgets so that PE equipment is available.

Environmental control, which includes removing stimuli from the environment that may cause change not to occur or a relapse, can also be used to facilitate change. In a PE context, this could include discussing PE work with colleagues who are interested in it, versus colleagues who are not, thus fostering added positivity to implementing PE versus negating it for perceived priority subjects (such as Mathematics).

Reinforcement management, which is rewarding oneself and others if change is implemented, can furthermore be employed. In a school context, teachers could reward themselves or others for implementing PE through changing the recognition policy at school. Finding helping relationships, which includes sourcing people who can facilitate with making the change, is moreover a support mechanism to facilitate change. Teachers implementing PE may decide to source NGOs who implement PE or CPTD facilitators for additional training. Financial support can be sourced from Lotto funds or parental involvement can be augmented through asking parents to assist with PE implementation (with, for example, setting up equipment or assisting with large class management).

Teachers may also opt for social liberation, which includes finding ways to advocate for change within the social context in which change is needed, whilst implementing PE. If the policy at

school prohibits PE implementation, teachers would be in the best position to explain why this should be changed and advocate for change.

Dramatic relief is an additional measure employed to facilitate the change process and consists of working through and experiencing the thoughts and emotions evoked through role playing or psychodramas. Teachers may opt to share their PE experiences with others and participate in PE-based lesson plans with colleagues or others to emulate the positive feelings that may be evoked during a PE session. However, they may also take a PE experience and discuss the frustrations they experience whilst implementing PE with, for example, a large class or in a school system where policy does not support PE implementation.

Environmental re-evaluation may also be used to identify the bigger picture regarding what is affecting PE implementation and/or how the lack of PE implementation is affecting the environment in which teaching and learning takes place. Through doing so, the benefits and negatives of change within the environment and from the self can be identified and acted on.

3.5 SUMMARY

In this chapter, I discussed the three main theories underpinning this study. Through discussing critical theory, I emphasised how the inclusion of teachers in the planning and implementation of CPTD was a form of counter-politics. In so doing, democratic and collaborative CPTD practices can align with the transformational agenda of government's 2030 National Development Plan. Key elements of implementing the principles of critical theory when collaborating with Foundation Phase teachers include: 1) Considering their individual and collective motivations and needs versus an enforced agenda by myself or others perceived to be in power; 2) Not only identifying oppression, but aiming to be liberated from it through identifying, challenging and changing the PE (or other) status quo regarding a school system; 3) Including critical reflection and reflexivity; 4) Ensuring critical and democratic dialogue; and 5) exploring teachers' beliefs regarding the knowledge they need to liberate themselves. Through exploring the transformative learning theory, the second theory I used, I came to understand that the following should be included in CPTD: 1) Individual experiences; 2) Critical reflection; 3) Dialogue; 4) A holistic orientation; 5) Awareness of context; and 6) Authentic practices. Changing meaning schemes and perspectives is not a linear process, but requires cyclical revisits to redefine and re-problematise a scenario. The transtheoretical model

of cognitive-behavioural change, the third theory I employed, highlights that teachers will be at different stages of readiness to change their PE practices. Teachers may progress and regress throughout the change stages and will require different support within each stage of change. In the next chapter, I provide a theoretical justification for the methodology used.

CHAPTER FOUR: THEORETICAL JUSTIFICATION OF METHODOLOGY USED IN STUDY

"Greatness is not born from one success. It's born from persevering through the countless failed attempts that preceded it" **(Simon Sinek)**

4.1 INTRODUCTION

In this chapter I describe my philosophical viewpoint and justify my choice of research methodology. This study was a journey of learning for me. I originally learnt to conduct research in Human Movement Science from a positivist paradigm, using quantitative instruments for data collection and analysis. However, when I began to work in an educational context, I realised that this paradigm was not always suitable and depended on the focus of the research. A problem that seemed to persist in the PE field, is that teachers did not always implement the programmes provided to them by the NGOs or the researchers I had collaborated with, even when equipment, CPTD and human resource support were provided. I therefore adopted an interpretive paradigm and qualitative approach to enable me to understand how teachers perceived, experienced and taught PE in schools in under-resourced contexts. Once I understood what teachers were experiencing at schools, I recognised that I needed to collaborate with them to help them change.

Collaboration required a shift to a participatory paradigm and design that would enable teachers to effect change in their practice. This decision was also based on my reading of the CPTD literature, which supports the effectiveness of initiatives that involve teachers in deciding what, why and how they need to learn. Therefore, my study was conducted in two phases. Phase One comprised a traditional qualitative enquiry among 24 teachers. Phase Two followed a participatory design, in which I collaborated with ten teachers to find ways to improve their teaching of PE, specifically focusing on the FMS development of their learners. I explain both phases in this chapter, outlining the research paradigm, design and methods used. I also explain how both the quality of the data and the ethical conduct of the research process were ensured.

4.2 PHASE ONE

4.2.1 Research paradigm

To gain in-depth understanding regarding Foundation Phase teachers' experiences of implementing PE in low resource schools through a qualitative enquiry, for Phase One of this study, I positioned myself within the interpretive paradigm (Scotland, 2012; Willis, Jost & Nilakanta, 2007). The interpretive paradigm facilitated me with an in-depth understanding of teachers' varied PE experiences.

The ontological preferences of researchers refer to their assumptions regarding the nature of reality, how things really are and how things really work (Killam, 2013; Scotland, 2012). I aimed to understand teachers' subjective (and thus different) perceptions and experiences of how they taught PE at their respective schools. This understanding of reality was in contrast to adopting, for example, a positivist ontology, where teachers' experiences of PE would have been assumed to be universal and quantifiable, and therefore predictable and generalisable (Killam, 2013).

Epistemology refers to the nature and forms of knowledge and therefore researchers' assumptions concerned with how knowledge is "created, acquired, and communicated" (Scotland, 2012, p. 9). An interpretive paradigm views knowledge as both individually and socially co-constructed through conscious interactions with the world and others (Scotland, 2012). Knowledge is therefore historically situated and culturally derived. Applied to this study, I thus understood teachers' subjective knowledge of their PE experiences as routed in their historical experiences and the culture of the school, and as communicated with others to create shared knowledge within their school contexts.

In the interpretive paradigm, qualitative methodology is employed to capture and understand an individual or group of individuals' world views, interactions, and/or personal motives. These shape individual or group reasoning, decision-making and behaviours within a given social phenomenon and context (Riazi, 2016). The strategy of enquiry I employed for Phase One of this study was phenomenology, which aims to identify an individual's direct experiences, without interference from any existing preconceptions on the part of the researcher through asking open-ended questions and allowing participants to share their stories (Smith et al.,

2009). In the following section, I elaborate on the methodology I used for the study design of Phase One.

4.2.2 Study design

I adopted an interpretative phenomenological analysis (IPA) design (Smith et al., 2009) for this study. IPA is a phenomenological method, meaning that it focuses on capturing participants' unique, individual, and subjective feelings and experiences through qualitative methods (Smith et al., 2009). The qualitative methodology I used in my study guided my attempts to interpret how teachers made sense of their PE experiences, and how my own learning and experiences influenced how I did so. In other words, I used a double hermeneutic approach (Smith et al., 2009). The underlying foundation of IPA for me, as the researcher, was to understand what it was like to be a teacher implementing PE in low resource schools and how the participating teachers made sense of their experience.

4.2.3 Research methods

4.2.3.1 Sampling

I employed purposive and convenience sampling (Patton, 2014), generating 24 semi-structured interviews with Foundation Phase teachers from New Brighton and Northern Areas Quintile Three schools – "no fee schools" and low resource schools in historically disadvantaged communities (Veriava, Thom & Hodgson, 2017). I had worked with an NGO in New Brighton schools, implementing PE with Intermediate Phase teachers and learners for a three-year period. I therefore had an existing relationship with these schools. I asked the relevant Principal and HOD of each site to recommend the teachers they believed would best meet my criteria for this study, i.e. Foundation Phase teachers working at a low resource school. As all teachers are mandated by government to implement PE (Department of Basic Education: Republic of South Africa, 2011), I assumed that all Foundation Phase teachers would be involved, directly or indirectly, in the implementation of the two hours of PE per week. Twelve teachers volunteered; three from each of the four New Brighton schools. As the New Brighton teachers often mentioned a pattern of their learners leaving their schools to go to Northern Areas schools, I decided to include Northern Areas teachers in my study, as it seemed (through my experiences at schools) as though this population group might have different PE experiences.

Although IPA studies normally involve small groups of six to fifteen people (Smith et al., 2009), I believed that as the Northern Areas schools predominantly had Coloured teachers, this

population group may have different PE experiences from the principally Black New Brighton teachers. To recruit Northern Areas teachers, I obtained a list of all the Northern Areas schools from the Education Department and phoned each school, in alphabetical order. I started with two schools and then progressed from there. Once a Principal agreed that he/she was interested in participating in the study, the Principal and HOD were asked to suggest Foundation Phase teachers that might be willing to participate. I then asked for volunteers, and ended up with 12 interviews; that is, three teachers from each of the four Northern Areas schools I ended up sampling. Table 4.1 depicts the biographical profiles of the teachers interviewed.

Table 4.1: Biographical profile of Phase One participants

C	A	S	G	YT	PEF	PED	N	Years (qualification)
J1	>50	F	3	18	1	30	36	3 (diploma)
J2	46	F	3	12	1	30	40	3 (diploma)
J3	50	F	2	15	2	30	58***	3 (diploma)
M1	43	F	3	15	2	30	30***	3 (diploma); 1 (ACE)
M2	55	F	2	18**	0	0	31	3 (diploma)
M3	52	F	1	21	2	30	30	3 (diploma)
L1	73	F	2	35*	0	0	32	2 (diploma)
L2	60	F	1	35	0	0	55***	3 (diploma)
L3	52	F	3	22	1	30	40	3 (diploma)
FJ1	50	F	3	20	1	60	45	3 (diploma); 1 (ACE); 1 (B.Ed Honours)
FJ2	30	F	2	5	0	0	45	4 (degree)
FJ3	46	F	1	15	<=1	40	40	3 (diploma); 1 (ACE); 1 (B.Ed
A1	30	F	3	5	<=1	60	43	4 (degree in Senior Phase); 1 (Post-Graduate Certificate in Education
A2	42	F	2	12	<=1	30	40	3 (diploma); 1 (ACE); 1 (B.Ed Honours)
A3	55	F	1	26	0	0	39	3 (diploma); 1 (ACE)
H1	60	F	1	20	<=2	<30	38	2 (diploma); 2 (English/Afrikaans)
H2	51	F	2	20	2	30	42	3 (diploma)
H3	58	F	3	27	<=2	60	37	3 (diploma); 2 (remedial)
R1	23	F	3	1	<=2	30	33	4 (degree)
R2	23	F	2	1	<=2	30	40	4 (degree)
R3	59	F	1	28	2	60	44	1 (diploma); 1 (diploma); 2 (remedial)
BS1	62	F	2	>31	1	30	30***	3 (diploma); 1 (Junior Primary Teacher's Diploma); 1 (diploma); 4 (distance learning, special education)
BS2	52	F	3	22	0	0	29	3 (diploma)
BS3	49	F	3	15	<=2	60	30	3 (diploma)

Acronym meaning: C (code); A (age); S (sex); G (grade); YT (years of teaching experience); PEF (PE frequency per week); PED (PE duration in minutes); N (Number of children); ACE (Advanced Certificate in Education); *(retired for 13 years); ** (on contract); ***(divides class in half during PE)

Table 4.1 establishes that all the participants in this study were female. The participants had between one to 31 years' teaching experience and were aged between 23 and 73 years old (the teachers older than 65 years were in retirement but were employed as contract workers due to staff shortages). Twenty-two participants had a three-year diploma qualification from a former teachers' training college[9], while five had a four-year degree qualification from university. Sixteen teachers had studied further, completing either an Advanced Certificate in Education (ACE), specialising in Information and Communication Technology, Language or Special Needs Education. Teachers had only experienced PE training as part of their teacher training college syllabus. None of the teachers indicated that they had received in-service PE training. Table 4.1 highlights that the teaching of PE varied in terms of time allocation and frequency per week.

4.2.3.2 Data collection methods

I conducted semi-structured interviews as primary data collection method for the purpose of this study (Galletta, 2013). In IPA, the use of a semi-structured interview can "facilitate with rapport and empathy and permit great flexibility of coverage" (Smith et al., 2009, p. 66), providing me with the flexibility needed for exploration. The structured questions (Riazi, 2016) enabled me to obtain information on teachers' demographic and educational levels, duration and frequency of teaching PE, the barriers they faced in teaching PE, and which movement activities they employed. The open-ended questions posed (Galletta, 2013) allowed the teachers to focus on their perceptions of the relevance of their pre-service and in-service PE training, their experience of teaching PE in historically disadvantaged areas, their thoughts on the CAPS Life Skill PE learning outcomes and their recommendations regarding improvements in the teaching of PE. I also decided on individual semi-structured interviews, as I believed teachers should be provided with a "safe space" to share their stories in this type of forum. Due to the politics I had experienced at schools whilst working as a PE facilitator, individual interviews were considered the best course of action.

Data collection took place at the participating teachers' respective schools, in a venue of the teachers' own choosing. One teacher was interviewed at a time, with a total of 24 being interviewed. I conducted the semi-structured interviews and recorded the interviews with a

[9] Post-apartheid, to save costs and to restructure education, teachers' training colleges for diploma qualifications were "closed" in the 1990's through either being re-absorbed into universities or becoming High Schools, community colleges or provincial training centres (Chisholm, 2010).

digital voice recorder. After the interview process, I transcribed the data for further data analysis. I repeated this process until no new information was being shared by the participating teachers from the two different sites. Details of the interview schedule are provided in Addendum H.

4.2.3.3 Data analysis

I used Braun and Clarke's thematic analysis process (Clarke et al., 2015) to analyse the data gathered. Stage One consisted of familiarising myself with the data through reading and re-reading it. Stage Two included creating initial codes. Stage Three consisted of codes being collated into themes through generating a thematic map to evaluate how the codes and themes related. Stage Four comprised redefining, re-evaluating and reviewing whether the themes are truly distinct. Stage Five consisted of naming, defining and conceptualising the themes. Stage Six consisted of producing a report through identifying the most compelling verbatim quotes for each of the relevant themes and sub-themes.

4.2.3.4 Measures to ensure trustworthiness

Guba (1981) suggests that there are four ways in which trustworthiness in a qualitative study can be improved, namely through enhancing the truth value (credibility/internal validity); applicability (transferability/external validity); consistency (dependability/reliability); and neutrality (confirmability/objectivity). A confirmability audit, as recommended by Guba (1981), Krefting (1991) and Loh (2013), between myself and two independent coders was employed to assess the degree of uniformity between our findings, serving to establish and confirm the truth, neutrality and consistency value of my findings (refer to Addendum I). Furthermore, as a different set of Foundation Phase teachers in Phase Two of this study discussed many of the themes and categories which emerged in Phase One whilst sharing their experiences of PE at school, the truth value of my findings was ascertained. According to Krefting (1991), if research findings have high truth value, then a group or individuals who are from the original sample, or a different group or individuals who also share that experience, would immediately recognise the descriptions within the findings presented.

To facilitate with the truth, applicability, consistency and neutrality of my findings, I included reflexivity (Meyer & Willis, 2019). I kept a journal and consulted critical friends (experts and experienced individuals) in the field of qualitative research to help me with reflexivity. I wrote down my thoughts, ideas, frustrations and feelings regarding the interviews within the

transcribed data and in summary format at the end of each transcription. I reflected on these comments with critical friends to assess how my assumptions were affecting my interpretation and implementation of the semi-structured interviews. According to Krefting (1991), asking colleagues to assess one's interviewing approaches and findings is a form of peer examination, adding to the truth and consistency of the research findings.

4.3 PHASE TWO

4.3.1 Research paradigm

I adopted a critical and participatory paradigm (Wood, 2020) for Phase Two of this study. The ontology of the critical paradigm is historical realism (Scotland, 2012). Historical realism proposes that reality is shaped by "social, political, cultural, economic, ethnic, and gender values" (Scotland, 2012, p.13). A participatory paradigm views reality within a relational ontology (Wood, 2020). This suggests that people experience the world in relation to each other, that multiple realities exist and that through a process of critical reflection on collective experiences, caring relationships are developed and the unique contribution of each individual towards solving collective problems is valued (Wood, 2020). I therefore rejected the assumption that CPTD should include transmissive modes of training (Kennedy, 2014) and that focusing on PE content alone would transform teachers. Rather, I viewed teachers as unique individuals with PE experiences, perceptions and ways of teaching that are socially constructed and influenced by (for example) their social, political, cultural, economic, ethnic, gender, and other values, within their school and community context and in their daily lives. I believed that through building genuine trusting relationships, exchanging knowledge and deconstructing collaboratively their understanding of teaching PE, teachers could change and decide for themselves how they would approach PE implementation at their schools.

From an epistemological perspective, a critical and participatory paradigm views knowledge as being influenced and validated by a dominant ideology (Scotland, 2012) that can be challenged and changed through critical self-reflection and reflexive dialogue with others (Wood, 2020). Applied to this study, PE having a lower priority in comparison to other subjects, is a dominant ideology (Van Deventer, 2012). PE is an add-on, non-essential subject in the curriculum. Furthermore, in the Foundation Phase CPTD does not usually involve teachers as active participants in the planning and implementation of PE (Dixon et al., 2014). To counter these dominant ideologies, I proceeded from the belief that teachers are "capable,

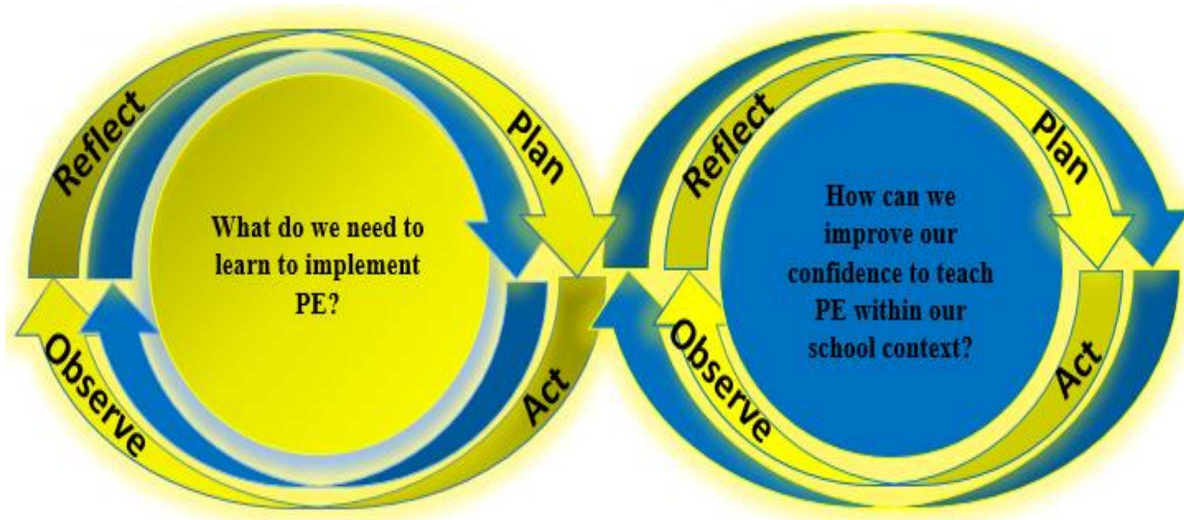
reflexive and resourceful practitioners and decision-makers" (Charteris, 2015, p. 1) and therefore able to determine their professional learning needs in relation to the learner, school and community contexts through dialogue. I rejected the idea of providing teachers with a pre-packaged and standardised PE-based CPTD experience, but rather chose to encourage teachers to: 1) Be active in determining their needs; 2) Producing useful and relevant knowledge through multiple forms of representation (for example, music, art, dance and writing); and 3) Through actively involving themselves in validating the knowledge they were producing (Wood, 2020).

The axiology innate to the critical and participatory paradigm is based on the values of emancipation, social justice, equality and liberation (Kemmis et al., 2014). Applied to this study, the action research process I employed, was intended to create a platform to raise the consciousness of teachers so that they would become able to identify their own needs and take action to meet them. Values such as "democracy, inclusion, care and compassion, respect, [and] dignity" (Wood, 2020, p. 29) guided the interaction between the participants and me. In our collaborative interactions, I aimed to create a safe space for teachers to equally contribute to the goals they set, respect each other's inputs and reframe their 'failures' as learning experiences.

In the following section, the research design and methods aligned with my chosen paradigm for Phase Two, are explained.

4.3.2 Participatory action learning and action research (PALAR)

Participatory Action Learning and Action Research (PALAR) (Zuber-Skerritt, 2015) was the research design I chose for Phase Two of this study. PALAR was well suited to Phase Two, as it aligned with the autonomy and agency that collaboratively based transformative CPTD models aim to develop (Kennedy, 2014). PALAR takes place within collaborative, iterative cycles of identifying the problem, planning, acting, observing and reflecting (Zuber-Skerritt, 2011). Figure 4.1 provides an overview of the cyclical approach I applied to this study, highlighting the focus of each cycle and the individual and group action taken.



Cycle One (Sessions one to four; October 2017 to April 2018) **Focus of sessions** - Forming an action learning group through building trust and relationships - Identifying knowledge teachers need and developing personally by sharing knowledge and skills with each other - Defining mutual purpose - Conducting in-depth context analysis - Forming vision **Individual action by participants between sessions:** Sharing PE content with colleagues. Implementing PE classes and inviting colleagues to watch encouraging them to implement lessons. Taking videos of classroom sessions to share with others.	**Cycle Two (Sessions five to fourteen; May 2018 to November 2019)** **Focus of sessions** -Developing a research question -Exploring team roles and responsibilities and each members' purpose - Identifying ethical conduct - Putting action plans in place based on building teachers' confidence to teach PE - Collaboratively creating PE lesson plans and videos and presentation to teach colleagues - Deciding on dissemination of findings - Reflecting on learning and development and deciding on next steps. **Individual action by participants between sessions:** Same as Cycle One

Figure 4.1: Two PALAR Cycles

4.3.2.1 Cycles of action learning and research

This study comprised two cycles: 1) Forming an action learning group to decide on what we wanted to learn and what we wanted to do to enable this to happen; and 2) Building teachers' confidence to teach PE and sharing what teachers had learnt with their colleagues so that all Foundation Phase learners could experience PE. From what I learnt from these two cycles, I generated guidelines for CPTD, aimed at improving teachers' PCK of FMS. These two cycles took place within 14 sessions, between October 2017 and November 2019.

Cycle One: Establishing relationship, focus and determining teachers' needs: The question guiding the first cycle was: ***What do we need to learn to be able to effectively implement PE?*** As per Wood's (2020) adapted Figure Eight Model depicted in Figure 4.2, Cycle One focused mainly on the upper relationship building section of our PALAR journey. That is, the section highlighted in yellow.

In Figures 4.1 and 4.2, the colour yellow depicts how relationship building was integrated into the research process and throughout Cycles One and Two. As time progressed, the participants and I focused primarily on our collaborative research journey within each cycle, highlighted in blue. It is important to note that relationship building continued and was central to our interactions throughout Cycles One and Two.

Cycle One, the primary relationship building cycle, took place in four sessions between October 2017 and April 2018. In this cycle, I focused on forming an action learning group through building relationships and trust and sharing knowledge and skills. An action learning group is "a small group of people [who] collaborate to address a problem or issue that is of mutual interest to them, most likely because it directly affects their lives" (Wood, 2020, p. 66). My goal through creating an action learning group and following the guidelines of Wood (2020), was to establish a platform for teachers to learn how to support, share and trust each other, to increase their self-awareness, to determine and improve their personal and professional needs, to develop a shared vision and how to reach it, and to engage in critical reflection after each session. I used group- and movement-based experiences innate to PE to enable teachers to develop relationships and to share their ideas and their current PE practices and stressors pertaining to their learners and school context. I also helped teachers develop their PCK of FMS collaboratively and in relation to how they envisaged PE within their schools and as it related to their official policy documents.

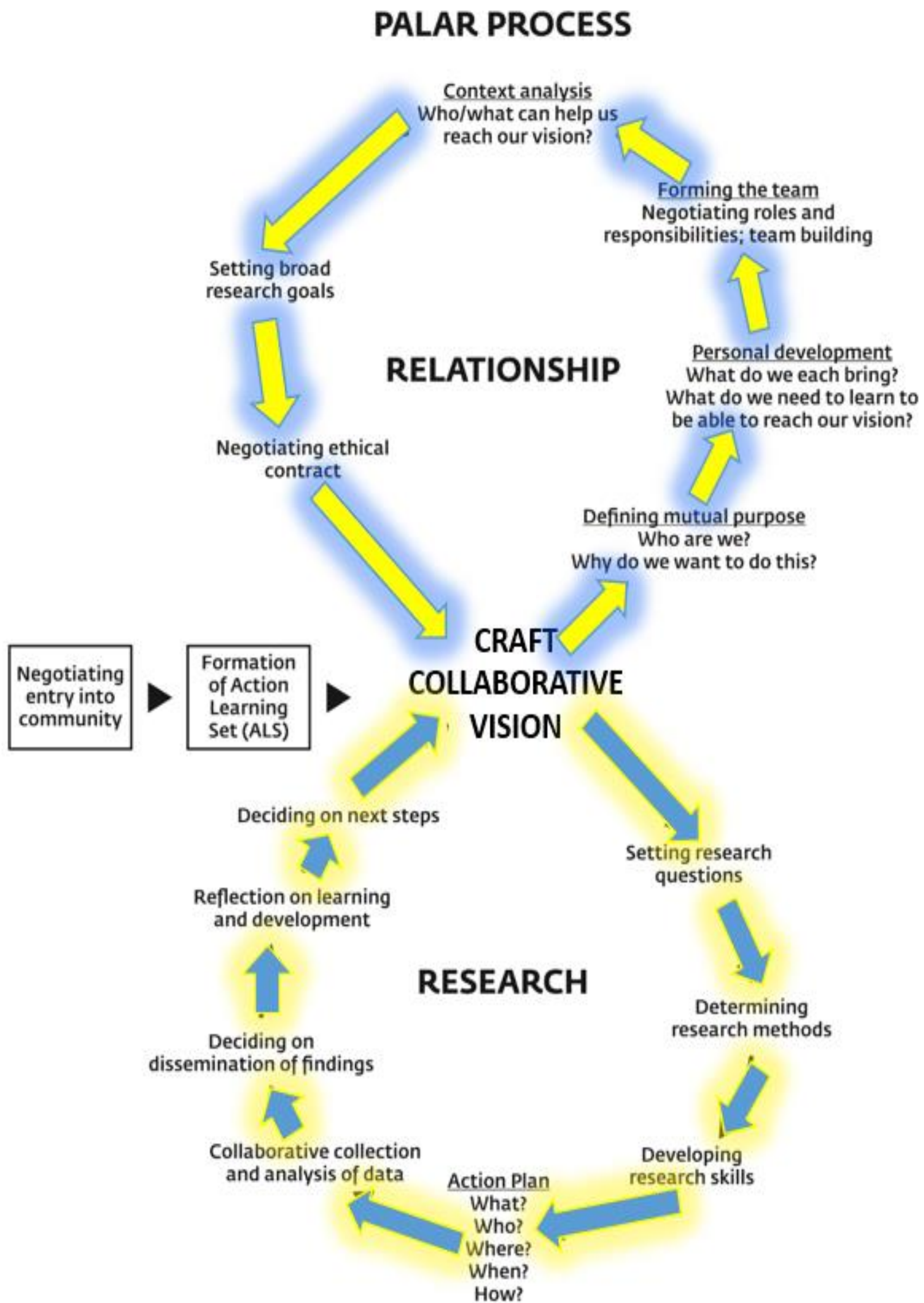


Figure 4.2: Wood's (2020) adapted Figure Eight Model

Through this interaction, the participants decided to name the group "Team Phys. Ed." and identified areas that needed to improve within themselves and at their schools, as per the CAPS PE guidelines. They also discussed how they could share what they had learnt with their colleagues.

With our critical reflections in mind and the guidelines formulated by Kemmis et al. (2014) regarding critical thinking, I posed the following questions to prompt the creation of our mutual purpose and vision: *What is our vision? How will we achieve our vision, and why? Who will we include, and why? When will we include them, and why? Where will we implement our outcomes, and why? Who is responsible for a given outcome, and why? What will affect us, and how will we overcome this, whilst achieving our vision and these outcomes, and why?? Who should we include in implementing our vision, and why? What are our ethical considerations to achieve our vision? How will we share our vision with others?*

To achieve the vision of the group, I encouraged the teachers to reflect on Phase One's findings regarding the PE contexts at schools (which I share in Chapter Five) and how this would support or impede the attainment of their vision. This formed part of our in-depth context analysis. Through this questioning process, our mutual purpose, and the vision the team decided on included becoming confident PE teachers and sharing what they would learn with others. All participants identified their strengths and weaknesses in the school context and regarding their PE teaching. Although some believed that they were ready to engage their colleagues and to share what they had learnt, ultimately the group decided that they would need to continue building their confidence in their PE teaching ability first, and with their learners at their respective schools. Individual confidence building and sharing included teachers engaging in implementing PE classes, based on what they had learnt, inviting colleagues to watch, or encouraging colleagues to implement their own lessons. The teachers also took videos of their classroom sessions to share with colleagues at school, and which they then brought back to the action learning group to critically discuss with teachers and me. This need to share their knowledge with their colleagues motivated the teachers to navigate ways of taking action to increase their confidence in their PE teaching ability, which prompted the initiation of Cycle Two.

Cycle Two: Building teachers' confidence to teach PE: In Cycle Two, which took place in ten sessions between May and November 2019, we predominantly focused on the research section of Wood's (2020) adapted Figure Eight Model (Figure 4.2), highlighted in the colour blue. Although we revisited the relationship section at each session to ensure that we stayed on focus and functioned optimally as a research team (as depicted by the yellow colouring in Figures 4.1 and 4.2), the essence of Cycle Two was answering the collaboratively designed research question.

To develop teachers' research question, and strategies to achieve this, I continued with democratic dialogue, posing the same questions that guided teachers' vision creation. *What is our vision? How will we achieve our vision, and why? Who will we include, and why? When will we include them, and why? Where will we implement our outcomes, and why? Who is responsible for a given outcome, and why? What will affect us, and how will we overcome this, whilst achieving our vision and these outcomes, and why? Who should we include in implementing our vision, and why? What are our ethical considerations to achieve our vision? How will we share our vision with others?* This questioning process led to the following research question being collaboratively formulated, namely: ***How can teachers improve their confidence to teach PE within their school contexts?*** As this study was focused on their PCK of FMS, we engaged primarily in exploring these two constructs collaboratively.

After formulating the research question, the participating teachers identified how they would improve their PE confidence for implementation in their schools. To build their confidence in teaching PE, the participants chose to engage in: 1) Group-based lesson planning; 2) Individual and/or group-based implementation of their lesson plans with their learners at their respective schools; 3) Subsequent action learning group reflection on the video-taped lesson; and 4) Sharing of what was learnt with others. A portfolio or task was awarded to each teacher, which led to each action learning group member becoming part of a team. Each team member played an active role in the creation, implementation and reflection of the achievement of the team's vision and research question. Putting action plans in place and identifying group norms, accountability and how we would work together in an ethical way ensued during this process. Furthermore, collaboratively creating PE lesson plans, videos and presentations to teach colleagues, formed part of this process. Also included, was generating data for subsequent collaborative data analysis and reflection on teachers' learning developments. Deciding on how

what had been done collaboratively would be disseminated and recognised by others, was additionally encompassed.

Generating guidelines for PE-based CPTD: From what I learnt in Cycles One and Two, I could generate guidelines for enabling the CPTD of PE teachers, with a specific emphasis on improving PCK of how to teach FMS. I did so through consulting Cycles One and Two's research findings, literature, my reflexive journal, and my theoretical framework.

Table 4.2 provides an overview of Sessions one to 14, intertwined and distributed between Cycles One and Two.

Table 4.2: Overview of the purpose, data generation strategies and techniques, venue, and timeframes of Cycles

Action Cycle with respective session numbers		Description of data generation strategies	Purpose	Data generation techniques	Data documentation technique	Venue	Time Frame
Cycle One:	1	Introduction to CAPS document and FMS through experiential learning activities consisting of concrete example, theory, practical application and reflection (Kolb, 2014). These included reflecting on video footage of FMS, presenting poster presentations on CAPS documents' FMS and participating in FMS-based movement activities.	To build relationships and trust and to share knowledge collaboratively through experiential learning which encompassed group- and movement- based activities. Sharing personal experiences of PE of teachers' schools and collaboratively identifying and generating depth of understanding regarding teachers' PE-based PCK needs for subsequent action planning.	Democratic dialogue (Brookfield & Preskill, 2016; Zuber-Skerritt, 2011)	Verbatim transcriptions of video footage and my reflexive diary notes	Away from school	8 hrs
	2	Exploring the Movement Analysis Framework (Graham et al., 2012) collaboratively through experiential learning activities consisting of concrete examples, theory, practical applications and reflections (Kolb, 2014). In this study, for example, I used innovative techniques such as creating a "dice" and "spin the wheel" activity to experience movements collaboratively (see Addendum J).				Away from school	8 hrs
	3	Exploring Mosston and Ashworth (1990) teaching styles and the TGFU (Drost & Todorovich, 2013) through collaborative experiential learning activities consisting of concrete example, theory, practical application and reflection (Kolb, 2014). Reflecting collaboratively on the videos the teachers decided to create of their application of the content knowledge learnt thus far.				Away from school	8 hrs
	4	Forming a collaborative vision and research question based on our experiences together thus far and through me asking the questions: *What is our vision? How will we achieve our vision, and why? Who will we include, and why? When will we include them, and why? Where will we implement our outcomes, and why? Who is responsible for a given outcome, and why? What will affect us, and how will we overcome this, whilst achieving our vision and these outcomes, and why?? Who should we include in implementing our vision, and why? What are our ethical considerations to achieve our vision? How will we share our vision with others?*				Away from school	8 hrs

Action Cycle with respective session numbers		Description of data generation strategies	Purpose	Data generation technique	Data documentation technique	Venue	Time Frame
Cycle Two	5	Grades R, One, Two and Three teachers from schools collaboratively creating lesson plans based on the CAPS document guidelines.	Collaboratively generating depth of understanding regarding teachers' PE-based PCK for subsequent action planning. Aiming to achieve answering the collaboratively set research question.	Democratic dialogue (Brookfield & Preskill, 2016; Zuber-Skerritt, 2011)	Verbatim transcriptions of video footage and my; reflexive diary notes	At school	3 hrs
	6	Action learning group collaboratively critically analysing videos of PE lesson plans implemented by those who volunteered to have videos of their classes taken.				At school	3 hrs
	7	Action learning group collaboratively critically analysing videos of PE lesson plans implemented by those who volunteered to have videos of their classes taken.				At school	3 hrs
	8	Action learning group collaboratively critically analysing videos of PE lesson plans implemented by those who volunteered to have videos of their classes taken.				At school	3 hrs
	9	Collaboratively exploring and reflecting on sessions one to eight.	To determine how sessions one to eight contributed to achieving our vision and answering the teams' research question. In so doing, we determined what comes next.	Creating a collage and verbally presenting and explaining it (Leavy, 2018)		Away from school	8 hrs
	10	Reflecting on Phase One's research findings (context analysis), PCK of FMS conceptual framework and how to achieve the Action Learning Group's vision	To determine what comes next in our journey in terms of our vision and answering our research question.	Democratic dialogue (Brookfield & Preskill, 2016; Zuber-Skerritt, 2011)		At school	3 hrs

Action Cycle with respective session numbers		Description of data generation strategies	Purpose	Data generation technique	Data documentation technique	Venue	Time Frame
Cycle Two *continued.*	11	Collaboratively exploring and reflecting on PE at school, Phase One's findings compared to teachers' current context, and where teachers' place themselves on the transtheoretical model of cognitive-behavioural change in relation to their PE implementation.	To determine what is affecting individual and collective change at school and what comes next in terms of achieving our vision.	Democratic dialogue (Brookfield & Preskill, 2016; Zuber-Skerritt, 2011)	Verbatim transcriptions of video footage and my reflexive diary notes	At school	8 hrs
	12	Creating presentation for colleagues, whilst critically reflecting on what should be shared and why.	To determine what of, how and why teachers' PE learning journeys will be presented to their colleagues.	Democratic dialogue (Brookfield & Preskill, 2016; Zuber-Skerritt, 2011)		At school	5 hrs
	13	Creating presentation for colleagues, whilst critically reflecting on what should be shared and why.	To determine what of, how and why teachers' PE learning journeys will be presented to their colleagues.			At school	5 hrs
	14	Critical reflection on colleagues' experiences of presentation and team-building activities, and thoughts on PE at school in the future.	To determine individual and systemic factors contributing to or negating PE implementation at school, why and how to foster or overcome this.			Away from school	3 hrs

4.3.3 Participant selection and school setting

Participant selection: The Principals and Foundation Phase teachers from the eight schools that participated in Phase One were invited to a two-hour session in which I: 1) Shared Phase One's findings; 2) Shared stories of Foundation Phase teachers' resilience, problem solving and creativity within PE; and 3) Explained the progression of the doctorate study in Phase Two of this research. Foundation Phase teachers were invited to participate in the PALAR study, with the extension of the invitation to school colleagues whom they believed would be interested in a PE-based PALAR journey. Ten Foundation Phase teachers from two schools in the Northern Areas volunteered to participate in the PALAR journey. However, teachers from New Brighton Area schools decided that as they already had international students implementing PE at their schools, had high workloads and other priorities and commitments, they would not be joining the PALAR journey. The demographic profile of each teacher who volunteered, is displayed in Table 4.3.

Table 4.3: Biographical profile of Phase Two participants

Code	Grade	nL	School	Age	YT	Highers Qualification	Language
T4	1	33	2	59	30	B.Ed Honours	Afrikaans
T5	1,3	30+	2	52	19	National Professional Diploma in Education	Afrikaans
T6	R	34	1	44	7	Early learning course (NQF Level 5)	Afrikaans
T7	3	44	1	50	30	B.Ed Honours	Afrikaans
T8	1	35	2	59	13	Diploma (3 years)	isiXhosa
T9	2	38+	1	60	33	Diploma (3 years); Honours in Special Needs Education	Afrikaans
T12	1	38+	1	47	10	B-Ed Honours	Afrikaans
T13	3	30	2	35	5	B-Ed Honours	Afrikaans
T16	1	34	1	52	30	Diploma (3 years); Advanced Certificate in Education (Senior and Intermediate phases)	Afrikaans
T19	3	38	2	35	11	B.Ed Honours	English

Keys: nL (number of learners); YT (Years teaching)

Teachers were between 35 to 60 years old, had either an early learning course certificate, National Professional Diploma in Education, B.Ed Honours degree, Advanced Certificate in Education or Honours in Special Needs Educations. Most teachers were Afrikaans, but the action learning group decided to speak English to accommodate everyone. No one had specialised in PE, with their PE courses primarily being embedded in their degrees or diplomas.

School setting: School One from the Northern Areas was situated in the gangland "heart" of Nelson Mandela Bay. An enclosed fenced area was provided around the school to improve safety; the open quad area was enclosed with a roof to create space for indoor activities; and a grass turf from a Hockey NGO programme was sourced to improve the gravel ground conditions. The sports fields were upgraded with the re-installation of grass. Two new netball courts were furthermore built. These renovations formed part of an international sponsorship initiative to alleviate the high crime and gangsterism rates in the area. Some of the PE programmes implemented at the school included 1) The Passport to Health Programme (Walter, 2014) for Foundation Phase learners – focused primarily on creating fun-and-engaging school grounds that motivate children to be physically active; 2) The DASH Programme for Grades four to six learners (Yap et al., 2015) – aimed at assisting teachers with implementing quality PE classes; and 3) A pilot grassroots hockey programme for Foundation and Intermediate Phase learners – aimed at assisting teachers with implementing hockey at school. There were altogether 13 Foundation Phase teachers at the school.

School Two from the Northern Areas had no sport fields and only a cement quad area between classrooms where PE was implemented. Limited PE equipment was available at the school. Ad *hoc* facilitation with PE implementation was received from exchange students, but this was mostly for Intermediate Phase versus Foundation Phase teachers and learners. Lotto funding saw the acquisition of sports equipment and the building of a Grade R playground. The school had a total of 13 Foundation Phase teachers.

4.3.4 Data generation strategies

Data generation normally occurs in collaborative form and therefore the data generation techniques I employed in this study included dialogue and collaborative collage making. To ensure that what I was doing aligned with the PALAR values as described in Wood (2020), I also employed a reflective journal.

Transcriptions of video recorded action learning sessions: The data generation activities undertaken in this study included analysing transcriptions of the dialogue that took place within the action learning group. I incorporated Gustavsen (2005, p. 19) principle of the democratic dialogue to limit one-way communication between the teachers and me, ensuring that each person had a voice. I aimed to ensure that:

1. Dialogue [was] based on the principle of give and take, not one-way communication.
2. All concerned with the issue under discussion [had] the opportunity to participate.
3. Participants [were] under the obligation to help other participants to be active in the dialogue.
4. All participants [had] the same status in the dialogue arenas.
5. Work experience [was] the point of departure for participation.
6. Some of the experiences that the participants had on entering the dialogue were seen as relevant.
7. It [was] possible for all participants to gain an understanding of the topics under discussion.
8. An argument [could] be rejected only after an investigation (and not, for instance, on the grounds that it emanated from a source with limited legitimacy).
9. All arguments to enter the dialogue [were] presented by the actors present.
10. All participants [were] obliged to accept that the other participants might have arguments better than their own.
11. Among the issues that [could] be made subject to discussion [were] the ordinary work roles of the participants—no-one is exempt from such discussion.
12. The dialogue [could] be able to integrate a growing degree of disagreement.
13. The dialogue [could] continuously generate decisions that provide a platform for joint action.

To adhere to these principles of democratic dialogue (and to promote participation), I included the following additional data generation strategies into my study:

- The circle of voices, as prescribed by Brookfield and Preskill (2016), which included teachers writing down their thoughts for a few minutes and then getting an uninterrupted opportunity to share their reflections with the group. Teachers could volunteer to go first, or we would go around the circle. However, in instances where silence presented, I kept in mind that silence is a form of democratic dialogue, to be embraced and explored further by the team (Boler, 2004).
- Employing Nominal Group Technique (NGT) to foster democratic decision-making (Hardina, 2012) and consequently further democratic dialogue. For example, if the participants could not decide on which FMS to focus on or which PCK to explore, I would ask them: For you personally, what FMS would you like to focus on for our practical application thereof, and why? Write this down on a piece of paper. A democratic process of selection then followed.
- Critically reflecting on the transcripts of each session by myself, with teachers and critical friends to identify the power relations in the group to problem solve them. I also reflected on whether I had made enough conversational moves, as per Brookfield and Preskill's (2016) recommendations; that is: 1) To create a space for a teacher who had not yet spoken; 2) Asking a cause-and-effect question such as "Why did we stay at the

Lodge so long versus go to schools to apply what we had learnt?"; 3) Making summary observations of everything said thus far and asking teachers to reflect on these; 4) Contributing to what the team was saying by asking "What comes to mind after experiencing this movement activity?"; 5) Highlighting contradictory comments within the discussion for further exploration. For example, "it seems we have two points, one is using children's lack of wearing PE clothes as an opportunity to discipline them versus this form of exclusion being seen as discrimination"; and 6) Encouraging teachers to share their thoughts through me sharing how their comments contributed to what I had learnt from the day's activities.

- As Boler (2004) states, like it or not, environments with conversations are "microcosms that reflect the social hierarchy of race, class, gender and homophobia that shape the larger world" (p. viii). Stated differently, and applied to this study, the social dynamics at school can be emulated within the action learning group. For example, one of the participants mentioned that HODs should not be present at the sessions. To address this concern, I opted to ask the HODs and teachers what these power relations meant to them and how best we could proceed collaboratively.
- Brookfield and Preskill (2016) suggest using the "hatful of quotes" technique to allow those who do not often talk an opportunity to do so. This is a type of icebreaker, especially for shy individuals who need help with building their confidence. I used this technique with quotes of what the participants had said about the benefits of PE and the resilient action they had to take to implement PE at school. Hereafter, the group reflected on the topics and whether any additional comments could be added to how they valued and implemented PE at school.
- According to Brookfield and Preskill (2016), using quotes to affirm and challenge the themes that emerge through a process can help foster democratic dialogue. However, the quotes chosen must be from different participants and the person who shares the quote with the group need not be the person who chose it. I adopted this approach with teachers to deliberate and discuss the themes and categories that emerged from our journey together. The teachers could remove or add verbatim quotes from previous sessions to different themes and categories, explaining their choices for further deliberation.
- Newsprint dialogues (Brookfield & Preskill, 2016) were also incorporated into the evaluations of the themes and categories that emerged from the teachers' analysis of

their own verbatim quotes. That is, the teachers created a summary of their themes and categories and placed the quotes next to them to support their claims. After the summary, the documents were placed on the wall and the teachers could walk around and add comments to the posters for further reflection within the group (preferably individually). The teachers were also prompted to write down their own thoughts regarding only the common themes and contradictions they noted.

- To ensure that conversation flowed after the teachers and I experienced either experiential movement-based learning activities (Kolb, 2014) or plans of action we collaboratively put in place, I would open the discussion to teachers for critical reflection. To do so, I continued to employ various conversational moves (Brookfield & Preskill, 2016).

The benefit of employing democratic dialogue was that both the teachers and I had the opportunity to add questions, provide suggestions, share experiences, engage in the development of action steps, and participate equally in the discussions. What was added to the conversation could be collaboratively analysed and reflected on for further action. Unfortunately, the negative was that I, as the researcher, and the teachers who were in leadership positions (i.e. HODs) or who were naturally outspoken, tended to dominate the conversation. Also, those topics that the teachers deemed to be sensitive were often not presented within group conversation. To promote discussion, I would share my concerns with the group and ask them what they felt was the best way forward. I would also continue employing the democratic dialogue strategies mentioned to promote participation.

Collage: To provide teachers with the opportunity to critically reflect on their multiple learning journeys in a non-traditional manner (such as writing only), I used collages. These collages comprised a collection of pictures (magazine pictures, images, photographs or paper scripts), pasted on a blank canvas in any manner that the participants felt represented them (Leavy, 2018). The advantage of using this type of arts-based approach collaboratively with teachers was that it provided the teachers with an opportunity to engage more fully with their affective domains and conscious and sub-conscious thinking. This was because they had the opportunity to engage with various symbols, colours and multiple ways to represent their thoughts in a creative way (Leavy, 2018; Van Der Vaart, Van Hoven & Huigen, 2018). Also, the teachers did not need to have artistic abilities to engage with the data generation technique, removing the perception that they were required to create something “perfect”. Furthermore, visual

material was already available in the form of clippings from magazines, and the teachers therefore did not need to recreate images and instead assimilated these into their reflections.

To ensure that the data generated from the visual art that the teachers created, was interpreted correctly by all participants, I asked the teachers to verbally share the meaning of their images, with subsequent opportunities for the team to ask questions. The prompt I provided teachers was: *Using the material provided, create a collage that reflects our PE journey together and how it has affected your PE teaching at school.* To assist them in constructing the collages, I provided teachers with: 1) Magazines, as these had a variety of fonts and pictures to represent their ideas with; 2) Coloured pens, paper and pencils to write down ideas if they preferred to represent their thoughts in written format; and 3) Clear guidelines on the purpose of the collages that resonated with the team's vision; thereby potentially providing the teachers with a platform to be inspired, engaged and empowered (Leavy, 2018). Examples of the collage's teachers created are provided in Addendum K. The data generated from these collages are shared in Chapter Six.

Reflective journal: To enhance my reflective learning process (Bager-Charleson, 2014; Meyer & Willis, 2019) and to help me adhere to the PALAR values of empowerment, social justice and equality (Kemmis et al., 2014), I used a reflective journal. According to Kemmis et al. (2014, p. 70), the "most important evidence to collect will be what you collect in your journal". I captured these reflections after each session and whilst I reflected on the videos and transcription. I did the same after my session with critical friends and after the PALAR-based workshops I attended for my professional development.

Through writing in my journal, I could reflect on what the teachers, critical friends and facilitators and participants in learning forums did and said and how I, and we, engaged, and why. I would write reflective notes on how I perceived the session had gone, and why. The questions I would pay particular attention to were those associated with how I aimed to ensure the trustworthiness of the research findings of my study; that is, asking myself questions related to outcome, process, democratic, catalytic and dialogic validity (Maxwell, 1992), which I explain in more detail below. I furthermore asked myself whether what the teachers and I did together was enforced in any way (known as legitimacy bias), resulting in the research process not "feeling right" to the teachers or me (Kemmis et al., 2014, p. 39). I constantly tried to elicit introspection (that is, examining my own mental and emotional processes) to explore what lens

of analysis I was using, and why, and what frame of mind I was in and how this affected my reasoning (Bager-Charleson, 2014). This was a key benefit of using a reflective journal, as it afforded me the opportunity for reflexivity: exploring my introspection and the meaning thereof with critical friends and with teachers in our subsequent sessions together (Bager-Charleson, 2014). I followed a cyclical process of introspection and reflexivity to try and understand why my assumptions, values, beliefs and attitudes existed in the first place, and how these aligned with the PALAR values I was aiming to implement. This process of reflexivity on my introspection afforded me the opportunity for my own transformative learning journey (Bager-Charleson, 2014), especially since I grappled with transitioning from positivist to critical and participatory paradigms. I provide an example of my reflections in Addendum L.

4.3.5 Data analysis

In PALAR, data analysis is meant to be a collaborative endeavour with participants (Wood, 2020). To foster collaborative data analysis, I used a two-pronged approach in this study. Firstly, within the action learning group, where we analysed the data on a practical level. Secondly, I performed data analysis on a theoretical level and shared the findings with the teachers for further reflection.

To analyse data collaboratively with the teachers on a practical level, I wrote the main themes and categories on the board during our action learning sessions, providing teachers with a chance to discuss whether or not these were correct or if any other themes were to be added. To continue including the teachers in the data analysis process, I also shared verbatim quote transcripts with them. However, the teachers felt that the volume of written work on the transcripts was too much to cover, and that an easier way to represent their journeys and what they had said, was needed. To overcome this, we used the following:

- The hatful of dialogues approach (Brookfield & Preskill, 2016), where I placed key verbatim quotes on a colourful cut-out snippet of a page for teachers to read and reflect on.
- The newsprint dialogue approach (Brookfield & Preskill, 2016), where each teacher placed verbatim quote snippets, into the categories and themes they believed were appropriate, on a large poster, for subsequent analysis thereof by their colleagues

individually. Using a colour pen, the teachers could write their thoughts about the quote and theme or category on the poster for subsequent reflection.

- The circle of voices approach (Brookfield & Preskill, 2016) to ensure that each teacher had a chance to share her critical reflections on the process and her experiences thereof.

After we completed these data analysis processes, I would go through the data, using Braun and Clarke's (Clarke et al., 2015) six step thematic analysis process, as explained in Phase One's research process. All themes generated, were then shared with the teachers, together with the original transcribed data, for further critical reflection and reflexivity. The themes and categories that emerged, the teachers and I also compared to Yidana and Lawal's (2015) teacher competency-based model (which I shared in Chapter Two) and Phase One's research findings (which I share in Chapter Five). Comparing these findings to my theoretical framework further aided the data analysis process.

4.3.6 Trustworthiness

To establish the trustworthiness of the data I used, the outcome, process, democratic, catalytic and dialogic validity (Herr & Anderson, 2014), together with legitimacy deficits (when something does not "feel right" to the teachers or me (Kemmis et al., 2014, p. 39)), were explored. Table 4.4 provides a list of questions I posed to assist me in identifying the trustworthiness of my findings.

Table 4.4: Trustworthiness and validity applied in this PALAR study focused on PE teaching in low resource school (Herr & Anderson, 2014)

Validity category	Definition in the form of a question
Outcome validity	Did the actions resolve the initial PE-based problem posed or was the PE-based problem reframed and understood from a different perspective, resulting in a new set of actions and research questions?
Process validity	Are the PE-based findings a result of a series of reflective cycles that included the ongoing problematisation of participants' PE practices, and the inclusion of various qualitative and/or quantitative perspectives? In so doing, guarding against a self-serving agenda?
Democratic validity	Was the research conducted collaboratively and did various key stakeholders invested in PE get an opportunity to solve problems and overcome obstacles?
Catalytic validity	Did the research process reorient, focus, and energise participants towards knowing their reality to transform it? Stated differently, could those involved see their realities differently, and act accordingly? Evidence of this is participants and the researcher's account of their changing perceptions and actions towards reality.

To maintain trustworthiness, I had critical friends give me advice on my implementation of the PALAR process and what it meant to be a critical and participatory theorist (Kemmis et al., 2014). My critical friends helped me with my introspection and reflexivity, and therefore catalytic validity. The critical friends I chose where university-based researchers and experts within the field of qualitative research, PALAR or adult education specialists. I provide an example of my reflexive notes in Addendum L. As the findings were critiqued by the Foundation Phase teachers participating in this study, and fellow researchers at conferences, I aimed to improve the dialogic validity of this study (Herr & Anderson, 2014). Dialogic validity refers to whether the documentation of the research and learning process provides sufficient evidence of participants being acknowledged and included in all decisions and actions (Wood, 2020).

4.4 ETHICAL CONSIDERATIONS

Ethics was maintained through first getting ethics clearance from the relevant university authorities (H14-HEA-HMS-015) and then permission to conduct the study from the ECDOE. The relevant School Principals were approached to provide permission to conduct this study (Addenda A, B, C and D). Subsequently, Foundation Phase teachers who volunteered to participate gave their written informed consent (Addenda A, B, E and F). Ethical requirements associated with qualitative research studies were upheld, including guidelines relating to non-maleficence, justice, beneficence and anonymity (Miller et al., 2012). In Phase One, for example, teachers' names were coded to maintain anonymity.

In Phase Two of this study, the same ethical considerations were included as in Phase One; however, as the study included PALAR cycles, I also considered Kemmis et al. (2014), McIntyre (2008) and Wood's (2020) ethical guidelines for participatory research. In PALAR, ethics is negotiated with teachers, not implied. The Foundation Phase teachers and I negotiated how we would ensure that no-one felt forced to participate in the study or in the activities we collaboratively created. Our interactions together were also reflected on by asking ourselves whether those we interacted with were being harmed in any way, did not have an equal opportunity to contribute to the study, were not receiving any benefit from our interactions or were not being respected for their wish to remain anonymous or to withdraw from the study. If ethical conduct created a concern, we would deliberate this as a group and find ways to overcome the obstacle. Each participant was asked whether she would like to be recognised in

the study by name, based on her collaborative engagement and contributions throughout. That is, having her name visible in articles, books or any other write-ups related to this study and/or having pictures of her within videos or photos visible. Coding names to ensure anonymity was chosen as the best course of action by teachers in this regard, and blurring teachers faces in videos or photos shared with the broader community (other than within their school contexts and with their colleagues), was furthermore preferred.

I applied Wood's (2020, p. 77) 7Cs and 3Rs of action research, namely communication, collaboration, commitment, compromise, coaching, critical self-reflection and competence; and reflection, trusting and supportive relationship and recognition to ensure my own facilitation of my own interaction. I depict these in Table 4.5. I also asked myself these questions every time I engaged with critical friends and reflexivity.

Table 4.5: 7Cs and 3Rs aligned with my study (adapted from Wood, 2020, p. 77)

Communication	How dialogical, how symmetrical and how inclusive is my communication?
Commitment	How committed am I to the project, the participants, and the outcome?
Competence	As facilitator of the process, and as researcher, what do I need to learn?
Compromise	How willing am I to listen to other points of view and reach mutual agreement?
Critical attitude	How do my feelings, thoughts, motives and values impact on the research process?
Collaboration	How collaborative is the process? What role do I and the participants play? Who holds the power at each stage?
Coaching	How directive am I? How can I improve my mentoring/facilitation skills?
Reflection	How can I help participants to reflect on their own learning?
Relationship	How can I improve the research relationship?
Recognition	How do I recognise and value participant achievements?

4.5 SUMMARY

In this chapter, I provided the theoretical justification for the research methodology used in this study. My transformative learning experiences are shared, and the resultant two-phased study is explained. I explain how and why I was positioned in the interpretive paradigm in Phase One and in the critical and participatory paradigms in Phase Two. I also share the research design, participant selection process, data generation, data analysis, trustworthiness and ethical considerations innate to each research phase. In the following chapter, I discuss the findings of Phase One.

CHAPTER FIVE: FOUNDATION PHASE TEACHERS' EXPERIENCES OF PHYSICAL EDUCATION IN HISTORICALLY DISADVANTAGED SCHOOLS

***"Even if we can produce small changes here, in our place, they say, we can't change the world… Our response is to say that to make such local changes is to change the world"* (Kemmis et al., 2014, p. 78)**

5.1 INTRODUCTION

In this chapter, I focus on the research findings emanating from Phase One, which aimed to answer the question: ***What are Foundation Phase teachers' experiences of implementing PE in low resource schools?*** The implementation of PE in South African schools is generally agreed to be sub-optimal (Draper et al., 2018), with low resource schools in historically disadvantaged communities being especially affected and having to cope with shortcomings and deficits in infrastructure and human resources (Salvini et al., 2018). Limited research exists on Foundation Phase teachers' experiences of PE in the Eastern Cape, one of the poorest provinces in South Africa (Chitiga-Mabugu et al., 2014). With the social, affective, physical and cognitive benefits PE has to offer learners (Bailey et al., 2009) and its potential to buffer the negative environmental factors that affect learners living in poverty-stricken areas, it was important to ascertain how PE was being taught. The goal of this exploration was to identify how I could support teachers with their PE implementation in low resource schools. To find out how to do this, it was necessary for me to begin by exploring teachers' experiences of teaching PE.

I start the chapter by recapping the methodology followed in Phase One. Hereafter, I critically discuss the research findings emanating from Phase One. Finally, I share my reflections on my personal learning.

5.2 SUMMARY OF PHASE ONE METHODOLOGY

Table 5.1 provides an overview of the research methodology I used in Phase One of this study. For an in-depth overview, I refer the reader to Chapter Four.

Table 5.1: Summary of Phase One research paradigm, methodology and conceptual framework

Paradigm	Interpretive paradigm (Scotland, 2012)
Research design	Interpretive phenomenological analysis (IPA) (Smith et al., 2009)
Sampling	Purposive and convenience sampling (Patton, 2014)
Participants	24 Foundation Phase teachers from New Brighton and Northern Areas of Nelson Mandela Bay, Eastern Cape (South Africa)
Data collection	Semi-structured interviews (Galletta, 2013)
Data analysis	Thematic analysis (Clarke et al., 2015)
Data trustworthiness	• Neutrality (confirmability/objectivity) via a confirmability audit with two independent assessors (Guba, 1981; Krefting, 1991; Loh, 2013). • Truth value (credibility/internal validity) of findings via Foundation Phase teachers' verifying findings and peer examination with experts (Krefting, 1991). • Truth value (credibility/internal validity), applicability (transferability/external validity), consistency (dependability/reliability) and neutrality (confirmability/objectivity) of my findings (Krefting, 1991; Loh, 2013) via my engagements with a reflexive journal (Meyer & Willis, 2019). I and critical friends.

5.3 DISCUSSION OF FINDINGS

Three main themes emerged that reflected participants' experiences of teaching PE in low resource environments, namely *Personal barriers* and *Systemic barriers* to teaching PE, as well as *Positive responses to challenges.* In Figure 5.1, an overview of the themes, categories and sub-categories that emanated from Phase One is presented. I discuss these in detail in the sections to follow.

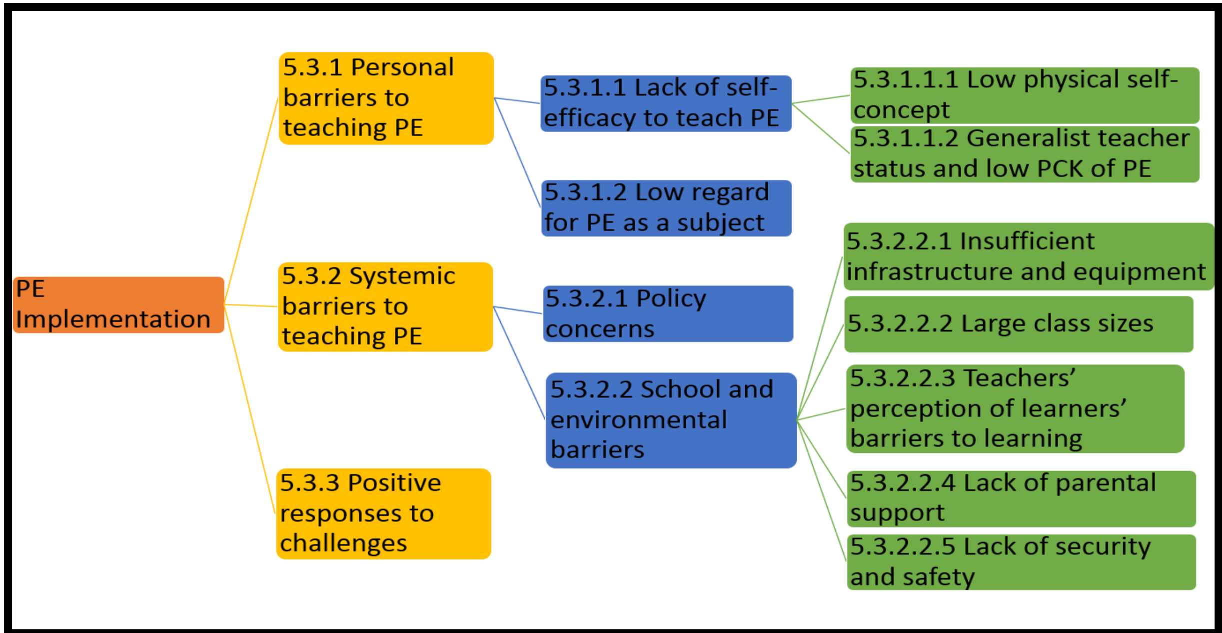


Figure 5.1: Overview of themes, categories and sub-categories

To ensure confidentiality and anonymity, I used the letters P and Q, S, T, U, V, W, Y and Z to identify the different schools, together with numerical numbers (1 to 24) in stating teachers' verbatim quotes.

5.3.1 Theme one: Personal barriers to teaching PE

This theme reflected teachers' self-beliefs about their knowledge and competency to teach PE, especially when considering their physical self-concept, their generalist teacher status, and their PCK of PE. It also reflected teachers' low regard and negative attitudes towards or beliefs about the importance of PE within the curriculum, which decreased the likelihood that they would actively engage in developing their capacity to teach the subject.

5.3.1.1 Sub-theme one: Lack of self-efficacy to teach PE

Caprara, Barbaranelli, Steca and Malone (2006) define self-efficacy as "teachers' belief in their ability to effectively handle various tasks, obligations, and challenges related to their professional roles" (p. 480). The participants in this study expressed their feelings of low self-efficacy, as discussed in the sub-themes below, related to their low physical self-concept and their limited PCK of PE.

5.3.1.1.1 Sub-category one: Low physical self-concept

Self-concept, specifically in the physical domain, refers to individuals' perceptions about their physical appearance and/or ability (Jajat, Sultoni, Abdullah & Suhermann, 2018). Physical concept in relation to PE teachers therefore refers to their perception of their ability to demonstrate movements and/or to possess the physical fitness prowess to take learners for PE classes, their self-evaluation of their body weight, athletic ability and general body assessment. The teachers expressed their lack of belief in their ability to perform well as a PE teacher, since they did not have confidence in their own physical ability, nor in that of their older colleagues:

> *I mean I look like an idiot outside trying to straighten my leg and it can't. You know what I am saying. It is not a case of that we don't want to do it. Like I said, the ladies in Grade One and Two, and not only them. They're old. Imagine them jumping and showing. I mean you have to demonstrate to the kids what they must do. So, it is not that we don't want to. It is just, I feel, it will be more of an advantage to them if we could have a PT* [Physical Trainer] *teacher or someone that can come and just come and help with that.* (Q1).

This finding is supported by an earlier study, in which individuals who experienced social appearance anxiety feared being humiliated or negatively judged by others, consequently avoiding activities that they perceived may lead to these negative experiences (Sabiston, Pila, Pinsonnault-Bilodeau & Cox, 2014). Research on older adults has established that physical self-concept is a strong mediator to participation in exercise and health-related quality of life activities (Hsu & Lu, 2018). Jajat et al. (2018) have found that novice PE teachers with lower physical self-concept tend to participate in less physical activity. The research findings of Faulkner and Reeves (2000) also demonstrate that teachers who have negative evaluations of performing PE due to self-evaluation or evaluations by others will be less likely to implement PE. Furthermore, even if teachers are willing to teach PE and value its contribution to their learners' holistic development, their negative self-efficacy beliefs regarding their physical abilities may override their volition to do so (Faulkner & Reeves, 2000).

5.3.1.1.2 Sub-category two: Generalist teacher status and low PCK of PE

It is important to consider teachers' perceptions about their self-efficacy related to their generalist teacher status and PCK of PE (which I discussed in depth in Chapter Two). In this regard, several participants in this study reflected on the quality and relevance of their PE teacher education by alluding to their experiences of pre- and in-service training. One participant explained that in her pre-service programme:

> "*they* [the lecturers] *did not really focus on physical education…they only covered creative movement in first year... we did not have training focused on that* [PE], *because when I started, I did not know what ball games are"* (Y2).

The participants in general did not believe that they possessed the content knowledge to teach PE well: *"…The teachers' knowledge. I think there is some lack also over there. Everything is like new now"* (U3). The PE pre-service training opportunities within the Nelson Mandela Bay area mainly consist of short-term modules embedded within degrees, possessing a low credit and NQF[10] level (ETA College, 2019; Nelson Mandela University, 2019; Rhodes University, 2019; Varsity College, 2019). Teachers are expected to implement PE at schools, yet they do not receive specialised training (Stroebel et al., 2017). The need for improved PE teacher education is supported by Van Deventer (2011), who concludes that universities need to include a discipline-based approach to PE in the training of Foundation Phase teachers. However, such training would also need to enable teachers to be creative in their approach to PE, since many schools lack sufficient resources (Stroebel et al., 2019).

When referring to in-service PE training, the participants in this study complained that the training provided was generally not effective. The training programmes were mostly short workshops conducted by outside facilitators, usually didactic in nature and lacking continuing support: "*Teachers are so gatvol* [fed up] *of going to workshops… just listening and coming back in here and not attending follow-up workshops. It is just a waste of time"* (Q2). The ineffectiveness of in-service training workshops, delivered in a didactic manner, is well supported in literature (Dixon et al., 2014; Steyn, 2008). With such poor training, having a PE specialist who is qualified, according to the teachers, would be *"more of an advantage to the child, because…* [teachers are] *stressing about all the other things"* (Q1). In a similar vein, participant Q2 asked: *"Why don't they just send in specialist teachers to do it?"*

The participants in this study were all generalist PE teachers. According to Breslin et al. (2012), a so-called generalist PE teacher is a qualified teacher, but someone who has "limited training in PE, has insufficient expertise and finds PE with its distinctive content difficult to develop competence in" (p. 2). The participants in this study were aware of their need for "*more*

[10] "The NQF is a comprehensive system, approved by the Minister of Higher Education and Training, for the classification, registration and publication of articulated and quality-assured national qualifications and part-qualifications" (SAQA, 2018)

instruction on how to do it [PE]*…how to put it into practice...* [how to] *organise… putting them* [learners] *in to groups...* [and]*… how to lay out, how to set out, how much time is given there...* [and the need for] *more specific information"* (U3). These comments encapsulated teachers' need for more knowledge on the subject (Ward & Ayvazo, 2016). Through requesting this information, the participants were also acknowledging their need for knowledge on the different teaching methodologies (that is, models, strategies, styles and techniques) (You, 2011) or the "design of instruction or teaching method" and knowledge of instructional models (Ward & Ayavo, 2016, p. 196). This was evident from comments made by the participants, such as, "*they* [DBE] *just give you the book. The curriculum says you must do this and the other, but there is not enough information…take me through a course first"* (Q2). The participants were therefore aware of their need for knowledge on how to implement PE based on the prescribed curriculum (You, 2011) and the different types of PE curricula that exist (Kulinna, 2008). You (2011) believes it is important for teachers to have knowledge of the systemic and progressive nature of content and how one year relates to the next. This is known as Horizontal Content Knowledge (You, 2011), and an example thereof is knowing how the Grade R PE curriculum compares to the Grade One, Two and Three PE curriculum and how these Grades are inter-related to develop quality programmes for PE. This type of information is implicit to PE, as knowing how to progress and regress lesson plans is vital for negating learner injury and legal liabilities (Babalola & Alayode, 2012). Although the participants described their needs in broad terms, not specifics, certain discipline-specific PCK is innate to the subject. I surmised that the fact that the teachers were not specific about their PCK needs could be attributed to their generalist PE instructor status and that they might not have known how to verbalise their needs using subject terminology or did not know what, how and why certain PCK elements were important.

Being generalist teachers negatively impacted on the teachers' self-efficacy to complete their work competently, as they clearly felt rather overwhelmed by the demands posed by their different roles: "*We need to be everything… Where is the librarian? Where's the nurse?... We are the school nurse… Where are the social workers?…it is just too much"* (U2). Vazi et al. (2013) acknowledge the pressure on teachers, especially in the Eastern Cape, to meet educational outcomes, and how this can lead to stress and, ultimately, burnout. Foundation Phase teachers are generalist classroom teachers, and as such are required to cover a significantly higher volume and range of work when compared to departmentalised (specialised) teachers, which also results in more stress (Strohl, Schmertzing, Schmertzing &

Hsiao, 2014). Such high stress levels and the limited time available to complete perceived priority subjects may lead to PE being neglected.

5.3.1.2 Sub-theme two: Low regard for PE as a subject

The participants generally expressed negative attitudes towards teaching PE, linked to the belief that it was not an important subject within the curriculum: *"The feelings of some of the teachers…*[are that] *this PE is such a waste of time… it is just an extra thing…* [and so] *not all of us concentrate on that"* (Y1). The participants also believed that *"physical education is not all that important*", even if they thought it should not be the case: "*It always comes last…and it shouldn't be that way"* (Q2). Another participant shared how her attitude towards PE had changed as she perceived that the necessary support structures were not in place for her to pursue it:

> *I had a strong love for Physical Education and I put everything in it. But I was very disappointed to find out that I could not go any further with it, because they* [educational institutions] *did not have the course here on it.* (R3).

The teachers' negative perceptions of PE can be attributed to the low priority status of PE in the curriculum, to which both local and international researchers have attested (Du Toit, Van Der Merwe & Rossouw, 2007; Stroebel et al., 2017; UNESCO & North Western Counties Physical Education Association (UK), 2014).

A low regard for PE, according to the participants, also resulted in teachers *"doing their own thing"*, because PE was seen as *"just an extra thing"* and "*a waste of time"* (Y1). The belief that *"you do it your way, and I'll do it my way"* (Y1) likewise negatively affected collegial engagements. Although the participants voiced the need to collaborate more with other teachers so that they could *"all* [be] *working from the same page and level it* [PE] *should be"* (U3), this rarely happened. According to Elliot and Campbell (2015), a culture of isolation is often experienced in the teaching profession, which is not conducive to the pursuit of lifelong learning. Within PE, when teachers do not work together, they do not have the opportunity to collaborate and share ideas.

The theme *Personal barriers to teaching PE* has important implications for CPTD. The examples I have provided concerning how attitudes and beliefs had affected PE implementation and collegial engagements, highlight the need for the inclusion of professional values and reflective practice in teacher training. This is advocated for by Yidana and Lawal (2015) in

their teacher competency-based model, which I discussed in-depth in Chapter Two. Consequently, including these forms of reflective practice in collaborative engagements with teachers can facilitate the transformation of their assumptions, values, beliefs and attitudes towards PE. Another important implication is the inclusion of communities of practice. Research has confirmed that generalist PE teachers' understanding of PE implementation can be improved by forming communities of practice (Dyson et al., 2016; Nash, 2009). Within such groups, negative attitudes can be changed by discussing "the struggles of new teachers, the challenges of learning a new curriculum and how to communicate effectively" with others (Martin et al., 2009, p. 516). Participatory forms of learning between teachers can also result in: 1) Problem solving regarding many of the barriers to education in low resource school communities; 2) Providing a platform for empowerment and advocacy; and 3) Providing teachers with a voice to share their grievances and hopes (Kennedy, 2014; Wood, 2020; Zuber-Skerritt, 2011). Effective in-service PE training, according to Elliot and Campbell (2015), should include collegial interactions between teachers and partnerships with, for example, educational authorities (such as universities) and senior management teams (such as Principals and Heads of Department). Encouraging teachers to engage in collegial interaction may result in the transformative learning needed to minimise their perceive barriers to PE.

5.3.2 Theme two: Systemic barriers to teaching PE

This theme captures participants' concerns about the lack of a supportive environment in which to teach PE, especially when considering issues such as the policy pertaining to the subject of PE, infrastructure and equipment, class size, learner characteristics, parental support and safety and security.

5.3.2.1 Sub-theme one: Policy concerns

Curriculum policy changes had clearly influenced the participants' PE teaching. They felt that the changes nullified the pre-service training they had undergone prior to 1994: *"We were well prepared... But since 1994, all the new things coming in, it changed a lot"* (Z3). Clearly, the removal of PE as a stand-alone subject had made it difficult for teachers to know how to fit it into the curriculum, because then teachers *"had that Phys Ed period and a curriculum that needed to be followed"* (Z3). Instead, the curriculum changes resulted in teachers' workloads being *"difficult"* (Q1) and "*stressful"* (U1, Y3) and in teachers and learners that *"cannot cope...* [as] *it's just too much"* (Y1). The teachers required *"more instruction on how to do it... and how to put it into practice"* (Z3). Curriculum transformation in South Africa saw

Curriculum 2005 (C2005) being implemented in 1997, followed by the Revised National Curriculum Statement (R-NCS) in 2002; subsequently the National Curriculum Statement (NCS) in 2007; and thereafter the CAPS from 2012 to the present (Govender, 2018; Stroebel et al., 2016). During these changes, PE became one of a number of learning areas that were crammed into one subject (namely Life Skills and Life Orientation), versus a stand-alone and specialist-led subject (Van Deventer, 2007). Teachers must therefore constantly learn new curriculum outcomes and assessments whilst trying to teach, adding to their workloads (Govender, 2018). These constant curriculum changes have taxed Foundation Phase teachers and their ability to deliver quality education (Nunalall, 2012), especially in low resource school context which additionally have financial, human resource and infrastructural shortages (Veriava et al., 2017).

"English, Afrikaans and Maths are our main subjects [that children] *have to pass…* [learners] *can't fail Phys. Ed."* (Q1). The participants therefore focused on the main subjects, to the detriment of PE. The participants confessed that, to achieve their priority subjects' learning outcomes, they "*steal time…*[they] *take the Phys. Ed. time…* [to] *do other assessments"* and that although they knew they were *"supposed to go out twice a week, the time is not there to go out"* (Z2) so they did not. Although the teachers confessed that they *"heard at one stage, the Department of Education is going to bring back what we had in previous years…"* and that they *"must be able to do the Phys Ed with the kids",* the current policy left teachers feeling *"more mad that they took it away in the first place"* (Q2). The participants were aware of how the changes had affected their learners: *"I don't think the children today get what the children got in the olden days"* (Z3), indicating that, overall, the curriculum changes had had a negative effect on the participants and their learners.

Van Deventer (2012) and Stroebel et al. (2019) advocate for PE to be a stand-alone subject, as it was prior to 1994, so that teachers will be motivated to regard it as an important subject in the holistic development of children. I believe that such a policy change would help teachers to change their attitudes; however, I also believe that the warning of Dixon et al. (2018) regarding the manner in which the CAPS has been set up, that is, "[obscuring] the disciplinary knowledge that teachers need to have in order to teach" (p. 17), should be heeded. It seems that another round of educational transformation and curriculum change is required to better support teachers and their learners in achieving quality learning outcomes. Simply making PE

a stand-alone subject will not in itself overcome the shortcomings of the CAPS (Dixon et al., 2018).

The support from the DBE was also perceived to have waned with the curriculum changes, with the participants sharing that the service delivery from the DBE hindered teachers' ability to achieve policy outcomes. Teachers shared that they were "*done with the Department. You will refer, but nothing is happening…"* (S1). Government officials would indicate that they *"…are going to bring stuff* [PE apparatus] … [but then they] *disappear. There is no apparatus"* (W3). One participant shared that she had requested PE equipment to be provided "*two years ago, but it never came"* (U2). Service delivery from the Department was characterised by the participants as "chronic leadership instability, politicisation and financial mismanagement" (Kota et al., 2017, p. 1). In the report by Equal Education (2016) titled "Planning to Fail", conclusions drawn about the ECDOE's lack of accountability and delivery were attributed to "poor governance, disorganisation and incapacity… political contestation, ANC [African National Congress] factionalism, and corruption" (p. 13-16).

These findings have important implications for CPTD within the realm of PE, and in general. That is, the need to acknowledge the effect policy, and the lack of support from government to implement policy, has on teachers' wellbeing and ultimately their learners' educational outcomes. Govender (2018) contends that the CPTD support teachers need during curriculum change in South Africa requires "a new and integrated framework offering much-needed effective, systematic, ongoing professional development programmes that translate into improved teaching practice and learning success" (p. S1). When referring to an integrated framework, the author is denoting that CPTD should provide teachers with an opportunity to practically apply curriculum change in their classroom practice, continuous collaboration with key stakeholders and take into consideration the changes that have to happen in the system "to support, guide, monitor and develop teachers in ways that enable them to succeed in implementing change initiatives and improving learning" (Govender, 2018, p. S9).

5.3.2.2 Sub-theme two: School and environmental barriers

The effect of the school environment on the teaching of PE was highlighted by participants' perceptions about infrastructure and equipment, class sizes and learners' characteristics. This sub-theme also included participants' experiences and perceptions of how the social context surrounding the school and the level of community support from parents affected PE teaching.

5.3.2.2.1 Sub-category one: Insufficient infrastructure and equipment

The participants were aware of infrastructural shortages, sharing that their school was *"built like a shack…* [with poor] *drainage"*, and that they had school grounds that were conducive to children getting hurt when falling: *"If children run outside and fall, it is just blood"* (R1). The poor infrastructure at Eastern Cape schools has been attributed to the inefficiency in service delivery from the ECDOE, resulting in some schools being "the worst-affected in terms of… using inappropriate material", resulting in a "lack of basic services" (Phakathi, 2018). In a similar vein, participant U1 identified the challenges around implementing PE indoors: "*There are not activities we can do, because there are desks, and now we must take time to pack the desks and the tables and the chairs".* Also, in *"wintertime, it is cold. The kids don't want to go outside"* (Q1). The PE teaching was therefore negatively affected by the limited enclosed outdoor and indoor facilities.

The presence of PE equipment at the relevant schools varied, with some teachers emphasising a lack thereof: *"Where are the mats for rolling?"* (Q1). Not all Foundation Phase grades had their own equipment: *"There is nothing we have that we can say, this is ours"* (Q1) or *"The equipment... It is not ours, really, it is the Grade R's"* (U2). Conversely, others shared that they had equipment: "*We are lucky: we have a storeroom full of things from donations"* (Z1), meaning that some of the time teachers had access to equipment should they decide to implement PE. The teachers also mentioned that *"in the Foundation Phase, we have all our things in class",* but that what was still lacking were *"benches and the mats"* (Z1). It is not easy for schools in historically disadvantaged areas to find the necessary funding, when compared to Former Model C schools. Although related to human resources, participant S1 highlighted this financial discrepancy: *"Those Model C schools: they have coaches. They hire coaches. They can pay for them. What about us? Because we can't".* Parents in the historically disadvantaged areas of the Eastern Cape cannot financially support their children's schools, as many are unemployed. The lack of financial support from parents means that low resource schools rely heavily on the government funding which, as I have already highlighted, does not deliver quality services to schools (Equal Education, 2016).

The lack of resources at schools is complicated by the fact that the participants had been trained for well-resourced schools: "*It is not easy to implement the training that we got from the College, as we were trained for facilities which are well developed"* (V2). This concern is supported by Zinn et al. (2014), who found that Foundation Phase teacher education

programmes in Nelson Mandela Bay mainly prepared teachers to work in well-resourced contexts. Teachers working in low resourced areas need to learn how to improvise when they do not have access to equipment (Du Toit et al., 2007). Teachers need more instructions on how to practically teach PE; how to design a lesson plan; how to organise groups of learners; and how to assess learning (Ward & Ayvazo, 2016) for low resource contexts. The need for this type of knowledge forms part of You (2011) and Ward and Ayvazo's (2016) depiction of Ball's et al. (2008) PCK of PE; that is, teachers' need for knowledge of the PE Instructional Environment (also known as pedagogical knowledge). This knowledge encompasses teachers' knowing how to use the context in which PE takes place to appropriately organise, manage, instruct, guide and correct learners. Capel and Whitehead (2012, p. 110) explain that pedagogical knowledge comprises "class organisation and management… discipline and behaviour management techniques… motivating pupils to participate… [and] conveying instructions successfully and providing appropriate behaviours, corrective and skill feedback". The implication for CPTD regarding PE is that teachers will have to learn how to compromise and be creative in adapting their teaching to low resource environments. Such learning would be enhanced by dialoguing with colleagues who face similar challenges and having access to informational resources.

5.3.2.2.2 Sub-category two: Large class sizes

Large class sizes were identified as another serious barrier to teaching PE. Participant Z3, for example, observed that "*to take out that 40 or more learners, it is difficult. If you take the little ones outside, they are all over the place. The groups are big, and discipline needs to be maintained".* In this regard, participant Z3 felt that teachers were not trained in designing PE lessons for large classes, and that the training should include "*…time management and type*[s] *of activities that does not take a lot of preparation to implement,* [or] *equipment, to take out with that 40 or more learners"*. A reality of schooling in South Africa is indeed that the majority of teachers have large classes to manage (Marais, 2016). This affects the quality of teaching and learning. The negative effect of such large class sizes on PE has been confirmed by research. Disciplinary problems, 'off-task' behaviour, lack of one-on-one instruction, equipment shortages and lack of administrative support when managing large classes are common barriers to teaching PE (Gross & Buchanan, 2015). As part of participants' PCK of PE, knowing how to teach large classes would form part of their knowledge on PE Instructional Environment and should be included in their CPTD (You, 2011).

5.3.2.2.3 Sub-category three: Teachers' perception of learners' barriers to learning

The participants also noted that many learners suffered from FAS, and consequently from *"many physical problems that affect physical education… if you take them out, there is problems"* (Z3). Regarding children with FAS, the participants shared that they found it difficult to encourage them to participate in lessons: *"They can't sit like this. Their posture is not good"* (U2) and *"They don't even want to hop. They don't want to jump. They will stand there and look at me like that" (Y3).* Participant U2 believed that for the Northern Areas in which she worked in as a whole, workshops and help were needed: *"If you can bring in someone for this alcohol syndrome…* [to] *give lessons to children with fetal alcohol syndrome, it can make a difference"*, meaning she did not feel competent to help differently abled learners. In Nelson Mandela Bay, Ellis (2016) reports that some of the highest rates of FAS exist in the country, validating participants' claims. Participants' experiences of differently abled children residing in historically disadvantaged areas with high crime rates also align with findings regarding the risk of developmental delays due to children being exposed to infectious diseases, psychological stressors and malnutrition (Jensen et al., 2017). In PE, teachers will need to be equipped to cater for learners with FAS and other cognitive and physical disabilities, as part of inclusive education (Loftus & Block, 2013; Orr et al., 2018; Roth et al., 2017).

The participating teachers also mentioned that the fact that the learners were not fluent in the language of teaching and instruction (English), made communication difficult in PE, as in other subjects: *"You want to reach everybody, and you want everybody to understand you. The message is not always clear to those isiXhosa children. Also, the Coloured Afrikaans-speaking children"* (Q2). With having to cater also for non-English speaking learners, participant X1 felt that she was *"always behind"* as "*learners, they are very slow".* Participant U2 emphasised that the DBE did not understand what teachers in low resource schools and disadvantaged communities go through. She could not understand how the DBE could ask *"Why is the pass rate so low?"*, sharing that *"a public school… can't be compared to Model C schools… it is a whole different story. It's difficult".*

There was a general feeling among the participants that both teaching and assessment should be accommodative of the perceived lower abilities of learners from disadvantaged environments. Participant W3 stated that she did not *"think the poor environment has an effect on the learners. The children have got talent. It is only, no-one is seeing them".* She added that "*the children have the skill. But no one can come and stimulate that thing and make them*

higher and higher. They can do anything!", meaning that external help was needed to develop the learners, as they were capable and had limitless potential.

These findings are significant, as they emphasise the PCK of PE related to Knowledge of Learners that the participants would need to explore in their CPTD. You (2011) refers to Knowledge of Learner Learning as knowing learners and their learning processes. Ward and Ayavo's (2016) Knowledge on Content and Student can be included here, as it refers to knowing "learners' understanding of the content, their prior knowledge, and what they are likely to misunderstand about the content" (p. 196). To know one's learners could also infer knowing them individually and what motivates them and knowing their developmental levels. This, too, includes learners who are differently abled (Capel & Whitehead, 2012). In this case, knowing how to include normally developing and differently abled learners, together with learners who have disciplinary problems, will be important for participants implementing PE.

5.3.2.2.4 Sub-category four: Lack of parental support

Several participants referred to the indirect effect that the lack of parental support had on education, let alone PE implementation:

> *Children come to school with empty stomachs. There is no proper care at home. He is not given that chance of being a child. Some are heading houses. At times you feel sorry for them. No-one is preparing their clothes. The socio-economic factors are playing a role in their lives. They have a bad effect.* (Y2).

South Africa has implemented a National School Nutrition Programme to alleviate short-term hunger among children and to entice them to attend school (Devereux et al., 2018). Child-headed households are, sadly, a common characteristic of the Eastern Cape. A lack of parental support is often cited as a barrier to quality education by Foundation Phase teachers (Neethling, 2015). This lack of parental support affects teachers' academic load in general, as they have the added responsibility of attending to the personal problems of the learners:

> *You must start from scratch when you are teaching... you don't just jump to Maths. You're supposed to start first from the life orientation.... The granny is old... and the mother is still outside, looking for another baby. Parents don't look after their children.* (X2).

With social issues encroaching on the time available for academic subjects, the time for PE is negatively affected.

5.3.2.2.5 Sub-category five: Lack of safety and security

The data clearly indicated the participants' awareness of the effect of the immediate social environment on their teaching of PE. They reported that "*with the shooting and stuff, we can't do the Physical Ed. outside*" (U3); "*It is not safe to go outside, because the tsotsies* [gangsters] *are moving around*" (S1); and "*There is a lot of shooting, so some of the parents won't allow their children to play outside*" (U1). The African News Agency (2019) and Chirume (2018) report that violence and gangsterism are common barriers faced by communities in historically disadvantaged areas in Nelson Mandela Bay.

The participating teachers stated that the violence that many children were exposed to in the community tended to be replayed in their interactions with their peers. Participant Q1 stated that children saw "*violent acts in their community*" and emulated this in her PE class through "*fighting and pushing*", making it difficult to maintain discipline. The areas in which I conducted this research are referred to as "crime hotspots within the Eastern Cape Province, with a high incidence of gang violence, hijacking and robbery" (Nelson Mandela Bay Municipality, 2017, p. 49). Lack of discipline in South African schools due to the violence learners witness and experience in their own communities is a concern and has been found to be a barrier to learning (Baruth & Mokoena, 2016). Barriers to learning were therefore the difficulty teachers experienced when trying to teach whilst learners displayed aggressive behaviour. Teachers would therefore need to know how to accommodate for the effects of violence on their learners as part of their PCK of PE, especially when considering their Knowledge of Instructional Environments (You, 2011).

5.3.3 Theme three: Positive responses to challenges

Despite the overwhelming barriers reported by the teachers, I was impressed that the participants managed to implement some measure of PE within their low resource school contexts. Although perceived as a low priority subject, some teachers felt *"guilty"* (Q3, S2 and Z3) about not making time for PE and that they chose to prioritise other subjects over PE, and *"sad"* (Q1 and Z1) that their learners were not experiencing the benefits PE had to offer. Even though the participants perceived barriers, their reflections on their feelings and attitudes catapulted them into action. For example, participant Z2 made sure her learners went out regularly, as she valued the benefits the children reaped in terms of discipline and group-work: *"I do it* [PE] *every time when I should do it… it will be better. They will become more disciplined in their groups and concentrating in that group".* The participants also employed

creative time management strategies by firstly being aware of how their time schedule affected them, and then choosing a time during the day that would set them up best for success: *"I tried to fit it in…after second break, but then I got bogged up with the work… so I do Phys. Ed. in the mornings instead"* (Y2). Time management skills are important for any teaching professional (Khan, Farooqi, Khalil & Faisal, 2016) and the incorporation thereof in PE teaching is therefore not surprising. Other forms of time management suggested by PE teachers have included reducing curriculum expectations for other subjects and implementing a whole school programme (Martin & Murtagh, 2015). The latter ensures that PE becomes less of a burden, as everyone is involved at the same time, creating a sense of school spirit and community.

The participants overcame equipment shortages by making their own: "*If you don't have something, you try and make something…*[using] *recycled equipment… we make it ourselves"* (Y1). Children also assisted in this regard by displaying creativity and their innate ability to problem solve: *"We don't have balls, but they* [the learners] *take plastic bags, and they make balls"* (Q1). The teachers stated that they used group work to accommodate equipment shortages and large class sizes: *"Equipment is divided according to the groups… Children will share"* (U1). Dividing learners into groups to share equipment and to manage discipline with large class sizes is a proven successful tactic demonstrated to help with implementing PE (Gross & Buchanan, 2015). Ebersöhn (2014) found that teachers in low resource school contexts and poverty-prone areas in South Africa adapted what resources they had to the context they found themselves in, particularly when the teacher had "traits such as compassion, creativity, optimism and especially flocking [networking] to access and use scarce protective resources" (p. 568). Solutions by PE teachers for resource constraints have also included: "New games with minimal equipment and set-up time, simple non-equipment based DPA [Daily Physical Activity] activities, and more indoor DPA activities for the classroom" (Martin & Murtagh, 2015, p. 20).

The teachers shared that they adapted PE for differently abled learners, through not *"forcing a learner to do something…rather* [giving] *them something else… not being so aggressive"* (Z2). As part of the Quality PE guidelines set forth by UNESCO (2015), PE is meant to be accessible; that is, the following must be ensured for:

> … provision of facilities, equipment, curriculum, and pedagogy, which is available to the entire student population including persons with disabilities,

> girls, or those with specific cultural/religious requirements, and where appropriate is modified or adapted to meet specific needs. Located in a safe environment free from threat and danger, regularly serviced, fully functioning, and fit for purpose. (p. 8)

The participants also did *"physical education in the classroom"* (U1), especially when it rained or there was gun violence in the neighbourhood. Inter-disciplinary curriculum models in PE are not a foreign concept. It can be employed to support educational outcomes in the classroom setting; for example, integrating Maths with movement activities (Lohren, 2017), resulting in learners increasing their physical activity levels throughout the day (Martin & Murtagh, 2015). Exploring indoor PE with teachers is a viable creative addition to outdoor activities if it is dangerous to go outside and/or to support learners with their development.

Creative activities were also implemented in the classroom to improve PE discipline: *"Because it takes a while to get out of class and in, due to discipline problems. So, what I will do, as I normally tell them to stretch out, stretch out your arms… we do breathing exercises before we go outside"* (T2). Many teaching approaches can be used to achieve success in PE lessons. Preparing learners for the lesson through appropriate warm-up sessions is one such method, as it "sets the tone for the rest of the lesson…[and] can shape a class into a well-behaved group… (Beighle & Pangrazi, 2019, p. 85).

Checking on the Internet when not knowing what to do in PE was another resourceful activity implemented by the participants: *"I googled…you can get a lot of ideas.…You don't have to sit there with your hands folded and say I don't know what to do"* (Y2). This action is a form of self-directed learning (Elliot & Campbell, 2015) through using online resources (Tindall & Enright, 2013, p.110). While international research on teacher-based solutions to the PE barriers they face daily, exists (Strampel et al., 2014; Weatherson, McKay, Gainforth & Jung, 2017), the findings need to be extended to low resource schools, especially within the Eastern Cape (South Africa) context.

These positive responses to challenges faced during PE was, in part, due to teachers' beliefs about the value of PE to their learners' development. For example, the fact that PE was "*taking their* [learners'] *minds off gansterism and drugs"* (Q2) was another encouraging factor. The prosocial benefits of PE for learners of lower socio-economic status communities were further emphasised: "*By taking them outside, it has that ability, they become one. So, it is good to go*

outside, then. It gives them the opportunity to... they forget about their home" (V3). Participation in PE and/or sport has been found to divert learners from negative social behaviour, such as violence, in school settings (Mandigo et al., 2016).

The pro-academic benefits PE fostered also motivated teachers to implement PE: "*Their movement abilities they learn in PE and what they do in PE is transferred over into the classroom… it* [PE] *gives the brain exercise. It gives the brain oxygen…outside they are getting fresh air and sun"* (Z1) – therefore providing children with positive coping mechanisms. PE improves the academic performance (Gall et al., 2018) and school readiness (Erasmus et al., 2016) of children in low SES communities.

Additionally, teachers recognised the general health and psychological benefits of PE: "*A healthy body equals a healthy mind… because when they come outside, you could see they've got that vigour*" (V2). A reduction in cardiovascular risk factors (Müller et al., 2019), and augmented cardiovascular fitness (Brusseau et al., 2016) have been demonstrated in research on children living in poverty who engage in physcial exercise.

The participants were aware of the numerous benefits PE had to offer children's sport development, especially regarding their learners' physical development:

> *I think PE in the Foundation Phase is very important for the child to develop skills. These fine motor skills. Because I still find these children are very unstable. Unbalanced. So if you practise maybe once a week or so, catching a ball, eye hand coordination, that everything helps with all those… like when they come to school for all that preparation before they can go to the real things* [like sport]. (T3).

The preceding sections reported on the challenges faced by participating teachers in implementing PE in under-resourced schools. The findings also highlighted that some of the teachers had responded creatively to these challenges. The implications of these findings for CPTD are discussed in the next section.

5.4 IMPLICATION OF FINDINGS OF PHASE ONE FOR CPTD

The participants in this study faced numerous personal and systemic barriers to PE, highlighting the complexity associated with implementing quality education in low resource schools in general, let alone PE. Regardless of how many barriers existed, the teachers did

show creativity in overcoming many of the challenges they said they faced. Phase One's research findings made clear to me the CPTD implications I needed to consider when moving forward with teachers. That is: 1) Teachers' assumptions, values, beliefs and attitudes regarding PE and their ability to implement it, could be improved by individual and collective critical reflection; 2) Teachers have to explore how they can fit PE into their learners' holistic development in spite of their workloads; 3) Teachers need to find creative responses to environmental barriers; 4) The benefits of collaborative learning, including within a community of practice, may create a platform for problem solving and advocacy for improvement; and 5) Teachers need to learn how to teach PE within their low resource school context through appropriate content and pedagogical content knowledge.

5.5 MY PERSONAL LEARNING FROM PHASE ONE

Based on my learning from Phase One, I became acutely aware of the limitations in my thinking and in the methodology I had intended to use. This transformation in thinking during Phase One led to the paradigm shifts I made in Phase Two of this study. I explain these below by captioning my reflective thoughts on my approach in Phase One.

"I never questioned why I did things the way I did things. I just assumed": When I finally asked myself the question why I conducted Phase One in this manner, I realised that I had been indoctrinated towards positivist research (Killam, 2013) during my undergraduate and postgraduate studies, and that I never questioned it, nor considered other paradigms. I was comfortable with taking the lead in research, being the expert and interpreting what participants said, and finding my one 'truth'. Collaboratively involving participants in the research process was a foreign concept to me, and hence adopting an interpretive paradigm for Phase One kept me in my comfort zone: I could still position myself as the lead researcher and interpreter of data. Thus, in Phase One, I was convinced that this approach to qualitative research was superior to post-positivist paradigms. In Phase One I was initially very reluctant to adopt action research as a methodological process, as the normal way of doing research and teaching in my life experiences up to that point of my research journey did not include this way of thinking and behaving. According to Herr and Anderson (2014), this is a normal phenomenon:

> The action research dissertation is the new kid on the block, and it is coming under intense scrutiny by both dissertation committees and IRBs [Institutional Research Boards]. While action research shares some similarities with qualitative research (and even quantitative research), it is different in that research participants themselves either are in control of

> the research or are participants in the design and methodology of the research…Committee members… are often stymied by the cyclical nature of action research as well as its purposes, which transcend mere knowledge generation to include personal and professional growth, and organizational and community empowerment. (p. 1)

I, consequently, transformed how I viewed action research, and how I conducted my research moving forward.

"Measuring and interpreting what people say in isolation, is not going to help them change": After completing Phase One, I realised that positioning myself in the interpretive paradigm was not appropriate for the goals I wanted to achieve. This form of research enquiry would provide me with limited depth of understanding regarding: 1) Teachers' personal and systemic CPTD needs; and 2) How PE could be implemented in a low resource school. Long-term engagement and follow-ups with teachers would enable them to better link "theories to practical skills" (Elliot & Campbell, 2015, p. 385), to explore their PCK of PE, and to understand what affected their abilities to change personally and within the constructs of their low resource schools. I therefore needed to position myself within a research paradigm that would allow me to engage with teachers in this way.

"I am not the expert": The leadership styles I had experienced during my academic career up until Phase One had been mainly of a bureaucratic, transactional and autocratic hierarchical nature (Murrari, 2015). I, therefore, without question, believed that a hierarchical chain of command and expert led approach to working with others was the only option. However, after reflecting on the work of Rittel and Webber (1973) and Lawson et al. (2015), together with Phase One's research findings, I came to realise that I was dealing with a wicked problem (a complex problem that has no foreseeable solution) (Lawson et al., 2015). Implementing PE in lower resource schools was a very complex problem and required a different approach to leadership and engagement with others. I therefore realised that taking the lead, working in isolation, and excluding teachers from the research process were not going to be conducive to changing how they taught PE.

The complex problem I was faced with, highlighted many of the assumptions, attitudes and values I did not even realise were guiding my initial "expert" positioning in this study during Phase One. I lived in a privileged community and came from a Former Model C School. I had

not taught PE together with all the other CAPS subjects Foundation Phase teachers had to, and especially within low resource schools and in poverty contexts. I had also not experienced how teachers taught all their subjects to their abled and differently abled learners, with limited support from the ECDOE, and with equipment and infrastructural shortages. My original idea of a ready-made, one-size-fits-all and standardised PE programme devised by me, the "expert", was clearly not going to align with the multiple realities teachers experienced at schools.

Through acknowledging and accepting that I was not the expert, I could position myself within a paradigm fostering power equality between me (as the researcher and facilitator) and the teachers (as participants and fellow experts). This paradigm shift regarding the researcher and participant relationship and the "expert" and "novice" helped set the foundation for my search for research avenues where I could share power and agency with teachers versus conduct research on them. Stated differently, this led me to adopt the Participatory Action Learning and Action Research (PALAR) approach (Wood, 2020) for Phase Two of this study.

In conclusion, Phase One was a valuable learning experience for me, as it assisted me in my own transformative learning journey, where I shifted from positivist to interpretive and ultimately to a participatory and critical paradigm. Phase One disrupted my beliefs, values, assumptions and attitudes and caused me to question myself and the power relations that prevailed within my supervision, teaching and working contexts.

5.6 SUMMARY

In this chapter, I answered the research question: ***What are Foundation Phase teachers' experiences of implementing Physical Education (PE) in low resource schools?*** My findings revealed that Foundation Phase teachers faced both personal and systemic barriers to PE teaching, resulting in PE not being implemented or not implemented properly. Regardless of these barriers, some creative problem solving ensured that PE took place. From my findings, I could identify important implications for teachers' CPTD. From my personal learnings, I was guided towards adopting PALAR as a research methodology for the rest of the study.

CHAPTER SIX: DISCUSSION AND FINDINGS OF PALAR CYCLES ONE AND TWO

"…we have forgotten our childhoods… that we also played…*(T5) *… the journey revitalised my spirit with Phys. Ed., and to just bring it back* (T7)*…"
(our Action Learning Group)

6.1 INTRODUCTION

In this chapter, I focus on two of the collaboratively constructed questions that emerged from my engagement with teachers in our two cycles of action and reflection, namely:

1. ***What do we need to learn to be able to effectively implement PE?***
2. ***How can we improve our confidence to teach PE within our school contexts?***

I commence this chapter by reminding the reader of the methodology used in Phase Two, which is followed by an overview and discussion of the findings.

6.2 OVERVIEW OF METHODOLOGY

Table 6.1 provides an overview of the paradigm and methodology I used in Phase Two. For an in-depth understanding, I refer the reader to Chapter Four.

Table 6.1: Summary of Phase Two's research paradigm, methodology and conceptual and theoretical frameworks

Paradigm	Critical and participatory paradigm (Kemmis et al., 2014)
Research design	PALAR (Wood, 2020; Zuber-Skerritt, 2015)
Sampling	Purposive and convenience sampling (Patton, 2014)
Participants	Ten Foundation Phase teachers from two Northern Areas schools
Data generation	Participants generated data through: • Democratic Dialogue (Reason & Bradbury, 2001, p. 18-19; Zuber-Skerritt, 2011) using data generation strategies such as a Circle of Voices (Brookfield & Preskill, 2016), Nominal Group Technique (Hardina, 2012), Conversational Moves, "hatful of quotes" and Newsprint Dialogues (Brookfield & Preskill, 2016). • Collages (Leavy, 2018). I also used a reflective journal and feedback from critical friends (Kemmis et al., 2014).

Data analysis	Two-pronged approach, namely 1) analysis of the data on a practical level within the action learning group; and 2) data analysis on a theoretical level by myself and subsequently discussed with teachers.
Data trustworthiness	Trustworthiness measures included: 1) Outcome validity; 2) Process validity; 3) Democratic validity; 4) Catalytic validity; 5) Dialogic validity; and 6) Legitimacy deficits (Herr & Anderson, 2014).
Theoretical framework	Critical theory (Brookfield, 2005), transformative learning theory (Mezirow, 1997) and transtheoretical model of cognitive-behavioural theory (Prochaska et al., 2008).
Conceptual framework	Teacher competency-based model (Yidana & Lawal, 2015).
Ethics clearance	Similar to Phase One research, with the inclusion of Kemmis et al. (2014), McIntyre (2008) and Wood's (2020) ethical guidelines for participatory research.
PALAR Cycle One	Four sessions, 32 hours: October 2017 to April 2018. Focus: *What do we need to learn to implement PE effectively?*
PALAR Cycle Two	Ten sessions, 44 hours: May to November 2019. Focus: *How can we improve our confidence to teach PE within our school contexts?*

6.3 OVERVIEW OF FINDINGS: CYCLES ONE AND TWO

Figure 6.1 provides an overview of the main themes that emerged. In the following section, I provide a discussion of the main findings of Cycles One and Two.

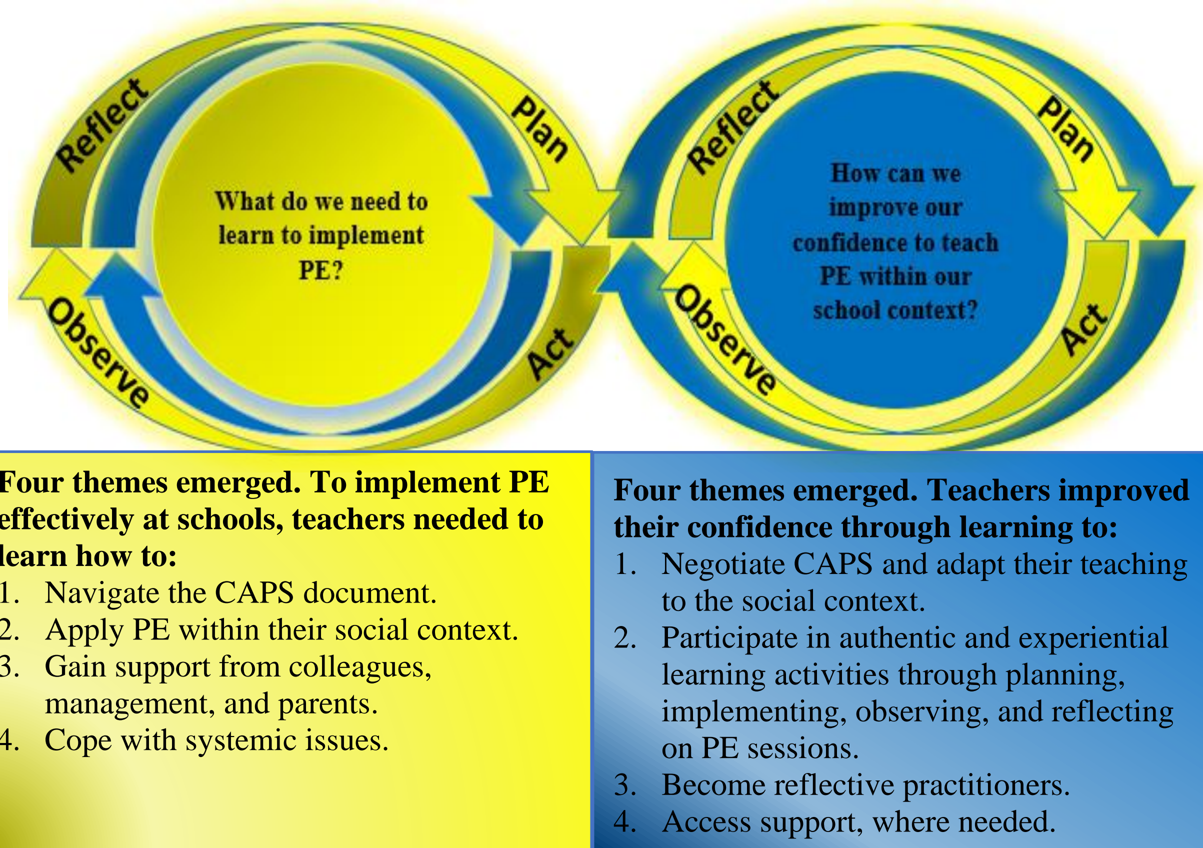


Figure 6.1: Overview of Cycle One and Two's Findings

6.3.1 Discussion of themes: Cycle One

In Cycle One, four themes emerged. In order to implement PE effectively at their schools, the teachers needed to learn how to: 1) Navigate the CAPS document; 2) Apply PE within their social context; 3) Gain support from colleagues, management and parents; and 4) Cope with systemic issues.

6.3.1.1 Theme One: The need to learn how to navigate the CAPS document

This theme captured teachers' need for CAPS related PCK, specifically focused on participants' knowledge of the PE subject (also known as content knowledge or common content knowledge) and assessments. It also captured teachers' need to identify how PE within the CAPS contributed to their learners' academic and holistic development.

The participants required actual examples and clarifications of the FMS concepts (such as galloping) within the CAPS, as teachers had many different interpretations thereof. There was a belief that content knowledge would improve their ability to adapt through choosing different examples of how to demonstrate the movements or finding alternative ways of teaching the movements. Furthermore, representing these movement concepts in the form of a lesson plan would help with the teaching of PE:

> *For me, the concepts of the actual things. The actual concepts of what we think it should be. Because when you explained it to us, we could see, it was not only what we thought it was, but it was also that* [something else]. *So, understanding the concepts a bit better… for example, gallop for me is difficult. The steps actually. The steps on how to get to it. Because at the moment most of us rely on demonstration. We don't have a written thing to say you must do this and then that…* [and] *the lesson plans and so forth, as that will help us to get structure into our lessons.* (T7).

The need for this type of knowledge is not surprising, as content knowledge refers to the PE knowledge required to understand the subject (Ward & Ayvazo, 2016). Having written examples thereof, and in the form of a planned-out document, is furthermore expected. According to Ward (2009) and Iserbyt et al. (2015), instructional tasks (e.g. tasks to teach motor skills) and representation (how the task is presented or verbally and visually displayed), can be referred to as specialised content knowledge. Thus, it was to be expected that the participants would require this type of information and would want to represent it in the form of a lesson plan.

It was evident that the teachers wanted knowledge on how to assess FMS in the CAPS: *"I'd like advice on how to create an assessment sheet for each of these skills. What do you call it, a rubric… but for each level of skill. What do I give that child if they master it?* (T9). Also added was *"How are we going to evaluate these children?... We need a checklist"* (T4). Access to assessment information was deemed important as *"when that child is busy in class or outside in a group and you notice that movement, you can quickly mark her"* (T9). Being able to assess learners' movement proficiency is not easy, as proficient movements have different body components. For example, running fast would require opposite arm and leg motion, knee drive and leg extension, an upright torso, eyes focused forward and contacting the floor with the front part of the foot (Ulrich, 2000). Generalist teachers would struggle with knowing what constitutes a proficient movement (Breslin et al., 2012), and would therefore need help with understanding and developing assessment sheets.

There was also a disconnect between academic subjects and PE within the curriculum, with teachers viewing movement education as something unrelated to academic development, and only happening outside the classroom:

> *…we are not really noticing this thing* [PE]*… And where all of this fits in… sometimes we separate the two from each other* [PE and academics]. *We make the curriculum something else, and what is outside something else.* (T7).

Implementing the CAPS, let alone navigating and making sense of it, is not an easy endeavour for teachers, and this dampens their enthusiasm for engaging with it: *"What is a challenge for me, is when you hear the teachers talk about the CAPS document, is getting teachers enthusiastic about following the CAPS"* (T7). I was not surprised that teachers had a disjointed view of PE within the curriculum, and how it contributed to their learners' holistic development, both inside and outside the classroom, for three reasons. Firstly, in South Africa, teaching has been de-professionalised, with too much standardisation and limited freedom to adapt (Shizha & Kariwo, 2011). Teachers are encouraged to follow standardised procedures and not veer off task, nor explore how subjects are inter-related and connected. Secondly, the opportunity to engage in pre-and in-service PE training is limited, with workshops being predominantly transmission-based, and lacking depth. Furthermore limited integration with the CAPS and practical application to the real-world setting takes place (Du Plooy et al., 2016; Steyn et al., 2012; Stroebel et al., 2019; Visagie, 2016; Zinn et al., 2014). Governor (2019) supports the notion of the need for an integrated framework for CPTD, focused on teachers practically applying the CAPS to improve their understanding and application thereof in the

real-world. Thirdly, the CAPS construction, with so many subjects and learning areas to complete, "is just too much" (Dixon et al., 2018, p. 20). PE, and other subjects which are important to learners' holistic development, simply get lost.

The participants emphasised that understanding how to navigate the CAPS through learning about PE's content knowledge and the application thereof in the form of lesson plans was important. They also highlighted that being able to assess learners' movement abilities and understand the importance of PE to their learners' holistic development within the CAPS was important. However, being able to apply these elements to their school context was paramount.

6.3.1.2 Theme Two: The need to learn how to apply PE within their school context

This theme encompassed participants' need to apply content knowledge to the real-world context, and to explore whether it works or not. It also included how teachers navigated the incorporation of PE into their academic schedules when considering their learners' characteristics, equipment availability and time management. The teachers' need for applying content knowledge is vindicated here:

> *There is no use we sit with all this information and we don't apply it and see if it is workable. We are just adding on and on to our group and knowledge. But we are not implementing and seeing if it makes a difference or if there are challenges in the concepts on paper… So, for me, our aim should be to focus on a specific skill that we have learnt. We have the wheel … We have clips on all the fundamental movement skills. We need to apply it.* (T7).

After collaboratively exploring the Movement Analysis Framework (Graham et al., 2012), the *"wheel"* , the participants became aware that, although they had been equipped with content knowledge throughout the project, this was not enough: they also needed to know whether they could apply the theoretical knowledge to their school contexts. Other teachers believed that they needed *"to equip"* themselves, *"because if you don't know how to do it, you will be frustrated"* (T12). Knowing what to do, and how to apply it, are two different constructs. Both are important to be a successful teacher (Yidana & Lawal, 2015).

Some of the participants wanted to engage in physical activities to not only practically apply what they needed to learn, but also to become fitter. They shared that: *"My next session I'd like to be more fit for all these things* [PE activities]. *Because I am not fit. How can a teacher not be fit?"* (T12). The participants were therefore becoming mindful of their own physical competence, and what they needed to do to improve this. That is, their physical self-concept,

which when improved, could augment teachers' likelihood to teach PE (Faulkner & Reeves, 2000).

At first, to practically apply what participants had learnt, they wanted me to *"visit their schools"* (T5), so that I could *"see what they do…* [and] *help them further and give them advice"* whilst they *"take… children out and apply these concepts…* [because]… *you are learning whilst you are out there. You gain confidence and they* [the learners] *gain confidence"* (T4). My concern with the requests to visit the teachers' schools was that it would reinforce the dominant culture of the "expert" helping the teacher (Stroebel et al., 2019). Instead, I encouraged the teachers to explore how they could learn collaboratively, and how to apply their content knowledge, with them taking the lead to empower themselves and others, as this was the goal of the PALAR design I adopted for this study. I discuss how they did this in Cycle Two.

The participants expressed how their learners' ability to listen and share affected their PE teaching, stating that: *"So as you can see Sam, they don't know how to land and stop. That's what I want more in the next session. If I say stop! They go on. They don't listen"* (T6). Participant 6 was aware that she did not understand why her Grade R and One learners did not pay attention to her commands. Children in these early developmental years take time to learn how to comprehend sound and to attach meaning to it (Hugo & Horn, 2013). Factors that can affect Foundation Phase learners' ability to comprehend in PE classes can be the surrounding environment if there is a lot of background noise, so the learner cannot hear the teacher, the number of learners (with more learners resulting in more noise), the type of instruction the teacher is using (inappropriate verbal and non-verbal instructions and/or no whistle, for example), whether children can understand the instructional language being used (it might be the learners' second language), to name but a few (Bourdeaud'hui, Aesaert, Van Keer & Van Braak, 2018; García-Fariña, Jiménez-Jiménez & Anguera, 2018). Some participants also mentioned a communication problem when they assisted other teachers' classes with PE: *"My problem is that the Grade Ones just listen to their own teacher, they don't listen to Grade Two and Grade Three teachers"* (T4). The fact that learners do not listen to a different teacher could be due to the numerous factors already mentioned, or to the teacher having a different communication style that the learners were not used to. The participants therefore thought that helping each other teach PE through being the class teacher for another group of learners was problematic. Assisting each other with the management of classes was a better approach.

Other difficulties experienced in teaching PE included *"The little ones… they don't want to share"* (T4), and *"They don't want to give each other a chance, because they are just enjoying themselves in the station and they don't want to move on"* (T5). Also, *"They will grab the balls and then they start kicking them around… your lesson will go haywire"* (T19). The lack of listening and sharing was partly attributed to *"many learners who have not been to the creche* [kindergarten] *or in Grade R*" and/or being *"neglected by their parents"* (T16). Children need to develop their social skills, especially considering that they may have poor or no role models at home (Blewitt et al., 2019). When consistently implemented, and with strategies that promote social cohesion between learners (such as cooperative learning), PE can become a valuable aid to helping learners develop social skills (Opstoel et al., 2019). Providing children with opportunities to play during PE (with different types of play including functional, sociodramatic, associative, cooperative and socio-affective play) (Mulovhedzi et al., 2017) can also aid them in learning how to share. The participants therefore needed assistance with how to help their learners socialise.

Equipment, and the need for it, became a hotly debated topic among the participants. Some shared that *"I am just thinking in terms of mats… Also, we don't have the luxury of going out with our class. It is stone, rocks, and sand… there is a small space next to the class there... What am I going to do to get their* [learner's] *attention?"* (T4). However, others had learnt that equipment was not necessary for PE implementation:

> *…that equipment and mats. I don't think it is a now barrier. It is something you should work on, but I don't think it is keeping you from doing Phys. Ed. now… and like the Grade R ladies said, they are busy doing this Phys. Ed. So, they can share what they have and what they are doing in their classrooms. So, the equipment is not the problem, the space is not the problem… They don't always have to go to the tar and play. They can do it in the classroom, as the rest of the learners do work. Whilst the others are writing, especially Grade One, Two and Three learners… keep them in the class and you take that one group just in front of your class… with the ball or the beanbag. Then put them in a game. So, you don't need to have all 30 outside. Because if it is right in front of your class, then you can be in and outside. Keep the ones that are inside the classroom with cut and paste and whatever…* (T7).

The participants had learnt that those who are doing PE, even with limited equipment, should share how they have overcome this barrier, that indoor PE is acceptable, and that learners could be divided into groups to accommodate the smaller space. Thus, through dialogue, the participants were already defining their needs and learning how to overcome barriers in the early stages of our collaboration.

The participants deemed time management as a barrier. The teachers felt discouraged from teaching PE, because they were pressurised to complete academic subjects within a limited timeframe: *"I think what demotivates me, or what causes me not to do the full two hours, is the pressure of completing your curriculum… Your prescribed curriculum in the timeframe that is allocated to us" (*T19). Others found it difficult to include PE in their academic schedule, as *"the curriculum is more academics, and… we are required to deal with the academics first… The child must do it, because these are the four areas that are looked at when the child goes into the next Grade"* (T8). According to Du Plessis and Marais (2015), the administrative load of the CAPS is high due, in part, to too many learning areas, no clear structure to the curriculum, a large volume of content to be covered, an over-reliance on content rather than skills and thinking, and too much assessment. Also, content is standardised, with slower learners not being accommodated for. Teachers consequently find it difficult to meet the administrative workloads and to help learners who are falling behind.

The participants in leadership positions shared that *"we as the HOD is under pressure… I need to teach until half past one and then you'll need that time for assessment… disruptions in the class, I counted one day, it's fifteen times the disruptions for the day… And in our cases, when we have to close down school… time is lost"* (T4). The disruptions caused were administrative in nature and ranged from colleagues needing the HOD to assist with academic work or to resolve a dispute between learners or teachers and parents (to name but a few). School closures in the Northern Areas are generally due to gangsterism or parental protests for better quality service from the DBE (Mbabele, 2015; Raahil, 2016; Zisonke & Daniels, 2016). During our time together, the schools closed often due to funerals (learners were shot, or teachers succumbed to disease). Participants worked in the areas referred to as "crime hotspots… with a high incidence of gang violence, hijacking and robbery" (Nelson Mandela Bay Municipality, 2017, p.49). All these disruptions affected participants' academic schedules and hence the amount of time available for PE. A fellow HOD also shared that "*My biggest challenge is time management at school. I don't have time for Phys. Ed. with my children"* (T7). However, she countered this statement by conveying how she was planning to overcome this barrier: *"So, I need to get somebody else to take my Phys. Ed: That is a challenge that I have".* This was why she had joined our collaborative journey in the first place, to support her colleague who would be taking her PE classes: *"So for me that is… I am here in the capacity to support my colleague"* (T7).

In summary, the participants needed to learn how to: 1) Navigate the implementation of CAPS's PE content knowledge and apply it within their school context; 2) Accommodate for their learners' characteristics in PE lessons; 3) Use limited or no equipment when teaching PE; and 4) Fit PE into their academic syllabus. Cycle Two provides more insight into how participants aimed to overcome these barriers. Within the school context, it was also important for participants to learn how to gain support from others and to navigate the social context.

6.3.1.3 Theme Three: The need to learn how to gain support from colleagues, management, and parents

The participants were very aware of how the social context affected their implementation of PE, and their need to think carefully about how they would gain support from key stakeholders, such as their colleagues, management, and parents. The participants shared that "*we need to go share with the rest of the group"* (T9), and *"to invite other Foundation Phase teachers"* (T8). The need to share with others was important for sustainability of the project:

> *This needs to grow because we need to share what we've learned because we not always going to be there to drive programme at the School… Keep this going and we need to find new champions. Like, she said she's not the subject head, but I know now that the seed has been planted. I know now if I say now, I can't do it, then, I know the seed was planted there. And that is what we should do.* (T7).

However, participants were stressed by the prospect that their fellow colleagues, who were not on the project, might not support them: "*They going to take us out at school. The teachers"* (T4). and:

> *There is always that type of thing, they are at some lodge, and it is Friday. They are already probably at home. So that is why I put on the group, we are here, and we are doing this. So, it is not like a get-away from school type of thing… So, there will always be that type of friction. You know more than me now. We have that animosity.* (T7).

Colleagues not in the action learning group believed that the participants were just trying to get away from school and their responsibilities, indicating a lack of collegiality and support for professional development. Others emphasised that *"there are still Foundation Phase teachers who do not want to join us… they are not interested"*, but that if there were to be buy-in and support, *"the Intermediate and Senior Phase can see what we do and the importance of FMS Phys. Ed."* (T8). When Foundation Phase teachers implemented PE, their colleagues perceived this as non-academic work and not related to learners' development. The participants therefore

felt discouraged by their colleagues' lack of support and motivation. The lack of support from the Intermediate Phase was attributed to "*international students that come and take Phys. Ed… So, it's done for them. So, they actually just sit and relax… They're not involved"* (T12). When Intermediate Phase teachers are not involved in PE, they do not take the time to understand the benefits thereof, thus adding to the cycle of misinformation and negative perceptions regarding the role of PE in academic development. The participants believed that if the Intermediate Phase teachers got *"more hands on"* with their learners, they would *"have more knowledge of what's happening"* (T12), and thus support Foundation Phase teachers when they tried to implement PE at school.

The participants believed that gaining support from their leadership was important:

> *My aim would be to invite, firstly now, I am speaking on a school level. To invite my other Grade One colleagues, and then to the rest of the Foundation Phase to come and see my lesson. And then to involve management to see what we are doing. Then we can take up problems related to not doing what we want to do. At a school level in the group. Then, from there at the school levels to empower people out there… so that they can buy in, because of the fact that we know, people are sitting.* (T4).

This approach to gaining support from colleagues and changing the context of teaching that participants were advocating for aligns with a bottom-up approach to change management (Skedsmo & Huber, 2019). That is, starting with colleagues, then management, and then the broader community. The reason for the need for support from management was that participants indicated that some of their colleague feared management: *"People are intimidated, somewhat, to a certain degree by management… They get this fear attached to, to ah, management. So, what happens is that teachers fear, and stay away. They're not being themselves… They're more reserved, they're more well behaved"* (T19). Having *"a good relationship"* (T19) with management was deemed essential for this perception to change. In Cycle Two, I share how participants aimed to achieve support from senior staff.

To maintain the confidence levels of participants and their focus on achieving their PE visions amidst learning how to cope with gaining support from their fellow colleagues, participants deemed it important to take a moment to celebrate the group's accomplishments. That is, to acknowledge what they had achieved to boost their confidence and unity as a team, before sharing what they had done with their colleagues:

> *Celebration and the sharing go together… Have a little celebration for our journey up until here. That will be also a very important… before sharing with others. To culminate almost what has happened over this year. We just boost each other and say: Wow, we've come so far! Because that will also boost our confidence in sharing with others. For me, it would be an important part of where we are now, so that we can keep on focusing… I just feel that we need to have that moment of where you just have that moment of where you just stand still and say, well done.* (T7).

Although stated less often than the necessity for collegial and managerial involvement, the participants expressed the need for support from parents, with some being more enthusiastic than others about the prospects of parental inclusion: "*We have a problem with parental involvement… If that can be addressed. And I mean I, I've spoken to parents a lot of times. They say, come, just give your names in* [to school]*, so that we* [the teachers] *can call on you"* (T5). However, participants felt that: *"You will get only… one or two… around that…. The good child's parents. In your class, some parents, they will come. They will make an effort… But the parents that you really need to come, that you want there, they don't usually come"* (T16). A lack of parental support in lower socio-economic areas is an unfortunate reality, as parents are not often able to help their children do their academic homework for reasons related to poverty, low educational levels and occupation and family structure, to name but a few (Munje & Mncube, 2018). The participants deemed support from parents as important, since parents were inter alia supposed to make sure that their learners bring suitable PE clothes to school: *"The learners, they don't bring their P.T. clothes to school… the little girlies coming without their P.T. clothes. When we have our jumping or sitting open… it is not on"* (T4). The teachers did not feel comfortable when their learners' underpants were exposed during PE sessions. Others did not allow their learners to participate in PE when they did not have the correct clothing, as this was viewed as evident of poor discipline. As each learner had PE clothing at the beginning of the year, and the teachers knew which learners had the financial means to buy PE clothes, but they did not bring their PE clothing, this was perceived as poor discipline on the part of both the learner and their parents: "*That is one of my reasons why I'm disciplining. Those learners who do not bring their clothes, do not take part in PT. They don't leave their PT clothes at home. You'll see. The numbers will get smaller if you discipline… I know my learners"* (T9). Many learners live in poverty, so it is important for teachers to understand why a learner is not bringing their PE clothes to school, and support or discipline accordingly. Also, finding sustainable strategies and partnership programmes with parents,

which capitalise on everyone's strengths, is important (Munje & Mncube, 2018). The participants therefore needed to find ways to gain more support from the parents.

In summary, gaining support from others was important to the participants as they needed to change their colleagues' and/or managements' perceptions to accept that: 1) Joining CPTD was aimed at contributing to achieving the schools' academic outcomes versus an opportunity to negate teaching responsibilities; 2) The noise and indoor/outdoor play during PE contributes to learners' academic development; and 3) Parental support can assist with learners' participation in PE at school through encouraging their children to dress accordingly (if parents could afford it). It became evident that the lack of the support from colleagues was affecting participants' self-confidence to share what they had learnt with their colleagues. To boost confidence, it would be important to take a moment to celebrate the group's accomplishments before sharing with others.

In addition to gaining support from others, the participants had to find ways to cope with systemic issues, such as sourcing funds for PE teaching and better integrating certain policy decisions into their teaching.

6.3.1.4 Theme Four: The need to learn how to cope with systemic issues

The participants' experiences of their day-to-day teaching seemed to stem, in part, from budget decisions which resulted in: 1) Funding either getting distributed to other priority areas; and/or 2) Learners who are not at the readiness level for a Grade being accepted, or learners who are too young entering Grade R. For example, being a Section 20 school, the budget required careful consideration, and had to be strongly defended, as the funds to buy the necessary resources for teaching within all subjects and learning areas, were not available:

> *For a section 20 school you get told what you can spend your money on. What we found that not every year you use your budget the same. So, it won't be used for Phys. Ed. every year. It goes for different types of needs. It depends on the learning area needs of the child. Because I don't want our teachers to go back and ask the Principals. Because I am now at the management level and just now, I get attacked and told I was not defending and having an input. Because it is not that the money is not spent properly. The needs of each school is different.* (T7).

The PE budget unfortunately was also complicated by an overemphasis on extramural sports, with little funds being allocated to the teaching of PE. The participants could not use the sports

equipment for PE, as the individuals in charge of sports were concerned that the equipment would become damaged or lost:

> *The Intermediate Phase won't let us use their equipment. That is for sport. Not for PE. It is difficult to get equipment, as it's locked away. The budget was not used for PE. It was used for sport. We don't have equipment to use at our school.* (T19).

Teachers therefore did not have access to PE equipment. The perception that sport and PE were viewed separately was surprising to me, as Foundation Phase learners are also meant to participate in age and developmentally appropriate sports codes, such as hockey, netball, cricket, and rugby (to name but a few) (Department of Basic Education: Republic of South Africa, 2011; Stafford, 2011). Participating in FMS also helps with the development of sport specific skills, for later use in the Intermediate Phase (Miller et al., 2016). Assisting Intermediate Phase teachers and/or sport coaches with understanding the benefits of PE for sport development was therefore important. This would assist Foundation Phase teachers with gaining access to sport equipment for PE lessons so that they can implement age and developmentally appropriate sport activities.

Another problem identified, was that learners were accepted into Grade R at too young an age or were progressed to the next Grade when they were not ready. This placed a large burden on teachers' workloads and learners' success. For example, one participant said that *"I have fifteen in my class… I think ten I got, ten that must still turn six…:"* (T6). This implies a developmental age gap of nearly a year between learners. In certain Grades, learners are not allowed to be failed: *"Grade R teachers are not allowed to fail their learners. So, all of them are progressed on to Grade One, which makes it difficult, because then what do you do?"* (T4). The problem of passing learners was that it ended up being a *"vicious cycle"* as learners passed when they should not be were *"dropping out of school, as they can't cope with learning"* (T13). The impact of this situation on PE was that it increased teachers' stress and workload as they had to reteach academic basics, leaving little time for PE in an already highly administrative-based curriculum (Du Plessis & Marais, 2015).

The progression policy also impacted negatively on collegiality at the participants' schools. According to the participants, this was because *"the Intermediate Phase don't think we do our job. Because when the learners come to them, they cannot even read or write…"* (T12). With *"the pressure… from the Department not wanting so many failures… The Principal, the SGB*

[School Governing Body], *they put pressure on those people* [teachers] *and that's why they* [other teachers] *are asking you questions"* (T4). It was thus difficult for Foundation Phase teachers to feel as though they were being supported by their colleagues. With the animosity between the Foundation and Intermediate Phases, and Intermediate Phase teachers having access to sport equipment and storage, gaining access to this equipment for PE teaching was not always possible for Foundation Phase teachers.

In conclusion, due to the issues discussed above, teachers tended to ignore PE and concentrate on other subjects. Systemic issues such as these have eroded the collegiality in schools and so introducing new ideas from professional development programmes is difficult.

6.3.1.5 My reflections on Cycle One

When I commenced CPTD, my assumption was that what teachers learnt collaboratively, they would easily be able to transfer to their classroom settings at school, as they would only be focused on themselves, and their learners. However, my assumptions regarding the implementation of PE at participants' schools was challenged when I asked them why they preferred that we meet away from the school setting in the early stages of their learning journeys. Four factors affected the change in my assumptions regarding teaching PE within the school context.

Firstly, I came to realise that the school context did not afford participants a learning environment that stimulated their thinking, assisted them in communicating, nor helped change their perceptions regarding the implementation of PE at schools:

> *Remove us from that school environment, because it's so monotonous… We see it all the time* [the school]. *We there, we bored of it. Just this environment is, it's soothing. It's different. The coffee and tea and just getting out. You now able to communicate outside of that environment… To just think… And just get lost in it. That's why we stayed so long at the Lodge… because there's more freedom. It's just different. You can let your hair down. You can communicate with everybody.* (T19)

Participants added that being away from school *"inspired us to go back and to go with more vigour"* (T8). Meaning that what we did together, energised participants to apply what they had learnt collaboratively within their school contexts. Secondly, the social context affected participants' abilities to implement what they had learnt in the group. Participants' fellow colleagues, to my surprise, were not accepting and supportive of their CPTD, and instead viewed the action learning group's absence from school as time off from their teaching

responsibilities. Their colleagues thought that the noise generated when PE was taught, disrupted teaching, and when the teachers tried to teach PE at school, they were therefore asked to stop. Thirdly, participants seemed to fear management, which prevented them from sharing ideas for change within their school contexts. Fourthly, the policy on learners' pass rates influenced participants ability to focus on PE. Fifth, Intermediate Phase teaches perceptions of sport and PE, and not allowing Foundation Phase teachers access to this equipment, made it difficult for PE teaching. I had never considered how the Grade progression policy affected education.

I now understood why participants emphasised that sharing a book that they had created in our collaborative sessions with their colleagues was not going to get them the support they need: *"If it was me, and I got a book from a workshop from a teacher, I'm going to throw it there in the cupboard"* (T4) and that *"Having a booklet and giving it out is not going to work in our situation"* (T7). As participants' colleagues and management perceived PE negatively, due to how it disrupted their academic schedule, and/or CPTD as an excuse to stay away from responsibilities at school, alternative strategies to gain support would be needed. Thus, in Cycle Two, teachers would need to strategise how to gain support from other stakeholders.

Cycle One gave me an opportunity to experience collaborative facilitation, and how difficult this can be. The skill sets I had to master, became more evident the longer we engaged, and so did my assumptions regarding our collaborative interactions. For example, the power relations became apparent when listening to the transcripts of myself and the HODs who tended to dominate the conversations. I had to learn how to implement democratic dialogue (Zuber-Skerritt, 2011), and I did so through consulting literature (e.g. Reason and Bradbury (2001, p. 18-19)). I also aimed to identify and apply different participatory methodologies (Brookfield & Preskill, 2016) in my interactions with teachers to encourage discussion characterised by each teacher having an opportunity to share their thoughts.

I had many assumptions that I was not even aware of. I consulted with a critical friend to engage in both critical reflection and reflexivity (Bager-Charleson, 2014; Meyer & Willis, 2019). I would ask myself questions related to why I did something, why I believed that was the best course of action, why I said something in the manner I said it, how my actions affected outcomes, and what I was going to do differently next time, and why. My critical friend helped me identify biases in my thinking and provided me with alternative perspectives.

Understanding my perceptions was important if my goal was to empower teachers. The following are some of my assumptions that changed during Cycle One:

- I believed that my promoters had the final say, versus what teachers and I had to say. I thus took what participants said back to my promoters for critical reflection on what should be done next, versus engaging with participants and collaboratively deciding on what comes next. As I was used to the hierarchical nature of the promoter-student relationship, I negated empowering teachers and myself. Even though in Phase One I had realised that the hierarchical nature of authority affected empowerment, I was still too used to the way things were normally done. As my thinking transformed, I realised that for a PALAR study, my promoters were my critical friends. Their valuable inputs should be shared with participants for subsequent collaborative decision making between the action learning group members. In Cycle Two, I thus focused on what participants wanted and I consulted my promoters as critical friends for guidance. I became more transparent and included participants in each aspect of my decision-making process.
- I assumed that my promoters and I were the experts in PE, as we had studied Human Movement Science and child development. Thus, at first, I did not even realise how much I was taking the lead and excluding participants from developing their own learning pathways. With this assumption, I took on all the responsibility within both the research and learning domains. That is, I created the PowerPoint presentations, analysed the transcripts, provided examples of PE lessons, and ensured that equipment for our PE lessons was present, to name but a few. This resulted in me being overwhelmed and dazed by everything I needed to learn and do. Even though in Phase One I had realised that I was not the expert, I had still not fully conceptualised PALAR. The transition to being fully participatory was difficult for me, as unfortunately, the critical friends I consulted in these early stages of my engagements with teachers were quantitative researchers. Therefore, the advice I received aligned with this paradigm of thinking. Through reading up on PALAR and finding qualitative researchers who had conducted PALAR projects, I was able to shift towards a participatory paradigm and to engage in teamwork with teachers. Trusting myself and others through letting go of wanting to control everything was an important lesson I had to learn to become truly participatory.

- I assumed that the only measure of success in CPTD was whether PE was being implemented, how effectively it was being taught, and whether what I was doing with the participants was making a change to their learners' PE experiences. Even though I had realised in Phase One that both systemic and personal factors affected teachers, I had not integrated this in to how I perceived assessment and monitoring. Only as I reflected on my thinking, did I realise that through only focusing on whether the teachers were implementing PE, I was inhibiting my ability to be an active listener during our collaborative sessions (McGrath, Palmgren & Liljedahl, 2019). My transformation from one-dimensional thinking to the inclusion of teachers' overall wellbeing represented an important learning moment for me. I realised that CPTD can transform individuals in many ways, by for example, changing how they viewed their learners' academic development, barriers to education, collegiality, and their own thinking and actions in everyday life. Thus, for Cycle Two, I aimed to maintain an open mind and use different lenses of analysis to explore participants' holistic growth within the PE domain.

With these reflections in mind, in Cycle Two, and when participants were ready to do so, we collaboratively decided to engage in school-based teaching and to challenge the systemic barriers they had identified.

In conclusion, I learnt a lot from Cycle One. Despite my assumptions and expectation that participants would be ready to implement PE in schools after Cycle One, they decided that they needed to continue building their confidence at schools and with their fellow colleagues. Using the findings from Cycle One to guide me, I then initiated Cycle Two, to try and help them meet their needs as identified in Cycle One.

6.3.2 Discussion of themes: Cycle Two

In Cycle Two, four themes emerged that explained how the teachers improved their self-confidence to teach PE. The participants learnt to: 1) Negotiate CAPS by adapting their teaching to the social context; 2) Participate in authentic and collaborative learning through planning, taking action, observing, and reflecting; 3) Improve the quality of their own teaching through becoming reflective practitioners; and 4) Access support within their contexts, where needed.

6.3.2.1 Theme One: Participants learnt to negotiate the CAPS and adapt their teaching to their social context

The participants gained confidence in adapting their teaching to reach educational outcomes, trusting their own knowledge, rather than relying solely on the CAPS document:

> *It is okay to improvise if things don't go as you planned… Go outside and enjoy yourself… Keep in mind that those skills* [fundamental movement skills] *will be developed, even if it is not in the CAPS document or in this term's planning specifically…* (T7).

Adaptability is an important skill for teachers to possess, as it enables them to focus on developing their learners and achieving numerous other learning outcomes through improvising where needed. Adapting and not stressing about not having the correct resources is another positive mindset:

> *So, I said there's no equipment and you know how strict I was about that. And they said the equipment did not work, and you said make a plan, you don't need to use equipment. So, there are bottles. Why don't we jump over the bottles and that's what we did. In order to just carry on and… Sometimes you would sit there and think, what am I going to do now. You know about it and you were actually procrastinating. Because in our situation there is no equipment here, so what must I do? Then I would take them out and let them run around. There is no mats and you can't let them go through the hoops and the space is not enough. Now you guide your time and if somebody is out there, you improvise, and you make a plan.* (T4).

It appeared that more PE was being taught than before, at least at one of the schools: "*At our school, there is definitely more people going out. And the equipment being outside now, too, also helps a lot. The children being actively playing and not just making plastic balls… They do use the equipment at break-time"* (T9). Equipment and infrastructural constraints are a concern many teachers raise when asked about PE teaching at South African schools (Burnett, 2018a). Although these are noteworthy concerns, the participants demonstrated that they could adopt different approaches to teaching PE when challenged with small spaces and limited equipment. Furthermore, enriching the environment and leaving equipment outside for children to choose to play with, increases the physical activity levels of learners in previously disadvantaged schools (Walter, 2014). Changing how equipment is stored and setup at their schools, therefore made a difference to participants and learners' experiences of PE.

Other participants adapted their teaching schedules and adopted indoor activity when they could not take learners outside:

> *For me, for all in the mornings, every morning… to help myself, I'm doing Phys. Ed. in the class. Like we're throwing the soft ball, or we using the bean bag to throw up and to catch it. Or to throw to each other… That helps me... because I, I'm starting with it in the morning...* (T12).

The participants demonstrated that schedule adaptions to align with teachers and learners' needs was another approach that could be used to overcome barriers to PE.

The participants learnt how to integrate PE into everyday teaching. Integrating the different educational themes from the CAPS Life Skill learning areas (such as food or plant life) helped them connect PE to academic outcomes in other subjects and/or learning areas:

> *What I also wanted to share the last session, you gave us ideas of how to make use of our different themes. And really, that is working. Our theme was healthy foods. My children enjoyed it. We did the warm-up in the class. I told them we are now going to plant a seed. Bend and plant it. Then give the seed water from right to left. Then when the rain falls on the seed… then they open their fingers and bend down again. Then the plant grows. Then they bend down like a little ball and grow up. And they enjoyed it. We are going out now. We have different stations. There is the pumpkin station, the potatoes, the carrots and the strawberries. Then we have singing. In the transition to outside…. This is the way we plant the seed, plant the seed, plant the seed… then we hopped. Then the cool-down was sit and give the plant water again. Then they have to stretch left and right to give the plant water. We did this to calm them down before class.* (T9).

There are different forms of PE curriculum models teachers can follow (Kulinna, 2008), with the inter-disciplinary curriculum model being one such approach (Lohren, 2017; Martin & Murtagh, 2015). I had introduced the action learning group to the idea of linking the different Life Skills learning area's content to PE, due to the high focus on academic learning at schools. Participant 9's practical example of how an inter-disciplinary curriculum model could be used, showed that it is possible to merge subject content with PE at schools. However, I noticed teachers reverted to traditional educational models (such as sport and/or movement-based curricula) focusing mainly on creating sport or FMS station set-ups versus integrating educational content throughout their entire PE lessons.

The participants also primarily employed reproductive teaching styles, such as command and practice teaching styles (Gallahue & Donnelly, 2007). Productive forms of teaching (such as convergent, divergent, or guided discovery teaching styles) were not employed as readily (Gallahue & Donnelly, 2007). The type of PE curricula and teaching style chosen by

participants depended on their individual preference. Some participants enjoyed sports, others enjoyed dancing, and others preferred their learners to just be physically active and engaged in any type of movement activity that made them laugh and have fun. Other factors affecting participants' choices were their beliefs. Some participants believed that their learners needed to be instructed on what, how and when to participate in movement activities. Others believed that maintaining discipline was important. I also believe that saving time affected the curriculum and teaching style choices of participants, with easy-to-set-up and instruct activities taking priority.

Participants also learnt to create diverse activities for differently abled learners that teachers previously believed were not capable of participating in PE:

> *Then there is the different child… but we have learnt that there are ways we can work with that child. You don't see it that there is a child with a problem. That child can perhaps catch a big ball, but not catch a tennis ball. And we can focus on that. I think that it's our minds that have been broadened and we have progressed.* (T12).

Others added how they could create a variety of movements through not only pairing learners, but by using different aspects of the Movement Analysis Framework (Graham et al., 2012): "*What I can add maybe to that… when we worked with the circle, we realised that it should not only be people with people. You can use different types of relationships and things to get to the end result"* (T7). For example, relationships with people can include leading, mirroring, in unison, in groups, solo and alone in mass (Graham et al., 2012). Relationships with objects can encompass the body being on or off, near or far, over or under, around, alongside, and symmetrical or asymmetrical (to name but a few) (Graham et al., 2012). The participants experiencing movement conceptual frameworks practically in pairs and with their learners, like the Movement Analysis Framework (Graham et al., 2012), provided them with content knowledge that illustrates how many different approaches can be used to achieve a movement objective. The participants' exploration thereof helped them transform their thinking towards how their learners could be accommodated.

At the start of our project, the participants were concerned about assessing their learners. However, as we progressed together, the teachers learnt how to assess movement skills and to help their learners improve:

> *For me the analysis helped me to see where the actual problem is. Because sometimes we just say, they can't gallop. But with the analysis and the*

breakdown here we can look at the different stages and see where is the actual problem is. For example with the catching, you could see it was because of this. We won't just go back and say the child can't catch. Now we know what to look for and what to remediate and go back. Like you said, be more verbal and instruct them in a game or pairing up. That was a good learning curve for me. (T7).

In summary, the teachers learnt to negotiate their contexts through: 1) Adapting CAPS requirements to their learners' needs and to their context; 2) Adapting PE when there was limited equipment and space; 3) Adapting the school schedule to align with teachers' and learners' needs; 4) Using different forms of PE curriculum models and teaching styles for indoor and/or outdoor activities; 5) Creating a diverse number of activities to accommodate different learning abilities; and 6) Improving how they assess their learners to help them progress in their movement abilities.

Whilst the participants were adapting their PE teaching to their social context, they also participated in authentic (context-based) and experiential (with reflection) learning (Chiva-Bartoll, Capella-Peris & Salvador-García, 2020; Thorburn, 2017).

6.3.2.2 Theme Two: Participants learnt to engage in authentic and experiential learning through planning, implementing, observing, and reflecting on PE sessions

The participants collaboratively decided on a process that would help them engage in authentic and experiential learning experiences. To this end, they decided to engage in group-based lesson planning and subsequent video analysis of their lessons in the action learning group. Participants decided to alternate between their two schools so that the hosting school took responsibility for catering. This also afforded them the opportunity to experience different school environments:

We started planning and we implemented our plans through the designing of lessons. Then we took it back through our video. We recorded our sessions, which also gave us some self-confidence. And then we evaluated our efforts in order for us to grow. That is what we said, we grow in leaps and bounds through the programme as we could reflect on what we have achieved. (T12).

My goal was to expose teachers to a variety of lesson plan formats, and so I followed the TGFU (Austin et al., 2004; Miller et al., 2016; Smith, 2014) lesson layout, which includes a combination of different teaching styles.

I think we all had a good understanding of how the session… should be run…The flow of the lesson… The equipment and everything that was needed.

> *…Warm-up into the game, into the stations, into the cooling down… The videos actually clarified some of the questions that I had. That referred back to the planning and things like, cos, ja it gave me much more clarity.* (T8).

The participants thus gained an understanding of the basic structure of a lesson to develop FMS through engaging in experiential learning. The participants furthermore learnt about what equipment to use.

Through critical questioning to find out participants learning needs and then providing input where needed, I was able to teach them the importance of planning, which in turn increased their confidence to teach PE:

> *The way that we doing it now* [group-based video analysis] *was actually bringing the paper to the practical. So for me this is working, to see that what we did in paper now, I can look at my template here and I can see, ok the educational theme was that so now if I wasn't on the right track now I at least, I can plan and find it.* (T16).

The participants also recognised that good planning was key to being able to adapt to specific contexts: *"I think this process in itself* [our collaborative planning process], *was the improvement plan. These are the challenges, this is the improvement plan, and then you'll obviously go back once you, towards the end of it, revise to see if any of these challenges have improved to a certain degree"* (T19). Planning also provided *"structure"* and *"to see if what was said is going to align with the programme we* [the action learning group] *set and have in front of us"* (T13).

The participants shared that authentic learning experiences were better than the traditional training approaches they were used to (such as PowerPoint presentation), as they experienced movement for themselves:

> *"It's hard work... it was fun dancing… but we could feel afterwards, this is really a warm-up. And if you were now just giving us a PowerPoint presentation to do a warmup in the morning, saying only just go use music, and step to the right, step to the left, move your hips… I was not going to do it"* (T5).

They were *"realising how important the development is for the child's health. Also, for developing their brain. It really encouraged me. It also gives me confidence"* (T6). This comment was supported by others: *"It gives you so much confidence when you see the child is nervous to give that leap forward. And then you see, there the child goes. And you have developed that for the child. It is a good feeling!"* (T4).

After having trouble in performing movements during our practical experiences together, participant T9 could empathise more with the difficulties her learners might face in doing some movements: *"I was just thinking, if my learners have the same problem now? I have just experienced it. I was thinking now, how come I can't do it* [skipping]*? I'm so big and I'm struggling? I was in the Girls' Brigade, so you march first?"*. Through learning how to move, participant 9 learnt how to adapt activities to her learners' needs: *"You said the ropes are a problem. Try and let them skip first without the ropes. Try to skip first without the ropes. Just like this. Then add ropes later"*. Before attending the group, the teachers had thought that a classroom environment conducive to learning was one where learners sat quietly. Now they realised that their expectations were unrealistic for young children. Through experiencing PE, the teachers became more comfortable with the noise and movement necessary when teaching PE: "*The journey, has reminded me that when I was a child, I used to play. Yet, when children want to play, I say sit down, stop making noise!"* (T8). Participants being cognisant of the fact that they had *"forgotten* [our] *childhoods… that we also played, and that we never knew that in education, it will come in handy"* (T5), helped them be more inclined to include PE in their teaching.

The use of authentic and experiential learning in PE teacher training has been found to produce favourable learning outcomes, such as being able to better link theory to practice (Chiva-Bartoll et al., 2020) and overcome perceived barriers to PE (Du Toit, 2019). It is therefore not surprising that the participants had positive experiences with these forms of learning. In summary, the participants' choice to engage in authentic and experiential learning aided them in their development as PE teachers, as they learnt: 1) How to practically apply content knowledge; 2) Why it is important to plan for PE; and 3) How it feels to experience PE and the benefits thereof for learners. Although authentic and collaborative learning helped the participants become better PE teachers, reflecting on their own thinking became important learning opportunities for them.

6.3.2.3 Theme Three: Participants learnt to become reflective practitioners

Through the process of authentic and experiential learning, the participants began to realise that they were responsible not only for their own learning, but to model what they were teaching to their learners:

> *We as educators… we should make it our responsibility to take it to our schools and from there… go further to see to it that our learners are active and in so*

> *doing we encourage a healthy life. And also, for myself, because as you can see, I also need to go to gym. At the end of the day, a healthy body embraces a healthy mind.* (T8).

The participants thus realised that "*it starts with yourself"* (T4). The participants understood that even though they were not yet competent PE teachers and/or had a negative attitude towards the subject, it was their responsibility to act and change the PE situation at school:

> *I'm also not a Phys. Ed. person… I myself consider… will I be able to it? So, I haven't, I haven't come to that point yet… Things have actually died down now* [when considering PE]. *But um, we know for the next year… that starts with me. What am I going to do?… I'm also reminded of… I don't wait for anybody. It starts with me…* (T4).

The participants also began to take responsibility for their own attitudes: "*We mustn't always focus on the negative, we must try to focus more to let the positive flow, even if there is shooting outside, or other problems…* (T7). Teachers' self-reflection on their attitudes helped them realise that how they viewed challenges affected their teaching: "*We had all the negativity and excuses to propose, but did not realise that these were only excuses. So, when everything was considered, we did not do Phys. Ed…"* (T13). The challenges teachers had previously perceived, had now instead *"changed into possibilities"* (T7). This change in teachers' attitudes towards PE was, in part, based on their choice to participate in their group-based PE planning, implementation and video analysis. During one of our critically reflective sessions, two participants created a poem that captured the value group learning had for them:

> *We started off as unenthusiastic, but with food and laughs, our minds became fantastic.*
> *Logs and planning videos and Samming* [learning with the facilitator/researcher, me, Samantha],
> *Fundamental movement skills is more daring.*
> *Reflection, reflection, reflection. Action leads to perfection.*
> *Learners and teachers, participation in skills and features.*
> *What started off as unenthusiastic, ended off as being bombastic.* (T19).

The participants started to change their attitudes from *"Arghhh man, nobody cares about Phys. Ed., so you can be like that, you can just go on",* voiced in an earlier session. They changed their attitudes as they reminded each other that what they were doing was for their learners (*"It's for our children"* (T4)) and that it helped them achieve their educational outcomes (*"It helps me achieve my teaching goals, making it easier"* (T13)). A positive result of participants' changes in attitudes towards PE was how they started influencing their colleagues' views of PE at school: *"It's a topic at school that was always a negative thing. But being on this journey,*

I think it's becoming... very positive... they [fellow colleagues] *want to know more"* (T9). It is therefore important for teachers to reflect on how their own thinking affects what they teach, as their attitudes inadvertently affect their colleagues' perceptions of what they teach.

The participants identified the need to change their attitudes and approaches to the normal way things were at school. That is, with limited PE being implemented and with resources being insufficient: *"It is so normal, that it becomes the norm. You get used to it... so we as teachers, we just go on. The barriers are normal to us"* (T4). As the project progressed, they no longer accepted that they could do nothing about the barriers they faced in implementing PE. They began to focus on what they could do, because they wanted: *"To do our best. We got into the, pulled into the curriculum of it* [PE] *and the action part of it, and how are we going to go forward"* (T8). They learnt the value of focusing on what they could control to bring about change: *"I would say that the group who are here, their mind-set is not to look at the external facts... because we want to make a difference... but we must work at it"* (T7). The group learning also helped the participants to reflect on their appreciation of the value of being given constructive feedback. This was a skill that they had to learn, as it was something new to them: *"At the end of the day, it's good to show us the videos... you should be open to criticism.. because, I mean from my personal point of view, that is how you learn and that is how you grow... how else are you going to learn?"* (T16). They learnt how to put their colleagues at ease when it came to making mistakes in PE through focusing on the positive role making errors had in the learning process:

> *There's only one point I want to make: no perfection... no-one is perfect. We will make mistakes, just accept what's done is done... You were perfect, but it's not about perfection... What did I tell, when I was busy with helping my colleague here, we were busy with our activity there now? I fall, you all laugh. I'm only human. I make mistakes...* (T5).

The trusting relationships they experienced within the action learning group enabled them to be honest about their ability to give and receive criticism:

> "*It's very difficult to try and, um, ah, criticise somebody in a good way because criticism is criticism at the end of the day... so you've got to really tiptoe around how you present or say something... it's a big pill to swallow when somebody has something negative to say about your lesson or how you presented it"* (T19).

The action learning group members were able to negotiate how feedback should be given in a non-threatening way: *"We take the word crit away. When we planned this session, that was not our aim and that word was not used at all. We are not at College. We are here to learn. We*

can't crit each other. We are having a lekker [good] *discussion"* (T7). The participants thereby demonstrated how much their confidence had grown, as they could share their thoughts and suggestions when their fellow colleagues joined some of their action learning sessions.

The participants also became aware of the need to self-reflect on their own PE lessons to improve their teaching: *"How do I do Phys. Ed. better? Am I doing it? Is it working? How does it fit into our schedule at school? Can we go out on a regular basis?... Not the space concerns, but the fundamental movement skills? Did it work with children? Could you have stations? Did the warm-up activities we learnt about now work?* (T7). By reflecting on similar questions, both individually and in the action learning group, the participants could take action to improve their PE teaching, where needed.

In summary, the participants realised that it was their choice to take responsibility for: 1) Implementing PE; 2) Having a positive attitude towards PE; 3) Finding ways to remove the systemic barriers to the teaching of PE; and 4) Changing their attitudes towards constructive feedback when learning about PE. I found this theme aligned well with what I had learnt in Cycle One, which was that the effectiveness of CPTD entailed more than just whether a teacher is implementing PE or not. Personal development during CPTD can contribute immensely to teachers' empowerment. To continue fostering participants' progress, support within their social context became a prominent feature they had to learn how to strategise if PE was to be implemented at their schools.

6.3.2.4 Theme Four: Participants learnt to access support in their social contexts where needed

This theme captured how the participants learnt to value the benefits of collaborative learning as an ongoing process. They did so with their action learning group members first, as gaining support from their fellow Foundation and Intermediate Phase colleagues who had not joined the action learning group, demanded more strategising and time:

> *Sharing is the best part here* [in our action learning group]. *We have learnt from each other. Where I could not dodge, now I know how to dodge. Because you don't do it properly and here you come and you learn. And you learn as a group. And the bonding. As you see we start to learn from each other. And even just the work that you are giving us.* (T4).

The bonding and collegiality fostered within the action learning group meant that the participants were able to support each other when implementing PE at schools: *"When it came*

time to do my lesson, my colleague came in with her ideas… it was enjoyable to work with her and to work the two classes together. You don't feel so alone" (T5). This synergy also meant that participants could support each other in different ways to implement PE at school: "*She* [fellow action learning group member] *is coming to my class. Because sometimes the learners enjoy a different face. You can use the team. And if you cannot make it, because we may not always be available, you can use your team and send them… even from the other school, too"* (T5). This form of assistance, the participants believed, could help them when other work priorities took precedence over PE teaching. Assistance from fellow action learning group members could also help diversify their learners' PE learning experiences, as a different classroom teacher would be taking PE. Peer learning between action learning group members created a bond focused on cooperation and enjoyment when working with members from other schools: "*We helped each other. Gaps were filled by someone else… usually you can do it on your own… but it was nice to work lessons out with other schools, not only your school"* (T13). Thus, instead of working in isolation, as the participants normally did at school, they started to appreciate the benefits of working together.

The collaboration within the group enabled the participants to share teaching resources:

> *This book I got it from the Department. And erm, in the book is the different lessons. And I only use the gymnastics part of the book. When you introduce us to the warming up and cool downs, it was not something I did not know, because it is in the book. There are different examples. I am not sure if the colleagues here are familiar with this book? The whole lesson is here. Then you just pick. You can pick locomotor and non-locomotor, and then you have your full stations.* (T15).

Conversations within the group exposed the unfair distribution of material among the schools. Some participants, and not others, had access to teaching and learning support material (TLSM) for PE. Having a platform to share information helped direct others to the resources already available.

The participants began to see the importance of sharing their knowledge with colleagues who had not been in our action learning group. The reason for this was twofold. Firstly, so that they could provide their colleagues with evidence that they were being productive at CPTD and not just taking time off from their responsibilities at school. Secondly, if other teachers were informed and learnt about PE and what participants were doing, they would be more likely to support efforts to teach it. Some participants gave information documents about FMS to their

Principals to hang up in their office so that others could see what they were doing. Others shared with their colleagues through inviting them to PE lessons: *"I am inviting colleagues to a lesson so they can practically see what we are doing and why we are doing it… and how it can help their learners"* (T9). One of our action learning group members had commenced with training teachers at other schools in the Eastern Cape on how to implement PE as part of Life Skills. From what she had learnt from our action learning group, she decided to introduce novel ways of sharing with colleagues, such as providing them with a variety of equipment to explore different ways to move and adapt PE activities to their learners' developmental needs. She would also ask her colleagues to reflect on their learning experiences,

> *I wanted just to show them Phys. Ed. is fun. Because that is what I need to create. Just open the teacher's minds. So, I went with ball skills, and I had a balloon, I had a tennis ball, I had a soccer ball and I just let them play with it. I said you do whatever you want to. Throw it, kick it, bounce it, play tennis with it, whatever you want. And then afterwards I ask them, what did you experience, can you tell me about the difference in handling the different sizes of balls? And they say with the soccer ball, there is more pressure to get it to move. With the balloon it's like very light and your hands, must be different if you catch the balloon. Because if you press too hard it will pop. The tennis ball is smaller, so it more concentration than the big ball. The big ball is much easier to handle. And I'm telling them that is what you do with your children, but you must know age-appropriate activities. They are Grade One, so the different sizes of balls and how to adapt is important. You must expose everything to the little ones. That's what I got.* (T7).

To continue gaining support from other teachers, some members in the action learning group decided that their fellow colleagues who wanted to join our sessions, could do so. Fellow Foundation Phase teachers were therefore invited to our collaborative sessions. However, as new teachers were joining the action learning group, the original participants started to become aware of how bringing in new members could put their colleagues at a disadvantage, as they did not have all the content knowledge that the action learning group members had:

> *We have a lot of new ladies here. And I think for learning purposes, we must share this first with them. The warm-ups and the discovery and the fundamentals is in there. A lot of the questions will be answered. So, I would see my first purpose at my school is to get these ladies that is new and on board, to get them the material. So that they have what you need for the planning and the fundamental movement skills…* (T7).

Four teachers joined and were easily integrated into the team during the early stages of participants' learning journeys and in Cycle One. Integrating fellow colleagues in the early stages of the project was easier as new members could experience hours of trust and relationship building and could gain access to the same content knowledge and practical

experience as their action learning group members. Unfortunately, inviting colleagues in Cycle Two to school-based sessions did not yield the same level of success, as participants' fellow colleagues had not experienced any trust and relationship building with each other and with the teachers from other schools. Fellow colleagues had also not accessed and experienced the content knowledge that the participants had. With these Cycle Two experiences of collegiality in mind, the participants thus decided that a more formal approach to gaining support was needed. The participants decided to do the following at their respective schools:

- Share the action learning group's vision. One member at each school volunteered to verbally represent the team's vision, which was to increase and improve the teaching of PE, and specifically FMS, at school. Improved collegiality was also a focus, and at times trumped PE teaching at school.
- Create a video which captured what participants had learnt. School one's teachers started off by demonstrating how much they did not enjoy CPTD at the beginning of our journey together because they viewed it as a waste of time. As time progressed, they demonstrated how their attitudes toward CPTD had changed and how their perceptions of PE had transformed. How their PE-based PCK changed was furthermore highlighted. School two's teachers decided to focus mainly on their PCK of PE and FMS. I helped those teachers who needed assistance with the video software and background music production. Participants created the layout and terminology used within the videos. The videos can be viewed here:
    - https://www.youtube.com/watch?v=AphVIcJA22E
    - and https://www.youtube.com/watch?v=iI0BiIdXGbs
- Create a lesson plan layout from start to finish and engage fellow colleagues in each step of a PE lesson. Each action learning group member volunteered to create either a warm-up, station set-up based on developing a specific FMS, an FMS game, or a cool-down. The participants decided that the FMS chosen should be linked to the CAPS document lesson plans for that term. The goal of this initiative was to show others how much fun PE can be, and how FMS development is linked to the CAPS and their learners' development.

In so doing, the participants hoped that their colleagues' interest in PE would be peaked, and they would gain more support for the implementation of PE at school. The schedule participants

planned for the day and the PE stations they created and implemented with their fellow colleagues, are included as Addendum M.
Varying levels of buy-in and support were evident after the participants shared their visions, showed their videos, and got their fellow colleagues to participate in a PE lesson at their two schools. At school one, the socio-political dynamics changed due to the HODs being replaced by new leadership which had not been part of our action learning group. This change in social dynamics at the school affected the collegiality between the participants and their colleagues. Other priorities also took precedence at the school, and PE teaching waned. Although school one had a PE project in place that provided teachers with PE equipment and training, the Programme Coordinator withdrew support due to lack of interest from school management and staff. Although school one also had PE and sport infrastructural upgrades (as they were part of an international research project, aimed at decreasing child and adolescent gangsterism in the area), social dynamics affected collegiality, and the use of these upgrades for PE. In summary, although the participants had built their confidence in PE and tried to change the system in which they worked (getting support from their colleagues), socio-political factors impeded them.

At school two, I asked the participants what they needed from me and the team to help them continue their PE teaching successfully at their schools. Some suggested that they needed PE equipment, while others proposed that they needed to identify how many differently abled learners they had in their class. These requests made several factors clear to me. Firstly, that some participants still viewed the lack of PE equipment as a barrier to PE, and that they could not yet adapt their PE teaching. Others did not know what they wanted and/or how to get what they wanted when considering PE. Also, PE was not a priority at school, and other academic related factors took precedence. I believed that as the participants were confident and ready to implement PE at their school, I would put them in contact with a PE programme that could help support them with gaining access to PE equipment and other physical activity opportunities at their school. I therefore helped them with networking. I provided them with the contact details of the PE Coordinator and was confident that they would use the network provided if they felt it was necessary. The participants chose to apply to be part of the PE project but, unfortunately, they were not accepted by the Project Coordinator, as the infrastructure at their school was perceived as inadequate to support the Programme.

In conclusion, although the participants learnt about PE and improved their confidence to teach it, several political and infrastructural issues at play meant they could not change how PE was viewed at their schools. Thus, even though participants decided to gain support through: 1) Working closely with their action learning group members; and 2) Extending what they had learnt to their Principal and fellow colleagues at school, more strategising is needed to transform PE teaching practices at schools.

6.3.2.5 My reflections on Cycle Two

Collaboratively working together at schools unlocked opportunities and challenges for both the participants and myself. Some participants invited colleagues to join our school-based sessions, even though the team initially decided that these sessions were meant to focus on developing their self-confidence, before sharing with their colleagues. I believe the reason for new colleagues joining was three-fold. Firstly, due to my inexperience as an action learning group facilitator, I at first encouraged the inclusion of others. I did not realise the consequences of not having had the experience of accumulative content knowledge and relationship and trust building in the learning journey for new participants. Secondly, some participants often mentioned that they needed support from their colleagues and that they did not want their colleagues feeling left out when we started to learn together at their schools. Their colleagues were consequently included to foster an atmosphere of inclusion. Thirdly, some participants were already confident enough to share with their colleagues, so they did not perceive that the inclusion of others would negatively affect their fellow action learning group members who were not yet equally self-confident.

I learnt a lot about how my assumptions affected my decision-making processes in Cycle Two, and what actions I need to take to change these in the future:

- At times, I believed that if I questioned group members, even in a constructive manner, it was going to result in conflict and cause social rejection and/or the project stopping altogether. However, I learnt that building trust and relationship requires authentic discussions focused on achieving the team's vision. It also requires courage and not to fear rejection. For example, as I became more aware of the importance of when and how fellow colleagues are included, having this conversation with participants was very difficult for me. In the future, I will remember to encourage the participants to collaboratively decide on guidelines for

when, how and why new members join, as it is important for their learning process and team cohesion in the long run.

- I assumed it was not necessary to include the Principals and other colleagues sooner than later. As the participants and I had worked in isolation and away from schools' premises up until our fourth session together, and our collaboration was progressing well, I had not considered the social implications thereof. Working together at school and with others presented a totally different social dynamic. We had not considered including the relevant Principals in our decision-making processes. For the participants, this might have been because they were not sure how to include their Principal or feared authority. For me, it was because I had learnt in Phase One, and Cycle One of Phase Two, that it was important to remove myself from the influence of authority and focus only on empowering the action learning group members I was with. In future, inviting the Principal, HODs and other colleagues to the learning process sooner rather than later, would be important. However, this approach must be strategised with the action learning group as they need to be confident enough to share and feel safe to share. They also need to consider how their colleagues can be included in a supportive manner. Collaborating at one school at a time might have also helped with trust and relationship building processes.

I also learnt about the need to find a balance between the reality of teaching (which can be negative) and the sanctuary an action learning group can create. Not having this balance in place can result in the non-implementation of action plans to overcome the teaching reality, motivation and self-confidence waning, and/or the project stagnating. To overcome this, an option is reminding teachers of their vision, their action steps, and their goals in the form of their verbatim quotes. Using collaborative methodologies such as Circle of Voices (Brookfield & Preskill, 2016), Nominal Group Technique (Hardina, 2012), Conversational Moves, "hatful of quotes" and Newsprint Dialogues (Brookfield & Preskill, 2016) in each session, I believe can also help participants. Not only will they be able to reflect on what they have shared in the past, but it can re-energise them to continue reflecting on what is important to them and why.

I learnt that teachers could transform their learning environments and their mindsets when trusted with the opportunity to do so. Finding ways to work with teachers when aiming to overcome many of the systemic barriers affecting South African education can result in positive outcomes.

6.4 SUMMARY

In this chapter, I provided the findings related to the research questions: 1) ***What do we need to learn to be able to effectively implement PE?***; and 2) ***How can we improve our confidence to teach PE within our school contexts?*** Through answering question one, teachers needed to learn how to navigate the CAPS, apply PE to their school context, learn how to gain support from colleagues, management, and parents, and how to cope with systemic issues. Through this process, the teachers subsequently decided to continue improving their confidence within their school contexts and to align their actions with their concerns in Cycle One. To improve their confidence the teachers learnt how to negotiate CAPS and adapt their teaching to their social context, to participate in authentic and collaborative learning through planning; taking action, observing; and reflecting; through becoming reflective practitioners; and accessing support, where needed.

In the following Chapter, I provide the PE CPTD guidelines based on the findings emanating from Cycle One and Two. These guidelines are based on teachers' experiences of their FMS development in PE and the teaching thereof within their low resource schools. I link the guidelines I present to literature findings and the theoretical framework of my study.

CHAPTER SEVEN: GUIDELINES FOR CONTINUING PROFESSIONAL TEACHER DEVELOPMENT (CPTD) FOR FOUNDATION PHASE PHYSICAL EDUCATION

"It starts with me!" (T4)*; *"High heels off, Takkies on!" (T16)
(our Action Learning Group)

7.1 INTRODUCTION

In this chapter, I focus on answering the third research question of this study, namely: ***What CPTD guidelines can be generated to enable Foundation Phase teachers to improve on and to implement their PCK of PE and FMS at low resource schools?*** The findings emanating from Phase Two (and presented in Chapter Six), the literature reviewed, and my engagements in critical reflection/reflexivity, resulted in these CPTD guidelines emerging. These CPTD guidelines do not only assist Foundation Phase teachers with increasing their capacity to teach PE, but additionally incorporate gaining support from key stakeholders invested in PE to aid teachers in achieving their PE visions within their low resource school contexts.

I commence this chapter with a tabulated overview of the CPTD guidelines. Hereafter, I discuss which findings support the inclusion of the guideline, why its inclusion is important, and how the guideline can be operationalised. Interlaced between my deliberations, I incorporate the theoretical framework of this study, namely, the transformative learning theory (Mezirow, 1985), the transtheoretical model of cognitive-behavioural change (Prochaska & DiClemente, 1983) and critical theory (Brookfield, 2005). A model as a summary in graphic form is then presented to conclude my explanations. A summary completes this chapter.

7.2 OPERATIONALISING THE CPTD GUIDELINES AIMED AT TRANSFORMING FOUNDATION PHASE PHYSICAL EDUCATION

Table 7.1 summarises the guidelines under the CPTD guideline headings and the suggested time periods, aims and proposed strategies to achieve the aims. The role of the facilitator when applying the proposed CPTD guidelines for the implementation of PE within low resource schools is also conveyed. Additionally, the sections of the thesis referred to in Table 7.1, indicate the findings on which these guidelines are based or the methods section where more information can be sourced.

Table 7.1: Overview of structural approach to PE-based CPTD process model

Guideline for CPTD and duration	Aims	Suggested strategies	What does facilitator do
Create a "safe" space for learning through the fostering of democratic relationships within the group Possible duration: 2 to 4 sessions	1.To create relationships and foster collaboration. 2. To create a "safe" space for learning and development. 3. To foster individual and collective critical reflection on PE practice and role as teacher in general (holistic developmental approach).	• Take teachers to a venue away from school on a day and time of their choosing. This prevents interruption from their normal day-to-day work commitments. A different environment can aid in communication and stimulating their critical reflections (6.3.1.5). • Provide teachers with opportunity to reflect on their values, beliefs, assumptions, and attitudes towards PE (6.3.1.1; 6.3.1.2; 6.3.1.4). • Use conversational movers (4.3.5) to engage discussion about the teaching of PE in low resource contexts (6.3.1.2; 6.3.1.4). • Build relationships and the understanding of PE through providing opportunities for PE-based cooperative learning and outdoor experiential learning (Table 4.2, Addendum J) (6.3.2.2; 6.3.2.4). • Provide teachers with an opportunity to reflect on teaching in low resource contexts in general, promoting understanding of teachers as part of a wider system, and not just someone who delivers PE (6.3.1.3; 6.3.1.4).	The facilitator is directive, providing teachers with opportunities to engage in relationship building activities and to critically reflect on their values, beliefs, assumptions, attitudes, and behaviour in relation to PE. The facilitator models democratic dialogue and participatory pedagogies (4.3.5).
Assist teachers in identifying their PE learning needs through transformative learning Possible time duration: 4 to 6 sessions	1.To challenge existing assumptions, fears, and negative attitudes towards PE. 2. To help teachers identify ways to meet CAPS outcomes with limited resources. 3.To continue fostering reflective practice and collaborative learning and development.	Collaboratively critically reflect on the following learning experiences: • Exploration of the CAPS so that teachers can understand the FMS and perceptual-motor development domains and find ways to reach outcomes in a low resource school context (6.3.1.1; 6.3.1.2). • Teachers deciding on how they would like to deconstruct and apply PE-based content knowledge and/or overcome PE barriers (6.3.1.1 to 6.3.1.4). • Teachers sharing books or other forms of content knowledge that they have used to achieve their PE outcomes (6.3.2.4). • Provide various examples of PE-based content knowledge and present practical experiences (2.5) to enhance reflective practice and to challenge teachers' values, beliefs, assumptions, and attitudes towards PE (6.3.1.1; 6.3.1.2). • Provide teachers with opportunity to present the strategies they have developed to improve teaching of PE within the CPTD group to build confidence and receive feedback (6.3.2). • Teachers debating emotion-laden topics related to their PE and the "the self", and in relation to others, learners, the school context, the curriculum, NGOs, colleagues, leadership, and the DBE (6.3.1.1 to 6.3.1.4).	The facilitator is directive, providing teachers with different examples of PE content knowledge and practical experiences that challenge their values, beliefs, assumptions, and attitudes in a supportive and encouraging manner. Facilitator encourages all teachers to participate. The facilitator models democratic dialogue and participatory pedagogies (4.3.5).

Assist teachers with developing action plans to help them overcome barriers and improve their teaching of PE Possible time duration: 2 to 4 sessions	1. To create a collective vision for teaching PE in under resourced school contexts. 2. To create plans that they can implement to improve their teaching of PE	• Use participatory pedagogies and democratic dialogue (4.3.5) to ask teachers critical questions related to the *"why, how and what"* of their PE-based vision, their focus, and their roles and responsibilities in attaining their vision (6.3.2). • Use participatory pedagogies and democratic dialogue (4.3.5) to assist teachers in developing tools to monitor and assess their own, and their learners' progress (6.3.2.5).	The facilitator models democratic dialogue and uses participatory pedagogies (4.3.5). The facilitator challenges action plans through posing critically reflective questions. The facilitator provides support and ideas for different forms of PE-based monitoring and assessment.
Encourage teachers to share their action plans with other teachers/management in their school, before implementing them, and to create communities of practice Possible time duration: 4 to 6 sessions	1. To assist teachers to create communities of practice in their school for the teaching of PE 2. To overcome possible barriers to the teaching of PE and sustain change.	• Ask crticial questions: e.g. *Who do you need to involve to achieve your vision?* (6.3.1.3; 6.3.2.4). • Support teachers to form communities of practice with other teachers (6.3.1.3; 6.3.2.4). • Support teachers to identify service providers or experts outside the school context to assist them with achieving their vision (6.3.2.5). • Support teachers to revise their vision and action plans (if need be), based on key stakeholders' inputs (6.3.1.3; 6.3.2.4). • Assist teachers with deciding on how their action plans will be shared with others (e.g. videos, collages, PowerPoints, practical PE activities, TLSM examples suited to their learners' and contextual needs, examples of how the CAPS can be adapted to these needs, ideas on how the school's teaching schedule can be adapted to accommodate PE and/or how PE equipment can be sourced etc.). (6.3.1.3; 6.3.2.4)	The facilitator is less directive, encouraging teachers to take the lead. The facilitator models democratic dialogue and uses participatory pedagogies (4.3.5) to assist teachers with identifying how they can gain support from key stakeholder. The facilitator supports teachers to engage and dialogue with others to foster a school wide positive attitude and commitment to the teaching of PE
Support teachers as they implement, reflect on, and share their progress within the group, and with others key stakeholders in their communities of practice Possible time duration: 5 to 12 sessions	1. To support teachers to continually improve their teaching of PE 2. To support teachers to create communities of practice within their school context. 3. To encourage teachers to continuously share their learning with key stakeholders in the school.	• Assist teachers to reflect on the monitoring and assessment techniques chosen to evaluate their progress (6.3.2.5). • Pose critical questions: *"Are the actions being put in place resolving the initial problems and why or why not?"* and "*What comes next?"*(6.3.1; 6.3.2). • Based on these findings, encourage teachers to continuously create, and recreate, how the action plans will be documented and disseminated. • Recognise teachers' efforts by asking: *"How can we recognise and value our achievements?*" (6.3.1.3).	The facilitator is less directive, encouraging teachers to take the lead. The facilitator models democratic dialogue and uses participatory pedagogies to support teachers to reflect on their progress (4.3.5). The facilitator supports teachers through providing them with options and differing views on their PE experiences and assessments thereof. The facilitator supports teachers as they develop their community of practice within their school context.

In the following sections, I discuss why it is important to implement each of the specific CPTD guidelines, what findings support the implementation of the guideline, and how the guideline can be operationalised.

7.2.1 Create a "safe" space for learning through the fostering of democratic relationships within the group

It is important to create a safe space for learning by building trusting relationships between teachers and with the facilitator. That is, a learning environment where teachers can explore their own needs and that of others, whilst experiencing the inevitable moments of vulnerability that often coincide with learning, change, and transformation (Molloy & Bearman, 2019). Participants in this study often reflectively pointed out how important it was to be part of a group where they could share their assumptions, values, beliefs, and attitudes towards PE and teaching in general (6.3.2.4). Fostering relationships and creating this "safe" space from the start of the action learning process is therefore important, especially when findings suggest the need for improved collegiality (6.3.1.3).

Whilst asking myself the critically reflective question: *"How can I improve the research relationship?"* (Wood, 2020, p. 77), the following emerged as important considerations:

- Providing CPTD experiences outside the school context, initially, on a day and for a time duration collaboratively decided on by teachers. This is an empowering approach, assisting with relationship building through providing a platform to communicate with others, and to energise teachers to go back and teach PE (6.3.1.5). It also provides teachers with an opportunity to critically reflect on their PE teaching experiences and their school context (6.1.3.1 to 6.1.3.4), before attempting to implement what they learnt at school.
- Engaging in humanising interactions (which are normally based on values such as "humility, respect, openness, curiosity, commitment, rigor, a willingness to listen…" (Roberts, 2000, p. 114)), through providing a platform for teachers to explore their experiences of teaching PE with others. For example, in this study participants shared their favourite memory of PE; a much-loved PE activity they included in their PE lessons; what vision they have for their learners' development; what vision they have for themselves and within their school contexts; and what their passions are for teaching in general (to name but a few). This approach also brought a cultural element into our

interactions, as participants could share physical activities played by children in their communities, and which they too, thoroughly enjoyed as children. Participants also had the opportunity to be open to other ideas, to ask questions about each other's experiences (and therefore to be curious) and listen to others and respect different points of view. Collectively, these types of interactions led to participants learning about their PE needs (6.3.1.1 to 6.3.1.4).

- Promoting understanding of teachers as an important part of the education system can aid in gaining in-depth understanding about what affects their teaching in general. Through providing Conversational Movers (Brookfield & Preskill, 2016) such as: *"What comes to mind?", " Is there anything else to share?",* and *"Are there any burning questions?"*, teachers can add their unique perspectives to their conversations. For participants in this study, this approach created a platform for discussing systemic issues affecting their teaching overall, highlighting important barriers to education in general (6.3.1.3; 6.3.1.4).
- Providing teachers with movement-based activities that can be achieved only if each teacher is equally involved. This can help foster relationship building and teachers' exploration of their own learning (see Addendum J for an example of such an activity). It too can afford teachers the opportunity to come up with their own movement-based game that has only one rule: each team member must participate. This form of PE is embedded in the concept of cooperative learning (Dyson et al., 2016) and outdoor experiential learning (Kourtesopoulou & Kriemadis, 2020). In this study, I found that these types of movement-based team activities helped participants experience their own movement abilities, and that of others, in a collaborative, fun and empowering manner. It also helped participants realise that, regardless of their size, shape, age and/or ability to perform a movement, they can adapt how they teach PE (6.3.2.2). Applying these types of activities early in the CPTD process can aid teachers in relationship building and collaboration to improve their teaching of PE.

Building relationships with each other would not have been possible if only I, or others, dominated the conversation. When considering relationship building, asking myself the critically reflective question: *"How dialogical, how symmetrical and how inclusive is my* [our] *communication?"* (Wood, 2020, p. 77), helped me identify when I, or someone else, was dominating the conversation. To foster relationship building, creating a democratic learning

environment is important. The following aided me in achieving this outcome, and should therefore be considered from the start of the CPTD process:

- Including democratic dialogue principles and providing each teacher with an opportunity to engage through using various participatory modalities (4.3.5).
- Asking: *Is the CPTD being conducted collaboratively, and are all the participants working equally together to solve problems and overcome obstacles? Is there anyone else we should include?* Asking these types of questions can aid in improving the democratic validity (Herr & Anderson, 2014) of the CPTD process, and therefore the empowerment of teachers.

In this study, it should be noted that participants engaged in these types of collaborative physical activities coupled with critical reflection, for an extended duration of time, and more intensely in the beginning of the project. These types of relationship building activities continued throughout the project but took up less time with each successive session. It was important for participants to meet often, and for longer durations of time to create depth within conversations and to maintain collaborative work. Ideally, the implementation of this guideline should therefore be anywhere between two to four sessions, each consisting of a few hours, and taking place every two to four weeks. However, when, where, how long, and how often teachers meet for the project, will depend on the Principal and HODs permission, and teachers' work/life commitments, time schedules, and teachers' perceptions about their need to work at or away from school.

7.2.2 Assist teachers in identifying their PE learning needs through transformative learning

For teachers to develop an understanding of their PE vision, and for them to contextualise their learning to their specific context, it is important for them to engage in transformative (Mezirow, 1985) and experiential (Kolb, 2014) learning. Engaging in these forms of learning can help foster discussion regarding what teachers and the facilitator assume they know about each other, PE, and teaching PE within a given school context. Employing these collaborative and exploratory learning approaches also aids in collaboratively identifying biases in their thinking, knowledge they possess and what they collectively and individually need to learn. Through employing these learning strategies, participants in this study identified what they needed to learn to enable them to implement PE effectively at their schools (6.3.1.1 to 6.3.1.4).

The goal of transformative learning is “learning that transforms problematic frames of reference to make them more inclusive, discriminating, reflective, open and emotionally able to change” (Mezirow, 2003, p. s59). In Chapter Five, I established how participants’ personal and systemic barriers to PE affected their teaching thereof. Some participants partook in creative problem-solving activities to overcome barriers, whilst others did not. Within collaborative settings, both perspectives (barriers and solutions) can be shared, promoting problem solving and/or advocacy for change. To operationalise transformative and experiential learning for PE-based CPTD, Taylor and Cranton's (2012) guidelines on activities to prompt the transformative learning process, are useful (3.3). The following emerged as being important learning opportunities for participants in this study, and are therefore recommended:

- Exploring and critically reflecting on various forms of PE-based content knowledge (i.e the CAPS). Critical reflective questions can include: *After experiencing/reading/re-creating the PE content shared, what comes to mind? How do you view PE after experiencing/reading/re-creating the PE content shared, and what does this mean to you as a PE teacher? How does your understanding of FMS/Perceptual-motor skills/games in general/indigenous games, compare to your PE experience or what you’ve read/re-created, and what does this mean for you as a PE teacher? How do you experience this content knowledge within your low resource school contexts, and what does this mean for how you teach PE?*
- Teachers deciding on how they would like to deconstruct and apply PE-based content knowledge and/or overcome PE barriers, can be empowering and allow for the exploration of the group’s strengths and weaknesses in teaching PE. For example, in this study, some participants decided to video record their sessions at school and bring it back for subsequent critical reflection within the group.
- Sharing books or other forms of content knowledge that teachers have used to achieve their PE outcomes. For example, in this study participants shared that the Department of Education had provided them with a good PE-based book (Discovery Vitality School Programme, n.d.), emphasising that content knowledge is available, if teachers choose to use it. In contrast, other participants said a book was not going to help them teach PE and overcome the systemic barriers to PE they faced, and that alternative approaches are needed instead (6.3.2.4; 6.3.2.5).
- Debating emotion-laden topics related to teaching PE and the “the self”, and in relation to others, learners, the school context, the curriculum, NGOs, colleagues, leadership,

and the DBE. In this study, these discussions aided in the development of participants' different points of views (6.3.1.1 to 6.3.1.4).

The type of PE-based PCK participants collaboratively explored in this study included the CAPS in relation to the FMS, perceptual-motor skills, games in general and indigenous games present within. They also explored how they implement the CAPS within their low resource school context. Examples of PE-based conceptual frameworks were collaboratively and practically explored, and included: 1) Movement Analysis Framework (Graham et al., 2012); 2) Mosston and Ashworth's (1990) teaching styles; and 3) The Teaching Games for Understanding teaching model (Drost & Todorovich, 2013). Participants used these experiences to understand and set up lesson plans, implement them, reflect on their teaching approaches, and how to adapt and change movements when considering their learners' needs. Group discussions helped participants to determine what they felt competent in doing and where they needed further development (6.3.1.1 to 6.3.1.4), as they became more conscious of their abilities. Therefore, through engaging in these types of activities, teachers' schemata and perspectives can be challenged (Mezirow, 2003), and their values, beliefs, assumptions, and attitudes towards PE explored through critical reflection. As part of teachers' transformative learning processes, instrumental, dialogic and self-reflective (Mezirow, 1985) and content, process and epistemic reflections (Kitchenham, 2008; Mezirow, 1985), were furthermore encouraged (see Chapter Three).

During these early phases of a transformative and collaborative CPTD experience, it is important to ask questions related to recognition, reflection, competence, critical reflection, and coaching (Wood, 2020, p. 77). This can be operationalised through creating a critically reflective moment where the facilitator and teachers can share concerns, and can problem solve how to ensure everyone's voices are heard. Authenticity and a genuine interest in helping teachers is a key characteristic the facilitator will need to achieve this outcome. These questions include:

- *"How can I help participants* [and myself] *to reflect on their* [and my] *own learning?"*
- *"How directive am I* [and others]*?"*
- *"How can I* [and others] *improve my* [and our] *mentoring/facilitation skills?"*
- *"As a facilitator* [or as a participant] *of the process, and as a researcher* [or a Foundation Phase teacher]*, what do I* [and we] *need to learn?"*

- *“How do my* [our] *feelings, thoughts, motives and values impact the research* [or CPTD process] *process?”.*
- *How can I* [and we] *recognise and value participants’ achievements?*”

Through asking myself and participants these types of questions and engaging in reflexivity whilst viewing video footage of the action learning group’s interactions, I could see if I was upholding and fostering participatory values (Wood, 2020).

In summary, the creation of a “safe” space and relationships (guideline one), and engaging in transformative learning (guidelines two), were catalyst to energising participants to put in place action plans to overcome their barriers to teaching PE (6.3.1.1 to 6.3.1.4). These phases therefore aided in catalytic validity through reorienting, focusing, and energising participants towards knowing their PE reality, viewing PE differently, and aiming to transform PE within their school context (Herr & Anderson, 2014).

To continue fostering teachers transformative learning, moving forward, it is important to formalise the action learning process into actionable plans, based on their needs.

7.2.3 Assist teachers with developing action plans to help them overcome barriers and improve their teaching of PE

To assist teachers with developing action plans to meet their needs, their PE-based vision, and their roles and responsibilities in attaining their vision, the following should be considered:

- Posing critical questions related to the *“why, how and what”* of the action learning group’s experiences. That is: *What is our vision? How will we achieve our vision, and why? Who will we include, and why? When will we include them, and why? Where will we implement our outcomes, and why? Who is responsible for a given outcome, and why? What will affect us, and how will we overcome this, whilst achieving our vision and these outcomes, and why? Who should we include in implementing our vision, and why? What are our ethical considerations to achieve our vision? How will we share our vision with others?* The *why* part of the questions are important as it helps teachers think critically about their decisions. Writing these questions out on a board, and collaboratively debating each component, can aid teachers in finding common ground (4.3.5 and 4.3.6).

- Employing participatory modalities (Brookfield & Preskill, 2016) for participants to collaboratively decide on, and narrow down, their action plans to a specific focus and common vision. Participants can, for example, visually represent their visions on a collage, and then share this with the team (Leavy, 2018). Ensuring that each teacher gets an opportunity to share their vision, and to foster diplomacy within the team, should be the goal (4.3.5). These exercises are good training for when teachers must develop a community of practice for PE in their own schools (see guideline 4 below).
- Consolidating, formalising, and providing each participant with a purpose, role, and responsibility, collaboratively answering the questions posed in Table 7.2.

Table 7.2: Consolidation and formalisation action learning process rubric

What will we do?
When will we do it?
How will we do it?
Who is responsible?
What resources do we need to achieve this?
Who do we need to involve to achieve this?
How will we monitor and assess if we have achieved our goals?
How will we document our learning process to share with others?

- The participants should then set some broad questions such as the ones set by participants in this study: ***What do we need to learn to be able to effectively implement PE***? The answers to this question are presented in 6.3.1.1 to 6.3.1.4. The second question to emerge was: ***How can we improve our confidence to teach PE within our school contexts?*** The outcome of answering this question is shared in 6.3.2.1 to 6.3.2.4.

- In Table 7.2, the question: *How will we monitor and assess if we have achieved this*, can aid in identifying the research data collection and analysis process. As PE-based CPTD was the focus of this study, sharing and/or collaboratively creating different quantitative and qualitative assessments to identify whether improvements in teaching and learning are taking place, is an important consideration (6.3.2.5). The inclusion of monitoring and assessment within CPTD should be an empowering experience, based on a collaborative effort between teachers and their facilitator and the readiness levels (confidence and motivation) of teachers. The types of monitoring and assessment included should be a combination of both quantitative and qualitative scores. That is, not only assessing teachers and learners' PE-based quantitative scores such as how

effectively they are performing PE lessons, but also qualitative elements of learning such as personal growth, enjoyment, satisfaction, changes in philosophies and lifestyles, and motivation, to name but a few. Collaboratively constructing assessments with teachers could help them with overcoming the fear they may have of criticism and/or their focus on only achieving set standards, which was a concern of participants in this study (6.3.2.3). The relentless focus on grading has been shown to create stress for teachers (Du Plessis & Marais, 2015) and negate the process of learning (Julius, 2018), and therefore requires collaborative critical reflection within the team setting.

Developing action plans aids in catalytic validity (Herr & Anderson, 2014). Participants in this study were reoriented, focused, and energised towards changing their PE realities after they had put together plans of action. This was also the point in participants' learning journeys where their mantras emerged, namely: *"It starts with me!"* (T4) and *"High heels off, Takkies on!"* (T16).

A concern that emerged during this study, while exploring the questions presented in Table 7.2, was the need to improve collegiality at their schools, and gain support from management and their colleagues (6.3.1.3). Consequently, it is recommended that before teachers implement their action learning plans, they are assisted to learn how to gain collegial support for the teaching of PE.

7.2.4 Encourage teachers to share their action plans with other teachers/management in their school, before implementing them, through creating communities of practice

The importance of including management, colleagues and other key stakeholders cannot be understated. To gain support for the achievement of their visions, teachers should work to set up communities of practice for the teaching of PE in their respective schools:

- Ask: *"Who do we need to involve to achieve this?"*. For example, in this study, key stakeholders were identified as the Principal, and fellow colleagues in both the Foundation and Intermediate Phases. The ECDOE's officials involved with infrastructural upgrades were also considered as important stakeholders.
- Find support from service providers or experts outside the school context to aid in overcoming PE barriers. For example, finding support for differently abled learners

(such as those with FAS) and how best to integrate them into the teaching environment (6.3.2.5).

- Decide on a platform that will encourage networking and the formation of a community of practice to ensure continual improvement of PE teaching. This could be at school or away from school, and on a day and time of choosing that suits teachers and key stakeholders' availability. In this study, participants started the process of forming communities of practice at their school by deciding to include their Principal and colleagues in PE-based experiential learning (6.3.2.4). Participants did so through sharing what they had learnt with their colleagues after they had attempted to implement their action plans at school. Gaining support from key stakeholders invested in PE after implementing action plans was found to be counterproductive (6.3.2.5). Other forms of sharing within the community of practice could include videos, collages, PowerPoints, practically-based PE activities, TLSM examples suited to learners' and contextual needs, examples of how the CAPS can be adapted to learners' and contextual needs, ideas on how the school's teaching schedule can be adapted to accommodate PE and/or how PE equipment can be sourced and more.

The facilitator's role at this stage should become less directive, and instead the action learning group members should start to guide the communities of practice they create at their respective schools. The facilitator therefore should support the action learning group through reminding them of the following whilst they create their communities of practice:

- To create a "safe" space for action learning, and to foster democratic relationships.
- To identify what the community of practice thinks about what has been done by the action learning group thus far, and the proposed action learning plans moving forward.
- To find out what the community of practice needs are and in relation to what has been shared by the action learning group through employing democratic and participatory methodologies.
- To create the community of practices' central vision and action plans through employing democratic and participatory methodologies.
- To encourage the newly formed communities of practice to share their vision and action plans with key stakeholders invested in PE to gain support.

This cyclical process of planning, acting, observing, and reflecting in the action learning group, and then sharing before implementing plans, is aimed at sustainable change within the school context. Through including key stakeholders, and creating a community of practice, a whole-school model of change can be initiated. Research shows that this approach can produce positive outcomes in learners' physical activity, especially when compared to only focusing on teachers' or learners' physical activity changes (Mulhearn, Kulinna & Webster, 2020). A whole school model is focused on the organisational culture towards physical activity and can include exploring "physical education, physical activity before and after school, family and community engagement, staff involvement, and PA [Physical Activity] during school" (p. 160). Learning how to collaboratively engage with the organisation's cultural values and beliefs (Cameron & Green, 2019), is therefore an important aspect to discuss.

In conclusion, through applying the four CPTD guidelines discussed thus far, participants were empowered to identify their needs (6.3.1.1 to 6.3.1.4), develop their action plans (6.3.2) and gain sustainable support where needed through aiming to create communities of practice at school (6.3.1.3 and 6.3.2.4).

7.2.5 Support teachers as they implement, reflect on, and share their progress within the communities of practice they created, and with other key stakeholders invested in PE

The action learning group will need to implement their action plans, reflect on these plans to identify their progress, and share their progress with others whilst they continue to support the communities of practice they created at their schools. The facilitator can support the action learning group during this process by assisting them as follows:

- Prompting critical reflections on the outcomes of the action learning group's assessments conducted for monitoring purposes.
- Asking the action learning group: *Did the actions we put in place resolve the initial problem posed, and why or why not?* (Herr & Anderson, 2014). This can aid in deciding whether the vision of the action learning group is being achieved, and why or why not.
- Referring the action learning group's broad questions created for critical reflection. In this study's case, the questions the action learning group posed, included: "*Did what we learnt collaboratively aid us in effectively implementing PE*" and *"Did we improve our confidence to teach PE within our school context through the actions we took?".*

- Assisting the action learning group with their documentation process aimed at disseminating the outcomes of their action plans.
- Asking the action learning group: *"How can I* [and we] *recognise and value participants' achievements?*" (Wood, 2020, p. 77). Maintaining relationships and trust throughout this cyclical process of learning is important if teachers are to be re-energised to continue collaborating and to re-initiate the next action learning cycle focused on improving their PE teaching at school. How participants in this study decided to be recognised for their efforts, included how they decided to share their learning process with others (6.3.2.4 and Addendum M). Recognition and praise for one's achievements come in various forms, and therefore identifying how a team of teachers perceive recognition, is important.

This back and forth process between the action learning group and the community of practice they create at their schools, emphasises the supportive role that the facilitator plays in assisting the action learning group with being fully empowered to achieve their visions at school. This cyclical process also aligns with the DBE's (Department of Basic Education: Republic of South Africa, 2015) recommendations on how to support the development of communities of practice at school. That is, creating communities of practice based on "mutual trust and respect; support, challenge and constructive critique; [a] shared vision and clear focus on learning for all [learners]; collaborative and reflective enquiry; inclusive membership and openness; supportive school management; collective responsibility for learners' learning; coherent, responsive change in practice; members com[ing] together regularly…[and] systematic, rigorous enquiry into practice" (p. 5-6). Through doing so, a sustained learning project can be fostered.

7.3 A GRAPHIC REPRESENTATION OF THE PROPOSED CPTD GUIDELINES

Figure 7.1 provides a visual presentation of the CPTD guidelines indicated in Table 7.1 and discussed thus far. The visual conceptualisation of the CPTD guidelines depicts the following:

- The circular format highlights the cyclical process of planning, acting, observing, and reflecting that occurs whilst each CPTD guideline is implemented.
- At the core of the CPTD implementation process, is the development of relationships between teachers themselves, and the facilitator, focused on fostering a "safe" space.

The same colour depicting relationship and creating a “safe” space in Figure 7.1, encompasses each subsequent guideline, highlighting that this is the core and the “glue” that maintains the team’s interactions and the sustenance of their action learning cycles.

- The guidelines are implemented in a sequential format, emanating outwards, with each subsequent guideline adding a new “layer” of action learning for teachers to deconstruct and reconstruct collaboratively.
- The arrows originating from the centre of the circle emphasise the changes in the facilitator’s and teachers’ roles. The facilitator’s directive role wanes with each CPTD guideline being implemented, eventually “disappearing” altogether once teachers are empowered to implement their own action learning plans within the communities of practice they created at their school. Therefore, the arrows represent the transfer of learning responsibilities and ownership.

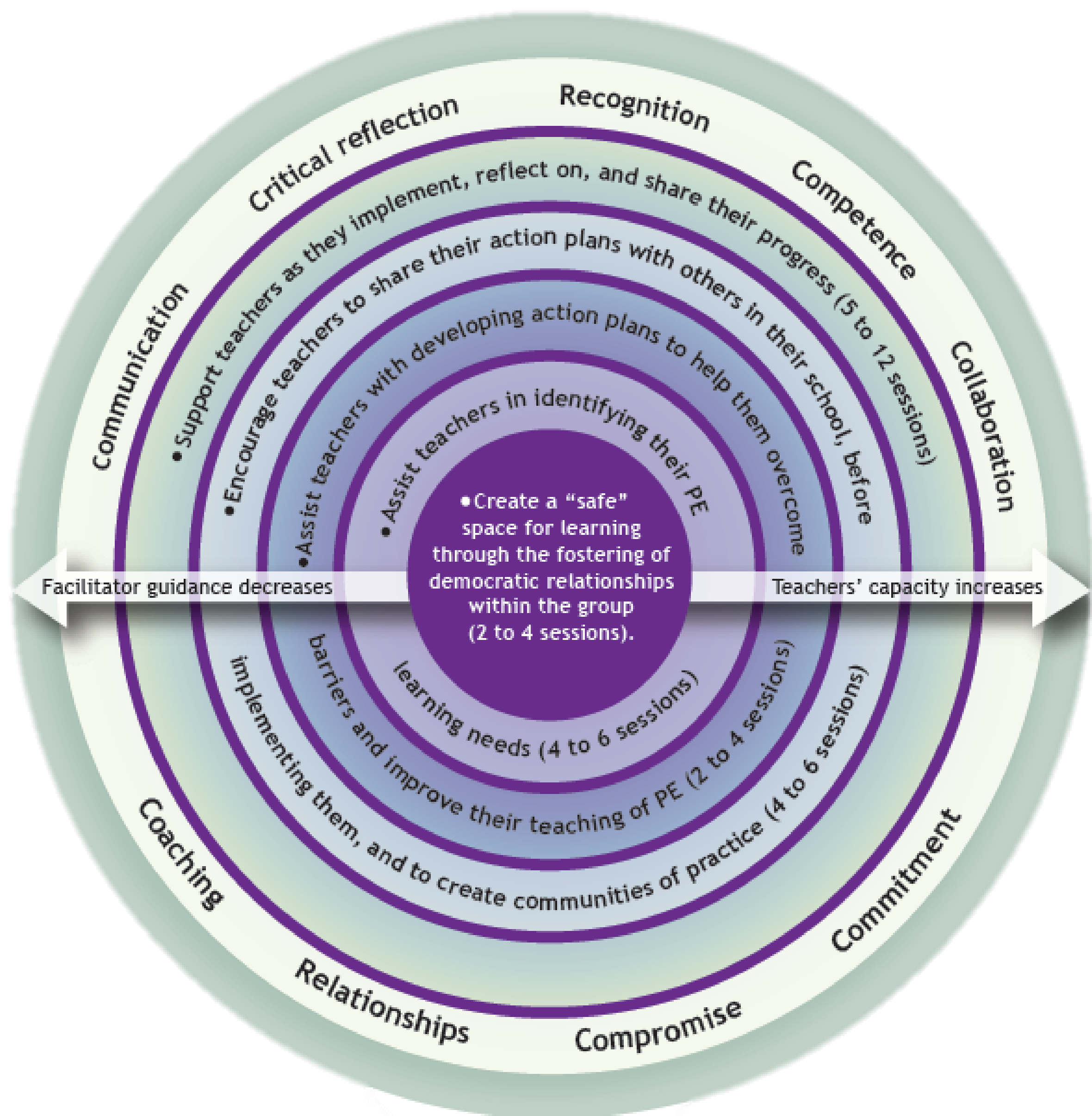


Figure 7.1: Visual presentation of the CPTD guideline

The values innate to PALAR (and as discussed in Chapter Four) surround the model, indicating how important it is to continuously foster collaboration, communication, commitment, critical reflection, compromise, competence, coaching, relationships, reflection, and recognition (Wood, 2020).

Innate to the transformative learning journey, through applying the five CPTD guidelines proposed in this study, teachers will be afforded the opportunity to engage in the following forms of change management behaviours suggested within the transtheoretical model of cognitive-behavioural change (Prochaska & DiClemente, 1983). That is, behaviours that can

aid teachers in progressing and regressing through their pre-contemplation, contemplation, preparation, action, maintenance, and termination stages of change when considering PE teaching (as explained in Chapter Three):

- *Consciousness raising,* in which teachers become aware of their need to increase their knowledge and their own abilities to implement PE (6.3.1.1 to 6.3.1.4).
- *Self- re-evaluation,* which involves teachers assessing whether PE teaching in a school context is a problem or not and imagining how the school would function differently if PE were taught (6.3.1.1 to 6.3.1.4).
- *Self-liberation* includes teachers making a commitment to changing their PE practice. In this study, as participants committed to joining CPTD and continued aiming to implement PE during our two-years together, they were in a process of self-liberation.
- Engaging in *environmental re-evaluation* by identifying the "bigger picture" of why PE is an important part of their learners' development and why it should be in their everyday teaching. In this study, when the pressures of work and life got a bit much for participants, they would refer to why they were joining the CPTD in the first place.
- Engaging in *social liberation.* That is, reflecting on the need to adjust policies and find ways to advocate for change within their social context and within existing policy frameworks. In this study, this included the need for augmented collegiality and social support within the school context (6.3.1.3), and other policy changes related to fund allocation and learners' progression from one Grade to the next (6.3.1.4). Fear of management, and overcoming this through creating better relationships, was an additional impeding factor participant believed should change (6.3.2.4).
- Engaging in *counter-conditioning*, which includes replacing habits which negate PE teaching with habits that support PE (6.3.2.1 to 6.3.2.4).
- Finding *helping relationships*, which includes sourcing support from colleagues and management at school who can facilitate with making the PE changes at schools (6.3.2.4).
- Participating in *dramatic relief* is an additional measure employed to facilitate the change process. It consists of working through and experiencing the thoughts and emotions which are evoked through role playing or psychodramas. In this study, as participants were not confident about their abilities to implement PE and/or would experience negative emotions when thinking about having to engage in PE, they decided to engage in PE activities in a "safe" space where they could build their

confidence and change their negative responses to PE. Participants challenged themselves with creating PE programmes and implementing these in a planned and progressive manner, with colleagues they trusted. This helped participants build their confidence. I also believe that the arts-based participatory methodologies I employed in this study provided teachers with the opportunity to engage in role playing and/or psychodramas. For example, creating collages (as shared in Chapter Six) through using magazine cut-outs and discussing what emotions are evoked by the poster and/or what the pictures mean, allowed participants to express their thoughts in a different way about their PE experiences at school (Leavy, 2018; Van Der Vaart et al., 2018).

7.4 HOW THE CPTD GUIDELINES AND MODEL COMPARES TO OTHER RESEARCH

When comparing the CPTD guidelines and model presented in this study to the research findings discussed in Chapter Two (2.4) (Edwards et al. 2019; Kakoma, 2012; Morake, 2014; Stroebel et al., 2019; Tsotetsi, 2013; Visagie, 2016); unique features emerge, adding to the body of knowledge:

- An alignment with the transformative goals of the 2030 National Development Plan (National Planning Commission: Republic of South Africa, 2012). Through adopting the proposed collaborative and transformative CPTD approach in this study, some of the challenges to education mentioned in the 2030 National Development Plan were addressed collaboratively by teachers and key stakeholders invested in PE. That is: 1) "Human capacity weaknesses in teaching [and] management" being collaboratively explored by teachers and management (p. 302); 2) "The lack of cooperation between key stakeholders" (in the case of this study, teachers and management) being collaboratively problem solved by teachers and management (p. 302); and 3) "Attempts to address educational challenges… characterised by blame and a lack of accountability" through teachers and management collaboratively identifying challenges, and putting in place action plans aimed at their PE progress (p. 302). Within the proposed model (Figure 7.1), accountability measures to monitor PE progress is included for future CPTD programmes. Through adopting a transformative and collaborative CPTD model, the National Development Plan's (2030) need for "working more closely with teachers to provide professional development opportunities, disseminate information about best practices and provide updates on cutting-edge research in particular school subject areas" (p. 308) was achieved in this study.

- This study answers the research question Stroebel (2018) posed and recommended for future research, namely: "How the Re-skilling Programme should be presented best to teachers to capacitate them to effectively implement PE?" (p. 165). It also provides one example of an innovative CPTD approach to meet Burnett-Louw's (2020, p. 9) proposed research need, namely the exploration of "innovative in-service teacher training models and strategies to enhance the quality of PE teaching in South African public schools". See Figure 7.1 and Table 7.1.
- The facilitator and teachers' roles throughout the CPTD process are clearly stipulated when compared to other studies, with an evolving learner-centred approach being adopted instead of only a learner- or teacher- centred approach.
- A whole-school approach is included through teachers being encouraged to create communities of practices that share their action learning plans with key stakeholders invested in PE (which can include colleagues, parents, universities, government representatives, NPOs/NGOs, the community etc.) before the implementation thereof.
- The CPTD model combines many of the different guidelines recommended by the authors, namely: 1) A learner-centred approach (and the inclusion of teachers' holistic needs); 2) A long-term CPTD programme with feedback cycles; 3) Pedagogical content and processes based on teachers' needs; 4) The inclusion of the context; 5) Collaboration between key stakeholders involved in PE teaching at schools; and 6) Some form of programme assessment and monitoring.

7.5 PERSONAL REFLECTION ON THE CPTD JOURNEY

My goal was to empower teachers to implement PE at their schools based on their needs, the needs of their learners, and their context. However, to do so, I had to ensure that how I approached and positioned myself within the CPTD programme, would allow for empowerment. Biases and factors that can affect a facilitator's ability to empower others include dependency-producing assumptions or distorted meaning schemes and perspectives (Mezirow, 1985) which exist during interactions with participants. In PE, factors that can affect democratic interactions include sex, race, sexuality, class and education, level of physical or mental disability, religion and cultural beliefs (Amusa & Toriola, 2010; Burnett, 2018b; Conchar, Bantjes, Swartz & Derman, 2016; Francis, 2017; John, 2018). Each action learning group will therefore be different. South Africa is a rainbow nation and globalisation is a reality. Therefore, as a facilitator positioned within a collaborative and transformative educational

environment; it will be important to be prepared for one's own and others' biases, dependency-producing assumptions, or distorted meaning schemes and perspectives (Mezirow, 1985). To be an effective facilitator who can implement a transformative and collaborative CPTD process model, I therefore suggest the following:

- **Be a reflective practitioner**: At the heart of the facilitators' skillset, should be reflective practice. To prevent a project from evolving into the facilitators' agenda, versus the participants', the facilitator should consider how dominant ideologies, power relations, and their own way of thinking, affects what decisions are made, how they are implemented, and why. It is recommended that the facilitator continuously pose the following questions: *Who is the expert here, and why ; Who has the final say, and why; What am I doing with participants and others, and why; What is the dominant assessment technique being used by me (the facilitator/researcher), by participants, and in the school context, and why; Is the dominant focus on teachers' and/or their learners' educational outcomes, or their learning processes, or something completely different, and why;* and *Does individual learning, group-learning or whole-school learning influence change, and why?*.
- **Be flexible**: A facilitator needs to approach CPTD with no hidden agendas. These need to evolve with the project and be collaboratively decided on. Therefore, a facilitator needs to be flexible in their thinking, in their application of learning approaches, be open-minded, and be able to adapt to participants and the context needs. However, the facilitator must also be able to challenge action learning groups in a manner that will foster critical thinking.
- **Be an expert in the field**: Within the context of PE-based CPTD, a facilitator needs to be a PE expert, knowledgeable about the PE curriculum, learner's growth and development needs, and how to develop teachers' PE-PCK through using different learning strategies and methods during instruction at and away from school.
- **Be capable of positioning him/herself in the collaborative and transformative learning domains**: Based on my interactions with participants in this study, the following should be considered:
    - How to apply different forms of reflective learning in a collaborative setting to PE-based CPTD.
    - How to manage conflict during CPTD sessions and how to foster diplomatic dialogue with all key stakeholders involved.

- How to include participatory methodologies to foster authentic relationship and trust building.
- How to include individual and organisational culture change, and how these factors affect overall change within school.

This is not a comprehensive list of what a facilitator needs to know or the skills they need to possess, and instead is only based on my reflexivity from my interactions with ten participants within two school contexts. Therefore, the facilitator should continuously ask him/herself: "*What do I need to learn to facilitate this process?*" (Wood, 2020, p. 77). Especially when considering that action learning groups can consist of different genders, ethnicities, cultures, religions, ages (including learners and/or their parents), levels of leadership (such as the Principal, HODs, DBE representatives etc.) and/or organisations (university, NGO, unions, etc.).

The transformative and collaborative CPTD process is a long-term process that requires patience and a passion for what you do with others. There are no shortcuts to the transformative learning journey. Choosing to adopt this CPTD model is rewarding, both intrinsically and extrinsically, and can be an immense benefit to the lives of the participants, their learners and all key stakeholders involved.

7.6 SUMMARY

In this chapter I answered the third research question of this study, namely: ***What CPTD guidelines can be generated to enable Foundation Phase teachers to improve on and to implement their PCK of PE and FMS at low resource schools?*** The findings emanating from this study and my own reflexivity on the PALAR journey experienced yielded five CPTD guidelines. Both a tabulated overview of the CPTD guidelines and a graphic depiction of the CPTD process are provided. Why the guidelines are important, what findings support their implementation, and how the guidelines can be operationalised, are discussed. Based on my reflexivity, and engagements with teachers, I also shared the skillsets I believe are necessary for facilitators who engage in collaborative and transformative CPTD programmes. In the following chapter, I answer the main research question of this study, namely: ***How can a collaborative CPTD approach assist Foundation Phase teachers to enrich their PCK of PE and FMS in low resource schools?***

CHAPTER EIGHT: SUMMARY OF FINDINGS, QUESTIONS FOR FURTHER RESEARCH, CONTRIBUTION TO KNOWLEDGE AND CONCLUSION

"The role of a leader is not to come up with all the great ideas. The role of a leader is to create an environment in which great ideas can happen." (Simon Sinek)

8.1 INTRODUCTION

In this chapter, I provide evidence of how I have answered the main research question of this study, namely: ***How can a collaborative and transformative CPTD approach assist Foundation Phase teachers in enriching their PCK of PE and FMS in low resource schools?*** I do so through providing a summary of the literature findings and empirical research that helped me to formulate this main research question. A summary, questions for further study, the theoretical, practical, and methodological contributions of this study, and the conclusion follow.

8.2 SUMMARY OF MAIN FINDINGS OF EACH CHAPTER

The purpose of this study was to explore how a collaborative and transformative CPTD approach would assist Foundation Phase teachers in enriching their PCK of PE and FMS in low resource schools. Seven chapters contributed to conceptualising and achieving the main purpose and research question of this study.

In Chapter One I shared how my personal interest in Foundation Phase PE-based CPTD in low resource schools and socio-economically challenged areas of the Nelson Mandela Bay emerged. Drawing from literature, I discussed the importance of PE teaching for Foundation Phase learners residing in poverty-stricken communities, and therefore, the need to support teachers with appropriate CPTD. That is, CPTD that supports Foundation Phase teachers by working with them, providing them with a voice and a choice, empowering them, and assisting them with navigating their teaching realities. I explained the importance of developing Foundation Phase teachers PCK of PE within their CPTD experiences, with an emphasis on their learners' FMS development. Through this exploration, I recognised that the normal CPTD models in South Africa are mainly transmission based and thus not conducive to supporting Foundation Phase teachers in low resource school contexts. I advocated for the use of a collaborative and transformative CPTD model. I therefore provided the rationale for this study,

highlighting how my experiences and explorations of literature transformed my thinking towards Foundation Phase CPTD, and what led to this study being conducted in two phases. I provided an overview of the respective questions in Phase One and Two; the theories that informed my thinking; the research methodology employed; the ethics considered and applied; and the practical, theoretical and methodological contributions of this study.

In Chapter Two I drew from existing literature and identified that many barriers to PE teaching exist, specifically in low resource schools. I critically reviewed and discussed why PE-based pre- and in-service training in the Eastern Cape is inadequate, and that the commonly employed transmission-based CPTD model decreases Foundation Phase teachers' opportunities for autonomy and teacher agency. I argued why a collaborative and transformative CPTD model could provide Foundation Phase teachers with an opportunity to navigate the PE component of the CAPS within their low resource school contexts, particularly since the CAPS has been found to lack disciplinary knowledge and is not theoretically sound. I critically analysed what PCK of PE and FMS is, and reasoned that it is difficult to conceptualise it within the low resource school context. In so doing, I justified why Foundation Phase teachers are uniquely situated to identify, challenge and change their PCK of PE and FMS needs, therefore moulding PE to their own, their learners, and their school context.

In Chapter Three I discussed why and how the critical theory approach (Brookfield, 2005) can be used to aid Foundation Phase teachers in identifying, challenging and changing their PE teaching realities; sharing the five principles to use when implementing this theory in the PE-based CPTD. I provided an overview and example of how the eleven steps within the transformative learning theory (Mezirow, 1997) could be applied to Foundation Phase PE-based CPTD. I reasoned that Foundation Phase teachers would be at different readiness levels for change, and that they would progress and regress differently within the stages of the transtheoretical model of cognitive-behavioural change (Prochaska & DiClemente, 1983). I argued that Foundation Phase teachers could support their transition within the stages of change if they chose to do so. In so doing, I justified the premise that using the learning principles innate to these three theories could aid in the implementation of a transformative and collaborative CPTD model. Through this critical analysis of theory, I recognised how Foundation Phase teachers could be empowered to view their PE teaching realities differently through transforming their values, beliefs, assumptions, attitudes and actions towards PE within their school contexts.

In Chapter Four I provided a theoretical justification for my use of qualitative research in Phase One, and my switch to PALAR in Phase Two. I discussed the philosophical frameworks I used when positioning myself within the interpretive, critical, and participatory paradigms. I, furthermore, provided an overview of Phase Two's PALAR Cycles One and Two. I provided an in-depth discussion of the selection process and school setting, data generation techniques, data analysis and the measures taken to increase trustworthiness in terms of Phases One and Two. I also explained the measures I took to ensure that the research adhered to ethical requirements.

In Chapter Five I answered the research question for Phase One: ***What are Foundation Phase teachers' experiences of implementing PE in low resource schools?*** Three broad themes were identified, namely personal and systemic barriers to PE, as well as positive responses to challenges. The overlap between themes was significant, highlighting the complexity of teachers' experiences and perceptions of PE. Teachers' positive responses emphasised that they possessed the creativity and advocacy to overcome the challenges posed. The findings of Phase One justified my argument for a transformative and collaborative CPTD model to support Foundation Phase teachers with PE teaching at their respective schools situated in socio-economically challenged areas.

From the findings, it may be concluded that:

- Teachers have personal and systematic barriers to PE that require collaborative problem solving.
- Teachers have solutions to the PE barriers they face, but that a platform for sharing these ideas within collaborative and transformative learning settings, is limited or non-existent within their school contexts.
- It would be beneficial to create a platform to enable Foundation Phase teachers to collaborate to learn how to improve their teaching of PE.
- Any CPTD approach should be centred on the context of the school and the socio-political landscape, since context influences teachers' abilities to implement learning and bring about change in PE teaching.

In Chapter Six: I critically discussed the findings from Phase Two of the study to answer the questions set by the participating teachers: ***What do we need to learn to be able to effectively implement PE*** and ***How can we improve our confidence to teach PE within our school contexts?*** Each question was addressed in a separate cycle of collaborative reflection and action, with the findings from cycle one informing action in cycle two.

The conclusion that can be drawn from Cycle One's findings about what teachers needed to learn are:

- **Teachers needed to learn how to understand the CAPS document.** To understand the CAPS, they needed to:
    - Learn how to design lesson plans for PE that aligned with CAPS outcomes.
    - Learn how to assess their learners' movement abilities.
    - Understand why PE was important to their learners' holistic development.

- **Teachers needed to learn how to implement PE within their school contexts**. To do so they needed to learn how to:
    - Implement PE-based content knowledge within their school context.
    - Accommodate for their learners' characteristics in PE lessons.
    - Use limited or no equipment when teaching PE.
    - Fit PE into their academic syllabus.

- **Teachers needed to learn how to gain support from colleagues, management, and parents.** That is, they needed to learn how to convince others that:
    - Joining CPTD was aimed at contributing to achieving the schools' academic outcomes versus an opportunity for teachers to negate their teaching responsibilities.
    - The noise and indoor/outdoor play during PE were contributing to learners' academic development.
    - Parental support can assist with learners' participation in PE at school through encouraging their children to dress accordingly (if parents can afford it).

- **Teachers needed to learn how to cope with systemic issues.** This included:
  - Funding being distributed to other priority areas.
  - Learners who are not at the readiness level for a Grade being accepted, or learners who are too young entering Grade R.

Based on Cycle One's findings, and my critical reflection on the process and data generated, it can be concluded that:

- Teachers learn about their needs through engaging in activities that foster critical consciousness about their PE teaching. Engaging in reflective activities (such as cooperative learning, outdoor experiential learning and the exploration of different types of PE-based content and PCK) helps teachers express their feelings, values, beliefs, assumptions, and attitudes towards PE; ultimately leading to their advocacy to attempt change.
- The action learning process should start with the development of a "safe" space where relationships and trust can be built, and transformative learning can transpire. The facilitator should model democratic and participatory methodologies. The facilitator, during these early stages of learning, should take on a more dominant role, and slowly hand-over the decision-making process to the action learning group members.
- Improving teachers' actual and perceived ability and confidence to teach PE within the low resource school context can take time and requires both away from and at school learning opportunities. A second cycle of action planning may need to be initiated to continue improving teachers' confidence to teach PE within their school contexts.

The themes of Cycle Two respond to the question of how teachers could improve their confidence to teach PE within their school contexts. The findings provided evidence that teachers had empowered themselves to meet their needs identified in Cycle One. The conclusion that can be drawn from Cycle Two's findings about what teachers did to improve their confidence to teach PE were:

- **Teachers improved their confidence in negotiating the CAPS through adapting their teaching to the social context.** Teachers did so through:
  - Adapting PE when there was limited equipment and space.

- Adapting the school schedule to align with teachers' and learners' needs.
- Using different forms of PE curriculum models and teaching styles for indoor and/or outdoor activities.
- Creating a diverse number of activities to accommodate different learning abilities.
- Improving how they assess their learners to help them progress in their movement abilities.

- **Teachers improved their confidence to teach PE within their school context through participating in authentic and collaborative learning that encompassed planning, taking action, observing, and reflecting**. They did so through deciding to engage in group-based lesson planning; individual and/or group-based implementation of their lesson plans with their learners at their respective schools; and subsequent action learning group reflection on the video-taped lesson. From these authentic and collaborative learning experiences, it can be concluded that:
    - They learnt how to practically apply content knowledge within their school context.
    - They learnt why it is important to plan for PE.
    - They experienced how it feels to participate in PE, and therefore learnt more about the benefits PE has to offer their learners.

- **Teachers improved their confidence to teach PE through becoming reflective practitioners.** Through engaging in reflective practice, it can be concluded that teachers' confidence improved as they realised that it was their choice to:
    - Take responsibility for teaching PE.
    - Have a positive attitude towards PE.
    - Find ways to remove the systemic barriers to the teaching of PE.
    - Change their attitudes towards constructive feedback when learning about PE.

- **Teachers improved their confidence to teach PE by accessing support in their social contexts, where needed.** It can be concluded that they did so through:
    - Working closely with their action learning group members whilst aiming to achieve their PE vision.

- Extending what they had learnt to their Principal and fellow colleagues at school.

Based on Cycle Two's findings, I can conclude that for a PE-based CPTD process to support the improvement of teachers' confidence to teach PE, the following should happen:

- Fellow colleagues and management should be included by following the guidelines of creating a community of practice within a school context. This process should start with relationship and trust building, and follow a process of action learning, and not just sharing what was learnt in a haphazard manner. Teachers should share their action plans with their communities of practice and other key stakeholders invested in PE before implementing them. Doing so can ensure that the learning process does not feel like critique and buy-in from fellow colleagues and management can be fostered.
- PCK of PE and FMS can be learnt through collaboratively decided on learning objectives created by teachers. Teachers can learn from collaboratively creating PE lesson plans based on the CAPS policy, implementing these PE lesson plans at school, and video recording their PE lessons for subsequent critical reflection thereof with fellow colleagues. Choosing to continue engaging in this self-initiated action learning process can help teachers sustain learning about PCK of PE and FMS needs.

I can also conclude that systemic barriers endemic to low resource schools, presented barriers to the teaching of PE and even with CPTD. Teachers may not be able to gain material and collegial support for PE. For example, the progression policy means that learners may not be physically developed enough to join in with their peers in certain exercises; funds are allocated to other academic subjects to the detriment of the PE budget; management also prioritise the teaching of subjects they deem to be more important; and collegial relations are not supportive as teachers compete for limited resources. However, the creation of a community of practice will provide a platform for interested teachers to address such challenges and build support for PE within the school.

In Chapter Seven: I focused on answering the third research question namely: ***What CPTD guidelines can be generated to enable Foundation Phase teachers to improve on and to implement their PCK of PE and FMS at low resource schools?*** The CPTD guidelines were derived from the findings of the two cycles in phase two, the review of literature and my critical

reflections on the whole process. Five CPTD guidelines aimed at collaborative and transformative PE-based CPTD were identified: 1) Create a “safe” space for learning through the fostering of democratic relationships within the group; 2) Assist teachers in identifying their PE learning needs through transformative learning; 3) Assist teachers with developing action plans to help them overcome barriers and improve their teaching of PE; 4) Encourage teachers to share their action plans with other teachers/management in their school, before implementing them, and to create communities of practice; and 5) Support teachers as they implement, reflect on, and share their progress within the communities of practice they created, and with other key stakeholders invested in PE.

A graphic depiction of the CPTD guidelines (Figure 7.1) illustrates how important it is to: 1) Start with relationship building between teachers themselves, and the facilitator, and thereby fostering a “safe” space; 2) Ensure that each subsequent guideline continues to include relationship and trust building, as this is the “glue” that maintains the group’s interactions and the sustenance of their action learning cycles; 3) Continuously engage in a cyclical process of action learning and therefore planning, acting, observing, and reflecting; 4) Implement the guidelines in sequential order, as each subsequent guideline adds a new “layer” of action learning and depth for teachers to deconstruct and reconstruct collaboratively; and 5) The facilitator’s directive role wanes with each CPTD guideline being implemented, eventually “disappearing” altogether once teachers are empowered to implement their own action learning plans within the communities of practice they created at their school.

8.3 QUESTIONS ARISING FROM THE STUDY THAT NEED FURTHER EXPLORATION

Key stakeholders involved in PE, that directly and/or indirectly affect PE teaching within the school context, include: the DBE, SAUPEA, PEISA, SRSA, SASCOC, the Department of Health, different universities, district and circuit level officials, school management, teachers, and NGOs. Parents and learners, who ultimately benefit from PE teaching, should furthermore be consulted when considering PE policy and the teaching thereof. For transformation in PE within the low resource school context to become a reality, it is important for key stakeholders (especially those involved in the day-to-day experiences of PE) to collaborate and find answers to the questions that follow.

Education policy

- How can Foundation Phase PE-based CPTD policy be re-evaluated to include collaborative and transformative CPTD models and teaching philosophies that support transformation within the school context? Continuing to employ transmission-based CPTD models may not effectively result in transformation within education in general, nor the achievement of many of the teacher education outcomes depicted in the 2030 National Developments Plan, especially in low resource school contexts.
- How can the PE component of the CAPS be re-evaluated and revised to be theoretically sound and to include disciplinary knowledge that is based on quality PE international policy standards? School management and teachers are mandated by government to follow policy, and therefore policy should align with quality PE standards.
- How can systemic barriers to education in general, which directly and indirectly affect PE, within low resource schools be overcome? For example, systemic barriers such as the Grade progression policy, chronic infrastructural shortcomings, lack of parental support, poor leadership and management, and lack of collegiality, and their effect on learning outcomes at school.
- How can monitoring and evaluations of PE collaboratively created by key stakeholders invested in PE (teachers, experts in PE etc.) assist with quality PE policy-level outcomes and implementation?

School level

- How can District and Circuit officials, Principals, HODs and teachers (and other key stakeholders invested in PE) employ collaborative and transformative CPTD models to explore the PE component of the CAPS and the implementation thereof in their low resource school contexts?
- How can District and Circuit officials, Principals, HODs and teachers (and other key stakeholders invested in education) use communities of practice within the school context to overcome systemic barriers to education in general, and which directly and indirectly affect PE, within low resource schools? For example, systemic barriers such as the Grade progression policy, the lack of funding for PE, chronic infrastructural shortcomings, lack of parental support, poor leadership and management, and lack of collegiality.

- How can the perception of PE as a subject be enhanced? Enhancing perceptions regarding PE in comparison to perceived high priority academic subjects may improve the implementation thereof in low resource school settings.

Pre-and in-service training

- How and where can the facilitators of collaborative and transformative PE-based CPTD models be trained to meet the demands of emancipatory action learning? A poorly trained facilitator will not possess the expertise to foster a transformative learning environment.
- How can collaborative, transformative and action learning principles be integrated into pre-service training? Finding platforms where pre-service teachers can transform their pre-conceptions of PE and problem-solve barriers to PE even before they enter the school context as qualified teachers, can prepare them for the realities of the South African school context.

CPTD research

- Limited research in the field of collaborative and transformative CPTD models exists in the PE field. It will be important to explore the varied application thereof. What would the outcomes of the application of a PE-based (or other subjects) collaborative and transformative CPTD model be if one or more of the following categories of participants are included: different genders, ethnicities, cultures, religions, ages (including learners and/or their parents), levels of leadership (such as the Principal, HODs, District and Circuit level official, DBE representatives etc.) and organisations (university representatives, NGOs, unions, etc.)?
- How can PE-based monitoring and assessment be integrated into a collaborative and transformative CPTD model without interrupting the values innate to the critical and participatory paradigms? Commencing with monitoring and assessment too early can negate teachers' exportations of their needs and bottleneck them into what an assessments focus is. However, to influence policy at all levels within the education system, it is important to include PE-based monitoring and assessment that is available in both quantitative and qualitative form to inform the understanding of whether CPTD outcomes were achieved.
- How can a PE-based collaborative and transformative CPTD model empower both Foundation Phase teachers and their learners equally? For example, asking teachers how

they experienced their CPTD, and what their CPTD learning needs are, is different to asking learners aged six to nine years old how they experienced PE teaching, and what they would prefer to learn in PE.

8.4 LIMITATIONS OF THE STUDY

To identify the limitations in this study, it is important to note my reflections on the validity criteria (Table 4.3), and whether these were upheld:

- Outcome validity: The actions in this study did not solve all the PE teaching problems faced within low resource schools due to limitations in my own ability as a facilitator and teachers' abilities and resources available. However, some of the PE barriers faced could be reframed and understood from a different perspective in Cycle One (6.3.1.1 to 6.3.1.4), and result in a new set of actions being devised and implemented to meet teachers' needs in Cycle Two (6.3.2 1 to 6.3.2 4). The findings in this study can therefore inform, guide, explain and influence future research or CPTD.
- Process validity: The findings are based on two action research cycles (6.3.1 and 6.3.2), and primarily from a qualitative perspective. To improve the process validity of this study, embedding quantitative measures within the action learning cycles, could have assisted with triangulation. Having more objective assessments over the long-term, of teachers' and learners' PE-based progress (be it in social, affective, physical, or cognitive domains of PE), could aid in identifying whether the qualitative findings are justified.
- Democratic validity: The findings in this study are based on teachers collaboratively engaging and solving PE problems at their schools. For the scope of a doctoral study, limitations regarding the inclusion of different perspectives include only those teachers who volunteered and not those who did not decide to join, only female teachers, one geographic area, and a similar cultural group. To improve democratic validity, creating an action learning group that includes learners, parents, DBE representatives, the Principals, males, other geographic areas and/or union members (and so forth), could add to generating a larger repertoire of perspectives. In terms of learners, exploring ways to capture their voices, experiences and perceptions of PE through innovative age-appropriated methodology is warranted.
- Catalytic validity: Teachers and I could see their PE realities differently (6.3.1.1 to 6.3.1.4; 6.3.2.1 to 6.3.2 4; 5.5; 6.3.1.5; 6.3.2.5). Therefore, the research process did reorient, focus, and energise teachers and I towards viewing the PE reality differently, and put in place

action plans to transform it. However, the change towards PE was not equal amongst teachers, with some eventually not implementing PE due to their personal and systemic barriers within their home and school contexts. A limitation in this study is therefore not being able to provide all the confounding variables affecting teachers' implementation of PE within school contexts.

It is important to note that this study was based on two schools and ten teachers' collaborative inputs, and therefore the study's findings cannot be generalised to other settings. A different group of teachers, school environments (rural, urban, township) and facilitator could have resulted in different findings. PE-based monitoring and assessment were not part of this study's focus, and it is therefore difficult to ascertain exactly what changed in teacher and their learners' performances when it came to their PE teaching.

8.5 CONTRIBUTIONS OF THE STUDY

Did this research add to the existing body of knowledge? Can this research assist facilitators of PE-based CPTD programmes? Can this research contribute to informing PE policy? Did the research fill a gap? Yes, I believe it has added to the body of knowledge (7.5) by providing answers to the question I asked at the beginning of this study: ***How can a collaborative and transformative CPTD approach assist Foundation Phase teachers in enriching their PCK of PE and FMS in low resource schools?*** Phase One provided empirical support for the exploration of this question, and Phase Two enabled the experiential design of a CPTD model aimed at overcoming the barriers to PE teachers were experiencing.

From a theoretical perspective, this study deliberated findings related to the use of a collaborative and transformative CPTD model in the Foundation Phase and in low resource schools situated within socio-economic areas of disadvantage. It yields a conceptual understanding, in the form of guidelines, of how to implement CPTD for PE teaching in low-resource schools. This study therefore adds to CPTD knowledge, providing insights into the use thereof. No study, to my knowledge, has explored this domain in Foundation Phase PE.

From a practical perspective, this study answered a practical question that arose in the literature, namely: "How the Re-skilling Programme should be presented best to teachers to capacitate them to effectively implement PE?" (Stroebel, 2018, p. 165). However, instead of a

Re-skilling Programme, which lends itself to a technical skills-based approach, this study provides an alternative approach through exploring a PE-based CPTD experience that is empowering and transformative, and is based on teachers' values, beliefs, assumptions and attitudes towards PE. This study therefore explored one example of "innovative in-service teacher training models and strategies to enhance the quality of PE teaching in South African public schools", as proposed by Burnett-Louw (2020, p. 9). The findings emanating from this study culminate in step-by-step guidelines on how to operationalise a collaborative and transformative CTPD model.

From a methodological perspective, this study is the first to show how PALAR can be used as a means of Professional Development with a group of Foundation Phase teachers of PE working in low resource schools located in socio-economically challenged areas.

8.6 CONCLUSION

This collaborative and transformative CPTD journey was a discovery process for me. Throughout I experienced three different research paradigms (interpretivist, critical and participatory), each opening my mind towards viewing the world and myself within it very differently. As someone who has put on many hats (from lecturing, to researching, to facilitating CPTD, teaching PE, practicing Biokineticist with different population groups, and dabbling in the fitness industry through group training), my eyes have been opened to the possibilities that PALAR, as a methodology, can bring to many different spaces. Using this methodology has provided me with an opportunity to identify my strengths and weaknesses, adding to my holistic development as a human being. To be successful in implementing PALAR, a well-rounded, reflexive, humble, and open-minded approach to life is key.

I now have a better understanding of why teachers do not implement PE, even when equipment, CPTD and human resource support is provided by others (such as NGOs or researchers). It is a complex situation consisting of personal and systemic barriers to PE, therefore making change within the school context very difficult. I believe there is hope for PE in the South African context, but it will require persistent effort and strategic changes by those within the education system at a national, provincial, district, circuit, and school level. One of these strategic changes, can be the consideration of including collaborative and transformative CPTD models.

The question that I answered in this study was: ***How can a collaborative and transformative CPTD approach assist Foundation Phase teachers in enriching their PCK of PE and FMS in low resource schools?*** Through experiencing Foundation Phase teachers' daily lives as they navigated their CPTD needs within the constructs of their home lives and school contexts, one important learning stands out. Transformation can take place when the leadership provided within the school context and by the facilitator of the CPTD process, fosters a learning environment that develops teachers' agency and supports them as they endeavour to transform themselves and their school contexts. This is where I believe the following saying rings true:

> "The role of a leader is not to come up with all the great ideas. The role of a leader is to create an environment in which great ideas can happen… Being the leader means you hold the highest rank, either by earning it, good fortune or navigating internal politics. Leading, however, means that others willingly follow you - not because they have to, not because they are paid to, but because they want to." (Simon Sinek, 2020).

In schools, we need leadership that supports teachers to create learning spaces that can empower them to take the lead in their own transformative journeys in collaboration with others. Empowering teachers to develop their critical consciousness in CPTD can make a difference to how PE is viewed and how teachers' PCK is developed for their school contexts and can possibly cause a ripple effect in the different structures governing education. The benefits of PE are numerous, and children have the right to experience quality PE as part of their holistic development. Teachers have a right to have the opportunity to empower themselves to achieve this objective and lead the way forward through an enriched CPTD experience. Having the right to something means that the responsibility resides within us, as teacher educators and researchers in the field of PE, to take on the challenge of assisting those invested in PE to achieve the vision they craft for themselves.

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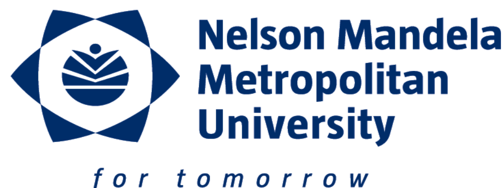
LIST OF ADDENDA

Addendum A: The Principal, Foundation Phase Head of Department, and teachers' information letter for Phase One



• PO Box 77000 • Nelson Mandela Metropolitan University[11]
• Port Elizabeth • 6031 • South Africa •www.nmmu.ac.za

Faculty of Health Sciences
Department of Human Movement Science
School of Lifestyle Sciences
Tel: 041 504 4692
E-mail: samantha.kahts2@nmmu.ac.za
Date: 15 April 2015

Attention: The Principal, Foundation Phase Head of Department, and teachers

RE: Request to conduct research at your school

Dear school staff

My name is Samantha Kahts and I am a doctoral student at the Nelson Mandela Metropolitan University (NMMU). I am exploring how a collaborative and transformative continuing professional teacher development (CPTD) approach can enrich Foundation Phase teachers Pedagogical Content Knowledge (PCK) of Physical Education (PE) and Fundamental Movement Skills (FMS) in their low resource school contexts. This research will be conducted under the supervision of Professor Rosa du Randt and Prof Wood.

This study has met the ethic requirements of the department of Human Movement Science, the Faculty of Health Sciences Research Technology and Innovation (FRTI) committee and the Research Ethics Committee (Human) (RECH) of the NMMU. The following approval number was received to conduct the research: **H14-HEA-HMS-015**

I would like to request permission from you, to conduct this research project at your school. The following sections highlight the research aims and methods, duration of the project, your schools' involvement, the ethical consideration, and significance of this study.

[11] Nelson Mandela University was known as Nelson Mandela Metropolitan University at the time this letter was written. In 2017 the name change. For more information, please refer to the following link:
https://naming.mandela.ac.za/

Research aims and methods

The primary aim of the study is to **explore how a collaborative CPTD approach can assist Foundation Phase teachers to enrich their PCK of PE and FMS in low resource schools.**

The research objectives for this study are dependent on which phase of the research project Foundation Phase teachers and I are in. There are two research phases.

In Phase One, I aim to **explore what Foundation Phase teachers' experiences of implementing PE in low resource schools are.** Foundation Phase teachers who volunteer to be part of the study will be sourced for a 60-minute semi-structured interview. The number of teachers interviewed at your school will depend on when data saturation is obtained. This means that I will stop the interviewing process once no new information from Foundation Phase teachers presents. The information from Foundation Phase teachers will assist me in establishing how best to help them with teaching PE at your schools.

Duration of the project

It is envisioned that one Foundation Phase teacher from each Grade participate in a semi-structured interview at a venue and time that is convenient. The duration of data collection will therefore be limited to 180 minutes, depending on the Foundation Phase teacher being interviewed and how much they discuss their experiences of PE.

Your schools' involvement, should you agree to be part of the study, would be to:

- Arrange for informed consent from the Foundation Phase teacher who volunteer to participate in the study.
- Arrange for a venue and time that is convenient for the Foundation Phase teacher.

Significance of Research Project

The research is believed to be significant and beneficial in the following ways:

- Barriers affecting Foundation Phase teachers when implementing PE lessons within lower resource schools can be identified and possible solutions can be generated. In so doing the information gathered can be used to guide future policy decisions by the Education Department, researchers, tertiary institutions, Principals, and teachers.
- Results can be used to inform pre- and in-service teacher education and curriculum development for the PE learning area of the Life Skills subject.

Ethical considerations and conduct

The following are the ethical considerations of this study:

- All information collected will be treated as confidential and neither the school nor the teacher or individual learners will be identifiable in the reports that are written.
- The results will be made available to the Principal, Head of Department and teachers of the school after the analysis and report has been compiled.
- Please keep in mind that participants may withdraw from the study at any time without penalty. The role of the school is voluntary and the school Principal may decide to withdraw the school's participation at any time.
- In collaboration with the Principal, Foundation Phase Head of Department, and teachers; all efforts will be made to ensure that no harm comes to any stakeholders involved during our sessions.

Attached for your perusal, are copies of the Principal and teachers' consent forms.

Your positive consideration of the request to participate in this research project is appreciated.
Yours sincerely

Samantha Kahts	Prof. Rosa du Randt
Researcher	Promoter
Tel: 073 3076 212	Tel: (041) 504-2499

Addendum B: The Principal, Foundation Phase Head of Department, and teachers' information letter for Phase Two

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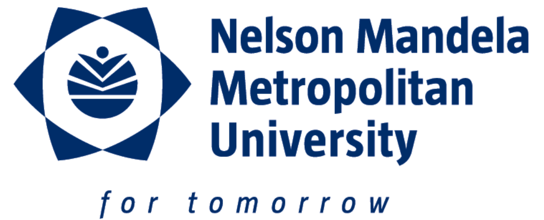

Faculty of Health Sciences
Department of Human Movement Science
School of Lifestyle Sciences
Tel: 041 504 4692
E-mail: samantha.kahts2@nmmu.ac.za
Date: August 2017

Attention: The Principal, Foundation Phase Head of Department, and teachers

RE: Request to conduct research at your school

Dear school staff

My name is Samantha Kahts and I am a doctoral student at the Nelson Mandela Metropolitan University (NMMU). I am exploring how a collaborative and transformative continuing professional teacher development (CPTD) approach can enrich Foundation Phase teachers Pedagogical Content Knowledge (PCK) of Physical Education (PE) and Fundamental Movement Skills (FMS) in their low resource school contexts. This research will be conducted under the supervision of Professor Rosa du Randt and Prof Wood.

This study has met the ethic requirements of the department of Human Movement Science, the Faculty of Health Sciences Research Technology and Innovation (FRTI) committee and the Research Ethics Committee (Human) (RECH) of the NMMU. The following approval number was received to conduct the research: **H14-HEA-HMS-015**

I would like to request permission from you, to conduct this research project at your school. The following sections highlight the research aims and methods, duration of the project, your schools' involvement, the ethical consideration, and significance of this study.

Research aims and methods

The primary aim of the study is to **explore how a collaborative CPTD approach can assist Foundation Phase teachers to enrich their PCK of PE and FMS in low resource schools.**

The research objectives for this study are dependent on which phase of the research project, Foundation Phase teachers and I are in. There are two research phases. Phase One has been conducted and entailed exploring Foundation Phase teachers' experiences of implementing PE in low resource schools. Phase two is now our focus and we would like to involve your school's teachers in this phase.

[12] Nelson Mandela University was known as Nelson Mandela Metropolitan University at the time this letter was written. In 2017 the name change. For more information, please refer to the following link:
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In Phase Two, the study will consist of **cyclical re-iterative processes with Foundation Phase teachers who volunteer to be part of the collaborative and transformative CPTD process.** These re-iterative cycles will be focused on empowering Foundation Phase teachers to implement PE at your school. The number of learning cycles with Foundation Phase teachers will depend on the teachers' goals and ambitions with regard to teaching PE at your school. Each cycle consists of identifying a problem, formulating a solution and putting in place actions, implementing the solution/actions, observing what happens, and then reflecting on the process. A new cycle emerges based on the findings which emerge. The cyclical process is known as action learning and research. As it is a participatory process, it is called participatory action learning and action research (PALAR).

The following are examples of what can take place in Cycle One between Foundation Phase teachers who volunteer to be part of the PALAR process, and me:

1. Forming an action learning group through building trust and relationships.
2. Identifying knowledge teachers need and developing personally by sharing knowledge and skills with each other.
3. Defining our mutual purpose.
4. Conducting an in-depth context analysis.
5. Forming a vision.

The following are examples of what can take place in Cycle Two between Foundation Phase teachers who volunteer to be part of the PALAR process, and me:

1. Developing a research question.
2. Exploring team roles and responsibilities and each members' purpose.
3. Identifying ethical conduct.
4. Putting action plans in place to build teachers' confidence to teach PE.
5. Collaboratively creating PE lesson plans and videos and presentation to share with colleagues.
6. Deciding on dissemination of findings.
7. Reflecting on learning and development and deciding on next steps.

Duration of the project

The duration of the research project is solely dependent on the Foundation Phase teachers, and their goals and ambitions regarding PE teaching at your school. Projects of this nature can take one to three years, depending on the teachers, and the schools' goals. Please keep in mind that the project's schedule depends on the Principal and Foundation Phase Head of Department and teachers' consent. All work commitments at school are considered by all key stakeholders involved, and no infringement on the schools normal working procedures will be made. All key stakeholders decide when it is best to meet up and implement the participatory action learning and action research cycles.

Your schools' involvement should you agree to be part of the study, would be to:

- Arrange for informed consent from the Foundation Phase teacher who volunteer to participate in the study.
- Assist teachers who are part of the CPTD research project with attendance of action learning sessions and follow-ups based on their perceived needs.
- Continue implementing PE in the Life Skills subject's two-hour prescribed teaching slots within the timetable.

Significance of Research Project

The research is believed to be significant and beneficial in the following ways:

- Foundation Phase teachers are the primary drivers of this project and thus the benefits to the school include how teachers decide to enrich their PE learning journeys. The practical benefits of teachers' engagements in this collaborative and transformative study can thus extend to learners, parents, fellow colleagues, and the community.
- Barriers affecting Foundation Phase teachers when implementing PE lessons within lower resource schools can be identified and possible solutions can be generated. In so doing the information gathered can be used to guide future policy decisions by the Education Department, tertiary institutions, Principals, and teachers.
- Results can be used to inform pre- and in-service teacher education and curriculum development for the PE learning area of the Life Skills subject.
- Guidelines in the use of a collaborative and transformative CPTD model to aid non-specialist PE teachers can be generated from this research.

Ethical considerations and conduct

The following are the ethical considerations of this study:

- The execution of PE lessons by teachers may be videotaped for the purpose of analysing the competency of teachers and learners with regard to their PE experiences. Video footage will only be shared between those colleagues who volunteer to be part of the study. If participants choose to share their video footage with others, all those involved must provide consent or assent.
- All information collected will be treated as confidential and neither the school nor the teacher or individual learners will be identifiable in the reports that are written. Unless the teachers who volunteered for the study want to include their names, no mention of the school or learners will be made. The results will be made available to the Principal, Head of Department and teachers of the school after the analysis and report has been compiled.
- Please keep in mind that participants may withdraw from the study at any time without penalty. The role of the school is voluntary and the school Principal may decide to withdraw the school's participation at any time.
- In collaboration with the Principal, Foundation Phase Head of Department, and teachers; all efforts will be made to ensure that no harm comes to any stakeholders involved during our sessions.

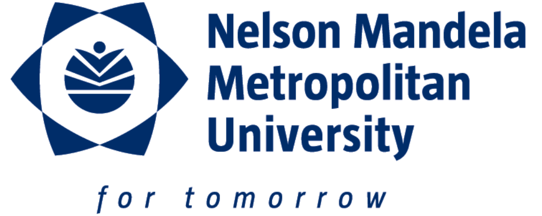
Attached for your perusal, are copies of the Principal and teachers' consent forms.

Your positive consideration of the request to participate in this research project is appreciated.
Yours sincerely

Samantha Kahts
Researcher
Tel: 073 3076 212

Prof. Rosa du Randt
Promoter
Tel: (041) 504-2499

Addendum C: Principal's informed consent form for Phase One



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Principal's Consent Form for Phase One of this research project

I,……………………………………(Principal's name) of…………………………………… school give consent to allow my Foundation Phase teachers to participate in a semi-structured interview and possible follow-up interview/s that are focused on answering the research question: ***What are Foundation Phase teachers' experiences of implementing Physical Education (PE) in their low resource schools?***

I understand that Foundation Phase teachers at my school will be involved in:

- A 60-minute interview where they answer questions related to teaching PE at their school.
- A recording of their discussion with the researcher via a digital audio recorder.

My schools' involvement will consist of:

- Informing Foundation Phase teachers of the research project and providing them with an opportunity to volunteer.
- Provide a time and day that suits both the school and teachers' time schedule for the interview to be conducted.

I have read the project information statement explaining the purpose of the project and understand that:

- School's participation is voluntary.
- I may decide to withdraw my school's teachers' participation at any time without penalty.
- All information obtained will be treated in strictest confidence.
- My name will not be identifiable in any written reports about the study.
- My school will not be identifiable in any written reports about the study.
- A report of the findings will be made available on request.
- I may seek further information on the project from Samantha Kahts at 073 3076 212 or samkahts@hotmail.com

Name of Principal　　　　　　　　　　　　Signature

Date　　　　______________________________　　　　______________________________

[13] Nelson Mandela University was known as Nelson Mandela Metropolitan University at the time this letter was written. In 2017 the name change. For more information, please refer to the following link:
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Addendum D: Principal's informed consent form for Phase Two

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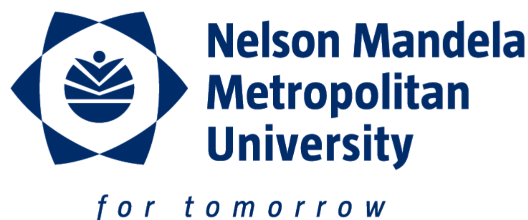

Principal's Consent Form for Phase Two of this research project

I,………………………………(Principal's name) of…………………………………… school, give my consent to allow my Foundation Phase teachers to participate in a collaborative and transformative continuing professional teacher development project focused on enriching their understanding of Physical Education (PE) and Fundamental Movement Skills teaching, at my school.

I understand that my Foundation Phase teachers who volunteer to be involved in this research will collaboratively participate in:

- Forming an action learning group through building trust and relationships.
- Identifying knowledge teachers need and developing personally by sharing knowledge and skills with each other.
- Defining their mutual purpose.
- Conducting an in-depth context analysis.
- Forming a vision.
- Developing a research question.
- Exploring team roles and responsibilities and each members' purpose.
- Identifying ethical conduct.
- Putting action plans in place to build teachers' confidence to teach PE.
- Collaboratively creating PE lesson plans and videos and presentation to share with colleagues.
- Deciding on dissemination of findings.
- Reflecting on learning and development and deciding on next steps.

I understand that:

- The sessions Foundation Phase teachers engage in will be recorded via either an audio recorder or video recorder.
- Transcriptions of Foundation Phase teachers' discussion with the researcher and fellow colleagues will be used for data analysis.

I have read the project information statement explaining the purpose of the project and understand that:

- My participation is voluntary.
- I may decide to withdraw my teachers' participation at any time without penalty.
- All information obtained will be treated in strictest confidence.
- My name will not be identifiable in any written reports about the study.
- My school will not be identifiable in any written reports about the study.
- A report of the findings will be made available on request.
- I may seek further information on the project from Samantha Kahts at 073 3076 212 or samkahts@hotmail.com

Name of Principal ____________________ Signature ____________________

Date ____________________

Thank you for your participation

Addendum E: Foundation Phase teachers' informed consent form for Phase One

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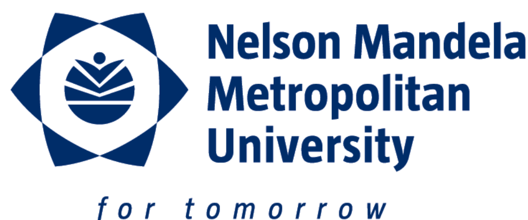

Foundation Phase teacher's consent form for Phase One of this research project

I,………………………………………………. (name), from the…………………………… school give consent to participate in a semi-structured interview and possible follow-up interview/s that are focused on answering the research question: ***What are Foundation Phase teachers' experiences of implementing Physical Education (PE) in their low resource schools?***

I understand and agree that my involvement in the research will include:

- A 60-minute interview where I will answer questions related to teaching PE at my school.
- A recording of my discussion with the researcher via an audio recorder.
- Transcriptions of my discussion with the researcher for subsequent data analysis.

I have read the project information explaining the purpose of the project and understand that:

- My participation is voluntary.
- I may decide to withdraw at any time without penalty.
- All information obtained will be treated in strictest confidence.
- My name will not be identifiable in any written reports about the study.
- My school will not be identifiable in any written reports about the study.
- A report of the findings will be made available to me.
- I may seek further information on the project from Samantha Kahts at 073 3076 212 or at samkahts@hotmail.com

Name of Teacher __________________________ Signature __________________________

Date __________________________

Thank you for your participation

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Addendum F: Foundation Phase teachers' informed consent form for Phase Two

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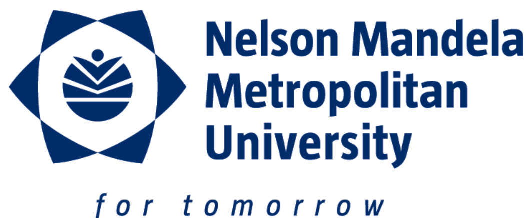


Foundation Phase teacher's consent form for Phase Two of this research project

I,…………………………………………….. (name), from the…………………………… school give consent to participate in a collaborative and transformative continuing professional teacher development project focused on enriching my understanding of Physical Education (PE) and Fundamental Movement Skill teaching at my school.

I understand that my involvement in the research will include:

- Forming an action learning group through building trust and relationships.
- Identifying knowledge teachers need and developing personally by sharing knowledge and skills with each other.
- Defining our mutual purpose.
- Conducting an in-depth context analysis.
- Forming a vision.
- Developing a research question.
- Exploring team roles and responsibilities and each members' purpose.
- Identifying ethical conduct.
- Putting action plans in place based to build teachers' confidence to teach PE.
- Collaboratively creating PE lesson plans and videos and presentation to teach colleagues.
- Deciding on dissemination of findings
- Reflecting on learning and development and deciding on next steps.

I understand and agree that:

- The sessions I engage in will be recorded via either an audio recorder or video recorder.
- Transcriptions of my discussion with the researcher and my colleagues will be used for data analysis.

I have read the project information explaining the purpose of the project and understand that:

- My participation is voluntary.
- I may decide to withdraw at any time without penalty.
- All information obtained will be treated in strictest confidence.
- My name will not be identifiable in any written reports about the study.
- My school will not be identifiable in any written reports about the study.
- A report of the findings will be made available to me.
- I may seek further information on the project from Samantha Kahts at 073 3076 212 or at samkahts@hotmail.com

Name of Teacher ______________________ Signature ______________________

Date ______________________

Thank you for your participation

Addendum G: An example of a PE Term Planner from the CAPS Life Skills document

Term 1 Grade 1
Physical Education; 20 hours **Recommended resources for Term 1** Beanbags and balls Markers, skittles, sashes, ribbons Hop-scotch marked out on a clean flat surface
The following content is to be covered in the course of term 1. Select Life Skills topics for the term to provide the context for Physical Education lessons, where appropriate. Alternative activities and school sports may also be included. **Adapt activities for disabled learners.** **Locomotor** • Dodging and walking in different directions • Dodging games around skittles changing direction • Using senses: observing - obstacle course • Using senses: hearing - listen to instructions while moving around **Perceptual motor** • Rolling a large ball to a partner • Passing a ball from one member of a group to another • Throwing and catching large balls **Rhythm** • Hop-scotch • Rope skipping • Rhymes singing while performing body actions **Co-ordination** • Throwing and catching beanbags • Jungle gym - arm travelling while hanging with over-grasp • Jungle gym - climbing up a ladder **Balance** • Dodging games around skittles changing direction • Identify different ways of moving across balancing beams • Jungle gym - balance walking on low level balancing form. **Spatial Orientation** • Using senses: proprioception - navigate body through various obstacles • Run in different directions without bumping into others using all available space • Different formation: circle • Jump over and move under obstacles, crawling, climbing, jumping, etc. • Jungle gym crawling and weaving through the frames using different parts of the body **Laterality** • Activities using the non-dominant side of the body **Sports and games** • Play favourite games selected by the learner • Movement games - concepts of size, distance, space and quantity covered

Addendum H: Semi-structured interview schedule for Phase One

The Interview Schedule

OPENING (establish rapport, purpose, timeline, and motivation):

My name is Samantha and I am from the Nelson Mandela Metropolitan University. I am currently completing my PhD on physical education in the foundation phase. The specific focus of today's 30- to 60-minute interview is to identify what the average day of a foundation phase teacher is in terms of physical education in lower socio-economic areas. Please remember there are no right or wrong answers. Your honest opinions will help towards creating support for foundation phase teachers' PE implementation. The questions asked will mainly focus on your PE implementation in relation to your qualifications, your experiences of implementing PE and working in a school situated in a lower socio-economic community, your thoughts on the CAPS and recommendations regarding PE implementation.

Topic 1: Qualification information

1.1. How long have you been a foundation phase teacher?

1.2. Where did you study to become a foundation phase teacher?

1.3. With the qualifications you have obtained, do you feel it adequately prepared you to implement physical education?

1.3.1. Please explain why.

Topic 2: Implementation of physical education lessons

2.1. What is your experience with implementing PE at your school?

Include asking:

a) Tell me about how many times a week you implement physical education.
b) Which days of the week and for how long?
c) If you do not implement physical education what are the reasons?
d) Do you have enough equipment for physical education?
e) What do you think about the indoor and outdoor facilities?
f) If it rains what do you do?
g) If you are not at school, do your staff members continue with phys ed for your learners?
h) What is the general 'feel' from the staff members towards physical education?

2.2. What types of activities do you do with your foundation phase children during physical education lessons?

a) Do you follow a set curriculum?

b) Do you do different activities for boys and girls?
c) Do you notice any differences in movement ability between the girls and boys?
d) How do you go about assessing your learners?

Topic 3: Socio-economic status effect on physical education lessons

3.1. Do you feel the lower socio-economic area affects children in their physical education lessons and why?

Topic 4: Thoughts on the CAPS document?

4.1. What are your thoughts on the CAPS document and why?

Topic 5: Recommendations or anything left out which was not asked?

6.1. Is there anything not covered within our discussion that you feel I need to consider going forward with helping foundation phase teachers implement physical education in lower socio-economic areas?

Closing:

Thank you for your time. The information you have provided will facilitate me greatly going forward. If you do not mind, if I feel I need to clarify what we discussed today, can I give you a call?

Addendum I: Confirmability audit for Phase One

Assessor 1:

Experiences of Foundation Stage Teachers with Physical Education

Implementation	Resources	Socio-economic Factors
Severe time constraints	Lack of equipment	High rate of foetal alcohol Syndrome
CAPS curriculum packed	Outdoor areas unsuitable	Poor mental and physical development, making performing activities difficult
Too much administration	Most schools have no separate indoor space if it rains.	
Many children take time to master class work *therefore......* Phys Ed often neglected	Lack of First Aid equipment	Many from abusive homes
Poor concentration	Lack of assistance from the Department regarding equipment and training.	Behavioural problems
Poor discipline		Many given inadequate attention, nutrition, clothing
Large numbers per class	Some schools assisted by German volunteers	Gangsterism activity in most areas
Most teachers try to implement some physical activity, which promotes well being and releases tension, but often not for as long or as often as prescribed	The idea of an i pad with ideas for implementing the Phys. Ed syllabus and making equipment from recycled materials was well received by most interviewees	
		Lack of Social Workers, Psychologists to counsel learners

Assessor 2:

During the interviews, the teachers [illegible]			
circumstances	policy	DBE	not supportive, CPTD workshops not effective, not funded properly
	policy	CAPS	not time to do PE, workload too heavy, too packed, admin load, unrealistic , not enough time.
	policy	Good old days	had better training, equipment, support from subject advisors.
	school	lack of facilities and equipment	not provided, not available, some are creative, others not. no grass fields, no undercover area during rainy days,
	school	large classes	overcrowded classrooms, cannot use classroom, need to do in groups, discipline a problem
	social environmen t	impact of lower sosio-economic	gangs, unsafe, FAS, poverty, hunger, discipline, language barrier, parents not involved, unsupportive
self	concern	ageing teachers	mostly between 50 and 60, cant demonstrate all the activities
	commitment	Attitude / disposition	care, compassion, committed, value, irrespective of hindrances, motivated, adaptive, creative and enterprising, resilient, guilt, despair
	incompetenc	own competences	had some training, don't feel competent , stressed, lack of self-confidence; Move-it / Germans help, need more outside expert help

Sam Kahts' depiction
Figure above is based on following codes:

MICRO-SYSTEM: Teacher related.

1. Teachers' demographics:

- Teacher's age (perceived as negative, as older teachers cannot teach PE)

2. Teachers' qualification:

- Years being a foundation phase teacher (depends on teacher and how they feel about PE)
- Teacher's pre-service training preparation (perceived negatively and positively. Did not prepare them for their context, nor to teach it properly)
- Teacher's in-service training (perceived negatively by most, training for PE a waste of time)

3. Teachers' work commitments:

- Teacher's other work (perceived negatively by most, can't get to PE)
- Teacher's schedules are hectic (perceived negatively by most, can't get to PE)
- Teacher's many priorities (perceived negatively by most, can't get to PE)

4. Teachers' need to collaborate with collegues:

- Teacher collaboration (perceived negatively by most when it comes to PE)

5. Teachers' feelings:

- Teacher's passion for teaching is why they do their work. They love what they do.
- Teacher's frustration with the education system negates their passion to teach.
- Teacher's enthusiasm for physical education (perceived positively by most)
- Teacher's thoughts on benefits of physical education (perceived positively by most)
- Teacher's attitudes towards teaching PE (perceived negative by most)
- Teacher's confidence in own movement ability (perceived negatively by most)
- Teacher's stress levels (perceived negatively by most, and that's why education in general is hard)
- Teacher's need for someone to help take phys ed (a specialist is better)
- Teacher's boredom in teaching in general (I want to retire)
- Teacher feeling lazy to implement phys ed

6. Teachrs' PE-based learning needs:

- Workshops a waste of time
- How to motivate
- Training at school and not workshops somewhere else
- Interactive engagement
- Applicable to the real world
- Makes the workload easier
- Deals with admin of modules
- Something different that is interesting and not boring
- Updated phys ed material needed
- Watch other colleagues to get ideas
- Emphasise importance of physical education for children
- Flash cards
- Dealing with children with alcohol syndrome
- Including previous PE programmes which worked (Colour System)

7. Teachers' time management

- Time to sit with struggling children (there is not enough time, so non-priority subjects suffer)
- Time to implement phys ed (not enough time)
- Time to complete workload (not enough time)
- Time to discipline (not enough time)

MICRO-SYSTEM: Child related

- Children's academic ability (perceived negatively by most as learners are "slow". Priority subjects therefore take longer to teach, and non-priority subjects fall to the wayside)
- Children' discipline (perceived negatively by most as they cannot be managed in PE classes)
- Children's initiative/motivation (perceived positively and negatively, depending on learner. PE classes need to accommodate for both, which is difficult)
- Children's diversity of movement ability (perceived negatively by some, as they cannot move at the level they should, or are differently abled. It is difficult to accommodate them in PE)
- Children's confidence (perceived negatively by some as some learners are too scared to move and engage in PE)
- Children are creative (if children are given the opportunity to engage in PE, and sport, they will prosper)
- Children's disabilities is a concern (FAS learners cannot take part in PE, it's too difficult for them)
- Children's language barriers (perceived negatively by some as in PE, it is difficult to communicate)
- Children's diet, malnutrition (perceived negatively by most, as children do not have food to sustain their physical activities)
- Children's safety (older children hurt the younger children during play time. Not related to PE, but a concern)

MICRO-SYSTEM: School related

1. School dynamics and organogram:

- Class size (perceived negatively by most, as it's difficult to teach learners in PE)
- Schools need for money (perceived negatively by most as no money for resources in general, let alone PE equipment)
- Not enough staff (Human resource, "can't someone from uni help us"; "I must be everything"). Perceived negatively as it affects education in general, let alone PE.
- Expectation that teacher must be a social worker, nurse, teacher, psychologist etc. (negative, too much work, and so non-priority subjects take strain)
- Staff moral and engagement with PE (depends on individual. Some people make a plan and overcome barriers, others are overwhelmed by it all, others just do not like PE)

2. Infrustructure related

- Indoor facilities (perceived negatively as PE cannot be implemented in classrooms) – linked weather, no indoor facilities to teach PE.
- Physical Education Equipment (perceived negatively as limited resources to teach PE)
- Outdoor facilities (perceived negative affect on PE as teachers' cannot implement PE properly. Increased injuries)
- Lack of academic resources (perceived negatively as affects priority subjects, let alone PE)
- No electricity (perceived negatively as affects priority subjects, let alone PE)
- University support (painted games, positive affect on PE)

MESO SYSTEM: IMMEDIATE ENVIRONMENT OUTSIDE SCHOOL

1. Parental influence (meso-system)

- Parent drug and alcohol abuse (negatively perceived affect on PE due to FAS, and lack of support to teachers, negatively affecting overall workload)
- Parent support/neglecting children (positively or negatively perceived, depends on parent) (negative affect on teachers' overall coping ability as their work responsibilities increase. PE indirectly affected as a non-prioritised subject)

2. Gang violence (negative)

- School closure (negatively perceived affect on PE due to indirect effect on academic subjects)
- Shooting and children getting killed (negatively perceived affect on education as a whole. Time lost in school due to funerals etc. negatively affects on everyone, let alone PE)

EXO-SYSTEM: POLICY AND PROCEDURES FROM GOVERNMENT

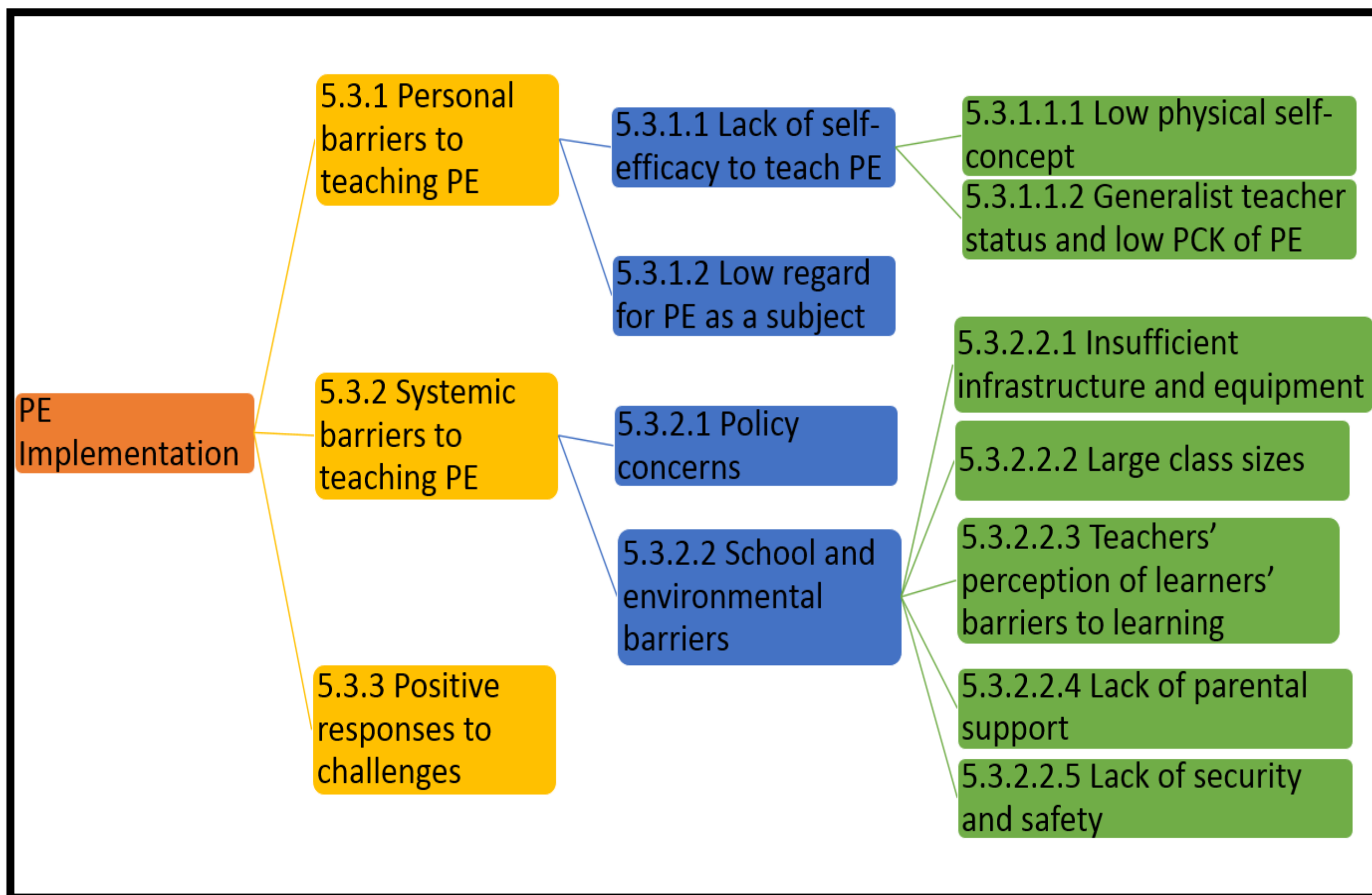
1. NGO focus on intermediate phase and not foundation phase (negative affect on Foundation Phase PE)

1. Lack of support from department of education (negative affect on PE)
2. CAPS requirements and time (positive and negative affect on PE)
3. Situation specific CAPS lacking (children's disability levels in areas are high, hard to accommodate for learners in PE)
4. Apartheid regime education sytem: "the good old days" compared to now (change in curriculum has a negative affect on PE).

MACRO SYSTEM

1. Poverty (negative affect on education as a whole, let alone PE)
2. Cultural norms in community (lack of parental support and finances puts extra pressure on teachers)

Condensed codes above into the following:



Addendum J: A "dice" and "spin the wheel" activity to experience movements collaboratively

FUNDAMENTAL MOVEMENT SKILL AND MOVEMENT CIRCLE GAMES

To learn the movement vocabulary of Grade One to Three learners, have fun playing the Fundamental Movement Skill and Movement Circle *Dice and Spin-the-Wheel* games with your colleagues.
When you are ready, you can even play the game with your learners to help them learn their movement vocabularly.

How to prepare for the game:

1. Before playing the game with colleagues, print 2 to 3 *blank dice* and 1 *circle cut-out* on a A3 or A4 paper sheets (see blank pictures attached below). A3 normally works better as it is larger. Also, print the Fundamental Movement Skill graph and the Movement Circle.

2. Provide your colleagues with the A3 or A4 *blank dice* or *circle cut-outs* and colourful kokis (or any stationary that will be easily visible to those rolling the dice or spinning the movement wheel).

3. Divide the group of colleagues you are playing the game with into two. Have one group create 2 to 3 *blank dice* filled with movement words from the Movement Circle depicted below. Have the second group re-write the movements from the Fundamental Movement Skill graph onto the blank *circle cut-out.*

4. Throw equipment around the room. Try and include different sized balls (Netball, Tennis ball, Rubgy ball, colourful small balls etc.), skipping ropes, beanbags, balloons, hulahoops, mini-cricket bats and tennis rackets and so forth. Add a sound system if you like and/or play music off your phone if the occasion arises where the group decides it is time to dance. You can also include any self-made equipment.

5. Allow the group to be creative and to choose what equipment they would like to use to demonstrate the movements depicted on the *dice* or the *movement circle* with all their peers.

How to play the game:

As the groups write down the movement words they will need to figure out what each movement is and play it amongst themselves before letting their colleagues *roll the dice* or *spin the wheel.*
If your group of colleagues do not know the movements, have them find out what the movements are by either asking fellow colleagues who do know and/or searching on the internet for examples. There are many websites and/or books on googlebook search engines. Try and let the groups figure out the movements before you give them the correct answer. Only guide and correct when necessary.
Once both groups are confident that they know the movements on their *dice* and *movement wheel,* have one group start the session off by giving their *dice* or *movement wheel* to the oppositve group to play.

General rules of the game:

1. Each individual in each group must have a turn to *roll the dice* or *spin the wheel.*
2. All members in the group have to demonstrate the movement together.
3. Your colleagues should be encouraged to use equipment and/or to be creative with how to demonstrate the movement even if there is no equipment.
4. HAVE FUN!!!!

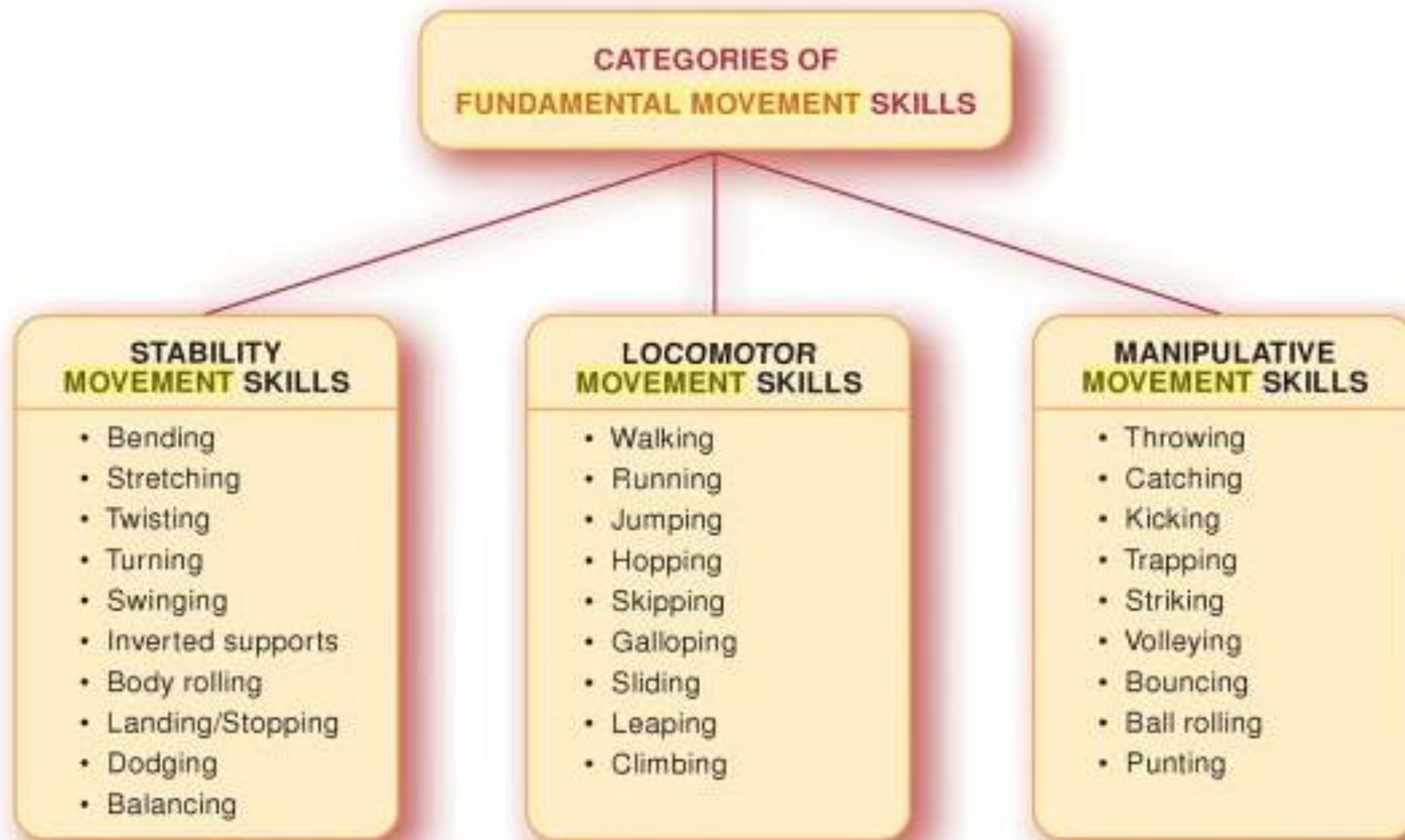
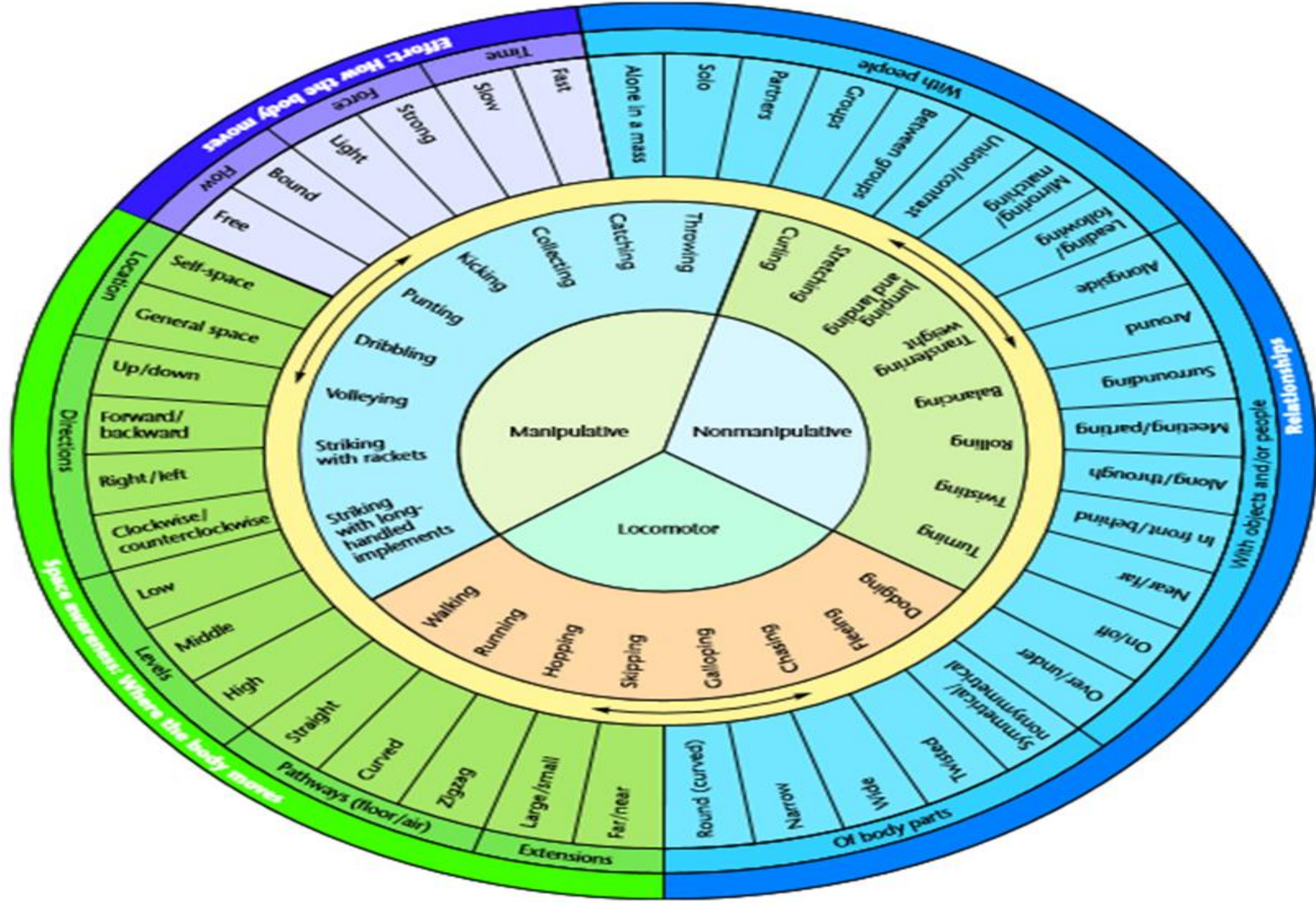


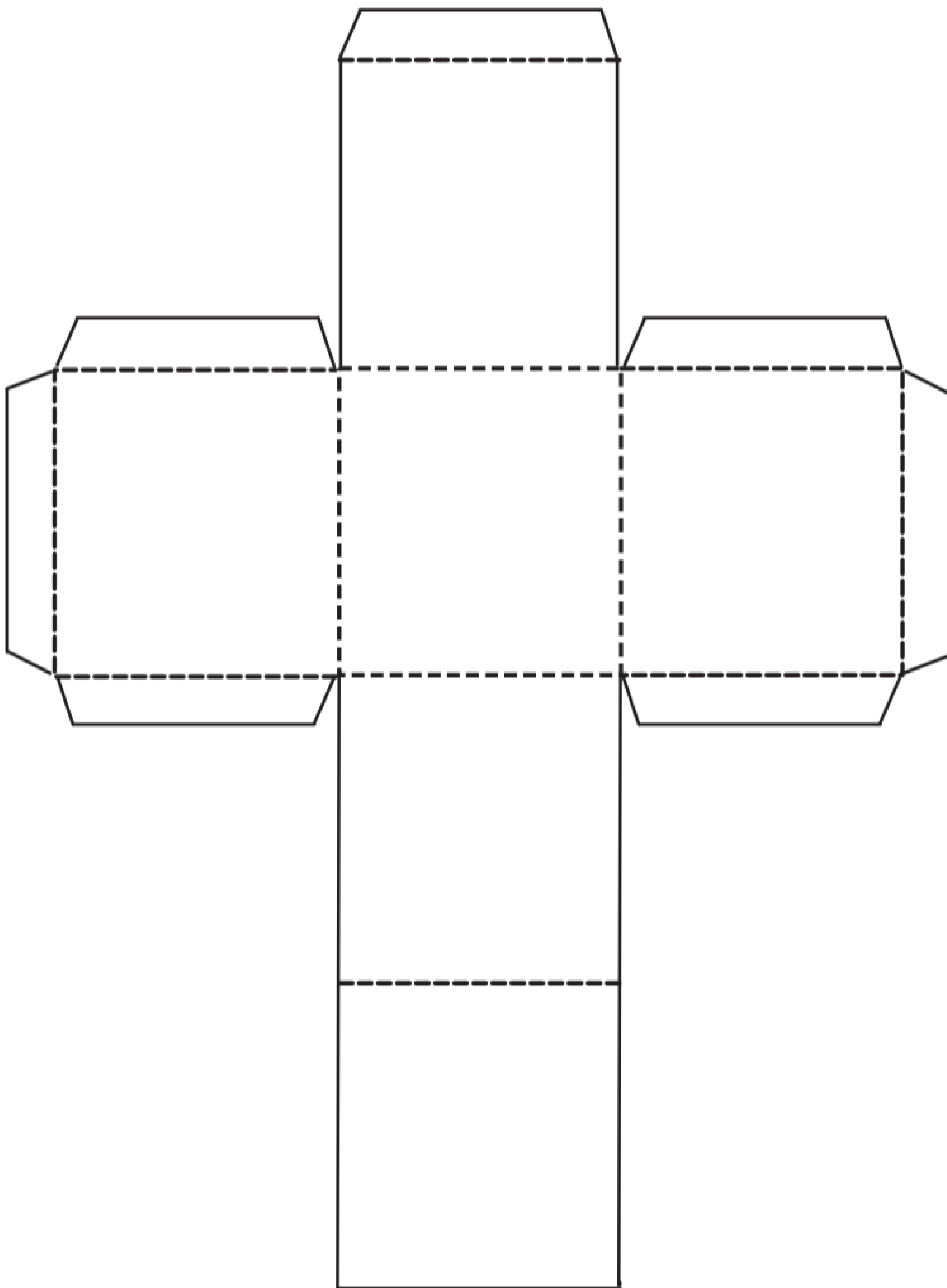
FIGURE 3.1 Selected fundamental movement skill themes.



Manipulative
Nonmanipulative
Locomotor
Throwing
Catching
Collecting
Kicking
Punting
Dribbling
Volleying
Striking with rackets
Striking with long-handled implements
Curling
Stretching
Jumping and landing
Transferring weight
Balancing
Rolling
Twisting
Turning
Dodging
Fleeing
Chasing
Galloping
Skipping
Hopping
Running
Walking
Effort: How the body moves
Time
Fast
Slow
Force
Strong
Light
Flow
Bound
Free
Space awareness: Where the body moves
Location
Self-space
General space
Directions
Up/down
Forward/backward
Right/left
Clockwise/counterclockwise
Levels
Low
Middle
High
Pathways (floor/air)
Straight
Curved
Zigzag
Extensions
Large/small
Far/near
Relationships
Of body parts
Round (curved)
Narrow
Wide
Twisted
Symmetrical/nonsymmetrical
With objects and/or people
Over/under
On/off
Near/far
In front/behind
Along/through
Meeting/parting
Surrounding
Around
Alongside
With people
Leading/following
Mirroring/matching
Unison/contrast
Between groups
Groups
Partners
Solo
Alone in a mass

Cube Pattern

Cut on solid lines - Fold on dashed lines



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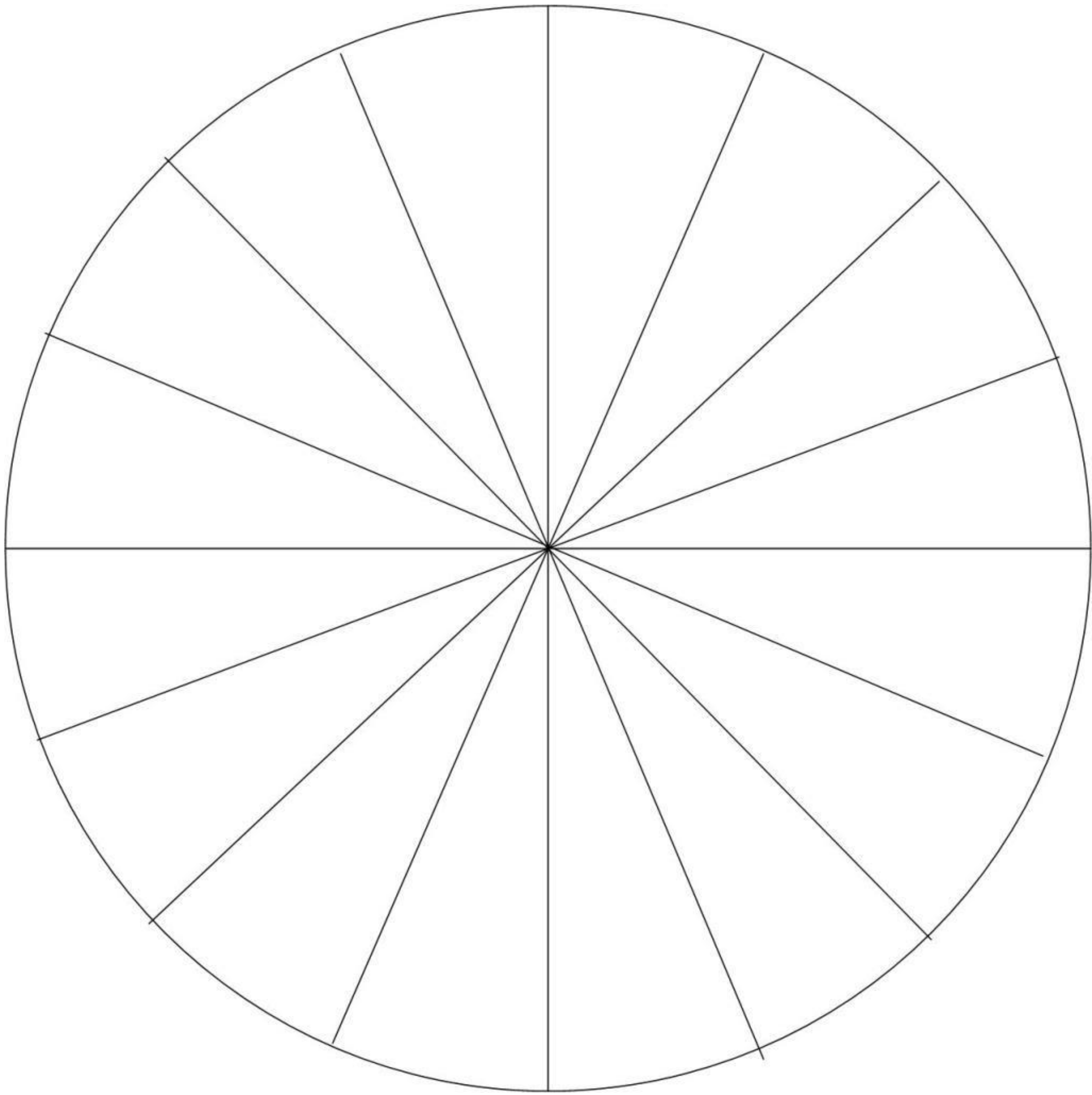
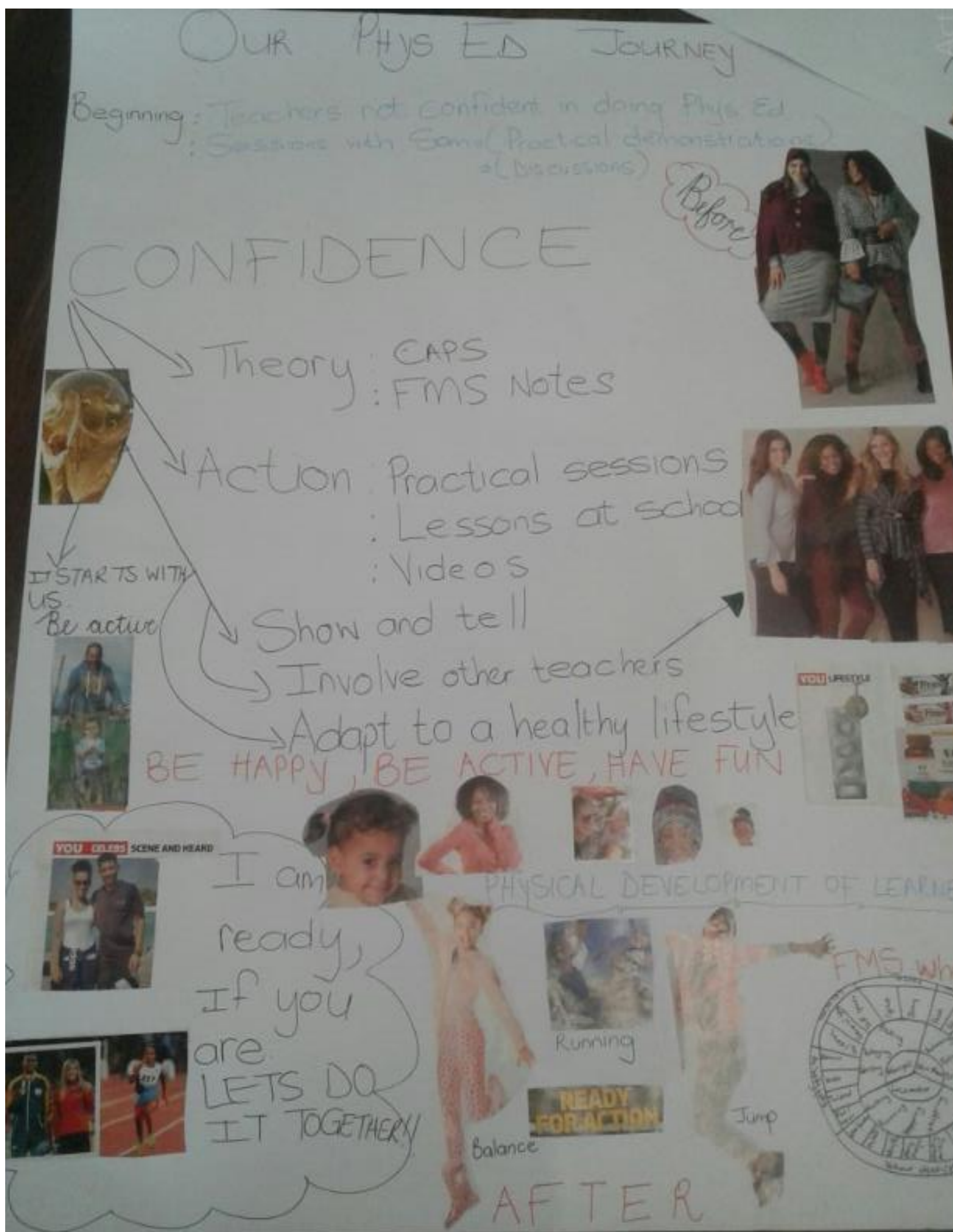


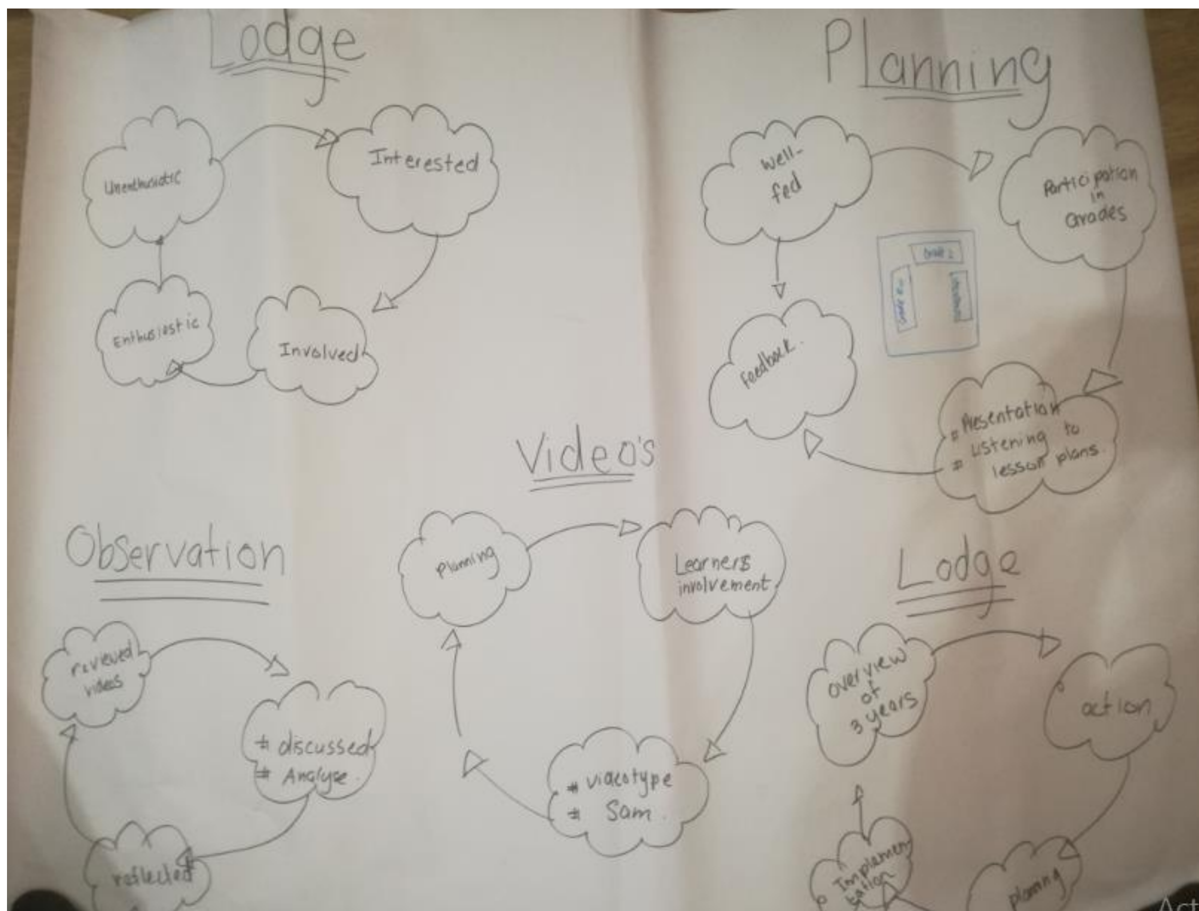
Addendum K: Examples of participants' collages



Looking thraugh our own lens

What started off as unenthusiastic
But with food and laughs

Our minds became fantastic
Lodges and planning
Videos and Samming
FMS is more darring
Reflection x3
Action leads to perfection
Learners and teachers
Participating in skills & features
What started off as unenthusiasti
Ending off as being bombastic



Phys-ED

How our Self confidence de

We were disillusioned
We knew we had to do
Phys ED but we did not
know how to approached it
Even though we had our
policy documents to guide
us.

In 2018 we me
Samantha Kahts
introduced us to
we got onto the
and started explor
subject of Phys ED

We grew in leaps
bounds throug
Programme as we c
reflect on what
have achieved
we know what w
for us and improv
the lessons that c
not have such a
impact. We learnt
imbrace what ev
resources we ha
we adapt both ph
and emotionally

We looked at where we were
and where we wanted to be,
how we will get there. We
started planning and implemented
our plans through designing lesson
plans and then we took it back through
video recorded sessions. We evaluated
our efforts in order for us to grow.

We realised then!!!

It Starts with us!!!

We are preparing to give back to our schools, ou
learners, our communities, Parents.

Jumping

Stretching

Get active

As a count
where obesity
is at an all-ti
high we as
educators ha
a responsibility
to see to it
our learners a
active and in
doing encourag
a healthy life

The different FMS is
of paramount importance
for a growing child

hopping

Parents should be the
primary role players in getting
their kids active by playing
games and having fun with
their children.

Healthy
Body

Healthy
mind

Addendum L: Snippet of reflexive journal

Reflective question: Are we implementing PALAR and if not, how can we adapt?

Upon reflecting on our group's collaborations thus far, I started to get an 'uneasy feeling' that something was amiss in terms of our collaborative journey. Key statements shared within our Action Learning Group (ALG) consisting of ten Foundation Phase teachers and I, and my promoter-PhD student group interactions that got me feeling 'uneasy' in terms of the validity of the PALAR currently being implemented were:

1. T7 said: *"Sam, we are here for your research project and will commit and see it through"*

   At this point of our journey I was hoping that we would have more joint investment into the project with a combined vision…. Also, at this point of our journey I was hoping a collective voice would have emerged…

2. The use of prompting words to teachers within my powerpoint presentations which are not yet collaborative…. For example: *"Reflecting on our Phys Ed journey thus far, for our next session I* [teacher] *would like"…*

   Reflectively I should ask the following prompting words in my PALAR cycles….. *"for our next session collectively, what do we want to achieve in terms of our FMS implementation goals….'.*

3. According to Kemmis, McTaggart and Nixon (2014) within *The Action Research Planner: Doing Critical Participatory Action Research* collaborative decision-making should commence from the outset of a PALAR study.

   At this point of my PALAR study and as a group we have not collaboratively asked ourselves the following*: WHAT (w) we are doing, WHY (w) we are doing it, HOW (h) we will achieve it, HOW MUCH we will implement (Hm) and HOW we will monitor our achievement and prove we have achieved our vision, WHO (w) we will include and WHY, WHEN (w) we will include them, WHEN we will complete our vision and WHERE (w) we will implement our vision. Additionally, throughout our process we would need to ask ARE WE (Aw)…. more rational and reasonable, more productive, and sustainable, and more just and inclusive?*

   I feel though that perhaps if I commenced with these aforementioned questions to maintain the validity of the PALAR collaborative principles from the very first session, it may have been a double-edged sword. More specifically, not providing teachers with enough time to first build a relationship and trust as a collective, to foster collaboration, to orientate teachers in terms of the context of FMS within CAPS and to collectively understand the groups' knowledge in terms of FMS may have caused augmented dropout rates. It was clear to me that from Phase One's results, teachers' lived experiences of PE implementation within lower SES were stressful. Hence, I believed that the best option moving

forward together would be to focus on adult learning principles first. The following reasons exemplify why we decided to not start with 100% collaboration at first:

3.1. In terms of adult learning theoretical principles our goals in the first few sessions were to create FMS and PE relevance within the workplace (adults are relevancy orientated), provide teachers with an opportunity for social cohesion (adults want social connection), to share previous experiences of FMS (adults have previous knowledge and experience to share) and to problem solve FMS they identified that they struggle with in schools collectively (adults are problem centric and again, have previous experiences to share). Lastly to create the platform for teachers to guide the next session's FMS PCK through identifying their own needs (adults are autonomous).

3.2. Orientating PALAR ALG before collaboratively deciding on the way forward is a scenario that is not unique to my study. A similar situation was depicted in Bruce Damon's PALAR study in which volunteers were first orientated in terms of the proposed research context before unpacking and deciding on the best way forward collaboratively.

3.3. Other than Phase One's research findings indicating that teachers' implementation of PE within the lower SES context was stressful, teachers' also indicated that their self-efficacy in teaching PE in FP was low. Within the FP, FMS are innate to the CAPS document. Hence, I deemed it important to firstly collaboratively establish what teachers' FMS knowledge was and to facilitate them in deciding what direction they would like to take in terms of building their self-efficacy in FMS further. This approach I additionally felt aligned with the socio-cognitive theory related to improving self-efficacy and the expectancy-value theory.

3.4. I deemed it important to re-establish connections and trust. Teachers often feel that researchers are only there to get in and get out. Hence, I felt that using fun and collaborative FMS games innate to the CAPS document teachers' implement at schools would provide a platform to build new relationships. Hence to build trust, collaboration and problem solving we used active and collaborative FMS PCK learning experiences.

In summary, although we did not start 100% collaboratively, the teachers guided me towards a more collaborative effort to create a combined vision.

3.5. Starting the journey with teachers in a space other than school I deemed appropriate. According to Neetling "*an unfamiliar setting can open the action learning set's perspectives to new alternatives*". Luckily for me this was possible. However, commencing at a venue that was not at teachers' schools, may be why they took so long to get to school-based teaching.

4. Another element of our collaborative journey which made me feel 'uneasy' in terms of PALAR was within our promoter-PhD student session with comments that included: *"We must guide them to where we want them to go"*. Reflectively, although I understand that the goal was and is to keep teachers focused on PCK of FMS development, I am wondering whether this approach is collaborative enough and in alignment with PALAR. I feel that for now, and up to this point, I have been on one side

strategizing the direction of the project and the teachers have been on the other side being guided by me. their own learning within these already established constructs.

5. Is the PALAR process I am experiencing normal? According to Kemmis et al.'s (2014) in a participatory action research study, it is normal to get to a point of feeling 'uneasy' in terms of the authenticity of collaborations. According to the authors when you start feeling 'uneasy' it is important to critically reflect on the following question, namely: *what we are doing here collaboratively?* Habermas (1979 In Kemmis et al., 2014) articulates these sentiments well in the following paragraph:

    In terms of Habermas's (1979) view of the four validity claims that are presupposed by every utterance, people may feel uncertain about (a) whether they comprehend what is being said (comprehensibility), (b) whether what is being said is true in the sense of accurate (truth), (c) whether what is being said is sincerely stated and not deceptive (sincerity), and (d) whether what is said is morally right and appropriate in the situation (moral appropriateness). Or they may feel that what is happening is somehow illegitimate or that there is a legitimation deficit or even a legitimation crisis because some state of affairs has been imposed on them, and they have not given authentic assent to what has been imposed (Habermas 1975). (Kemmic et al., 2014)....

How can I pose these questions to teachers in a practical manner?

In summary I believe that although my journey has not started off fully collaboratively and additionally has not progressed to a point where teachers have collaboratively answered the following questions: *WHAT (w) we are doing, WHY (w) we are doing it, HOW (h) we will achieve it, HOW MUCH will we implement (Hm) and HOW will we monitor our achievement and prove we have achieved our vision, WHO (w) will we include and WHY, WHEN (w) will we include them, WHEN will we complete our vision and WHERE (w) will we implement our vision*….the study has evolved to a point of departure where teachers are starting to take ownership of their own learning experiences by requesting to apply what they have learnt at schools.

As part of Kemmis *et al.* (2014), a reflective question to think about is *if I could do things differently in terms of the authenticity of PALAR, would I?* As mentioned, I feel yes and no. I still believe that without the process implemented thus far, teachers would have left.

So what should the PALAR journey be moving forward?

From Kemmis *et al.* (2014) it becomes clear that the PALAR journey we have been on has not necessarily been fully collaborative. Whether within this study we could have engaged collaboratively from the very first session is questionable. Fortunately, the nature of PALAR includes a dynamic 'unfolding' of events with critical reflection and the opportunity to reconnect with everyone involved to foster full collaboration. The following extracts together with my reflective thoughts highlight the need for us as a unit to become more inclusive as we move into the next meeting together:

- *..critical participatory action research is a practice—changing practice…..* Hence what we do together should innately generate change where we implement our practice. We have minimal collaborative feedback on the change taking place at schools. Teachers need to reflect on why they have not yet gone to their school context and decide what comes next.

- *…. being critical about my practice, how I understand it and the environment in which I work;* Hence we should unpack how we teach PE to get a better understanding of why we do what we do, if we need to change what we do and if so why and how we would do this etc. etc. There are many reflective questions I have not yet posed about teachers' PE teaching at their school.

- *….. fully participatory in that all decisions are collaborative and not forced... joint agreement…* Hence collaboratively decide what is our PE vision, what do we want to achieve, where we want to go, how we are going to achieve this etc. etc. More specifically, questions we need to decide on collectively are *WHAT is our focus, WHY is this a focus, HOW will we achieve this focus, HOW will we monitor our achievements, WHO do we need to involved and why, by WHEN must this be done and WHERE will it take place. Throughout this process we need to ask ourselves if WE ARE more rational and reasonable, more productive and sustainable, and more just and inclusive?* Also, focus on decision-making within the ALG, and not only with promoters.

- *….. include the development of a language that speaks to the material-economic (environment), cultural-discursive (normal way of doing things) and social-political arrangement (those in power and power relations) and how to take this information to transform. Hence it is situated within the constructs of where the change is needed…..* Hence developing PCK that aligns with teachers' environment, their way of doing things and the power relations at schools and within our group etc. etc.…. critically reflecting on how learning is emerging.

- *…what is done needs to be validated so that what people say they are doing is not just based on their own interests….* Hence how do we know what we are doing is correct? Collaboratively decide on how to monitor and assess progress.

- *…. monitor changes to see if they are actually impacting social change….*Hence collaboratively decide on how will we monitor our change.

Although we have had some collaboration in the PALAR sessions thus far and in terms of teachers' directing their learning session, we have not embraced collaboration fully. To become more inclusive in our next PALAR session the following is suggested:

1. Everyone will be sharing their collaborative thoughts on their implementation of PE first. We should create an agenda for our sessions together.
2. I will request that on the agenda for the meeting we have planned that I would like to take a moment re-emphasise the fundamentals of our collaborative community and that our focus together is to discuss things equally, listen to each others views and the value of our collaborations being that of learning from each other.
3. Then I'd like the group to reflect on *1) how what we did in our workshops together influenced their practical application of PE at school; 2) how they worked towards successfully implementing PE and 3) what PE implementation barriers they faced.* This will help us see whether or not the FMS PCK workshops were successful, what self-directed steps teachers took to improve and what barriers they personally faced…
4. I would also like to reemphasise collaboration and how our group could work towards taking our personal experiences to move forward as a unit. More specifically a question I'd like to pose is….. *With all our personal experiences and needs shared in terms of our personal journey's thus far, moving forward, how can we collectively decide on WHAT our focus in FMS implementation in PE for FP is as a group is, WHY is this our collective focus, HOW will we achieve this collective focus, HOW will we monitor our collective achievements and prove that we have achieved them, WHO will we include or involved in our collective space and why, by WHEN would we like to achieve this, WHERE will this take place………..* Throughout this process *we need to ask ourselves if WE ARE more rational and reasonable, more productive and sustainable, and more just and inclusive?*
5. Lastly I'd like teacher' to have a look at the themes and thoughts I have generated over the last few sessions and critique it for its validity… This should have been done collaboratively throughout our process together, but I was initially overwhelmed by all of the work. In Neethling… *the 35 documents retrieved where analysed by the group of 8 teachers.* I think the themes and sub-themes gathered from the interviews should be reviewed by the teachers (those who want to join the next phase)…

6. If we move onto observation of learners, as a group we must decide what themes present as we observe each other implement PE sessions..

This line of question seems to also align with Neethling's type of learning. More specifically, there are three types of learning namely instrumental, dialogue and self-reflective. Furthermore, within these questions posed I should focus on:

1. The innate reasons for successful learning (versus problem solving the negatives)
2. Collective versus individual problem solving
3. There are many 'ways of knowing' and hence be open minded to it.
4. Include reflective learning

With these changes I feel we will improve the validity of the PALAR journey thus far (see Neethling examples):

 Outcome validity includes the level to which actions resolve the initial problem posed: Did we succeed in identifying the obstacles in the inclusive classroom? (cf. 5.8.2);
 Process validity includes the level to which problems are framed and solved in a way that enables ongoing learning: Could we get to a point of how to address the obstacle and overcome it? (cf. 5.10);
 Democratic validity includes the level to which research is done in collaboration with all the participants: Did we all work equally together to solve problems and overcome the obstacles? (cf. Figure 1.2);
 Catalytic validity includes the level to which the research process reorients, focuses, and energizes participants towards knowing reality in order to transform it: Are the teachers equipped to take control of their teaching and apply the theory of inclusive education in their classrooms? (cf. 5.8.2); and
 Dialogic validity reflects on the developing of the research processes in which I can have confidence in my findings: Can I go back to my teaching and learning and apply the knowledge and adapt my study material? (cf. Chapter 6).

*** Validity criteria for PALAR have different definitions depending on the text. Herr and Anderson (2014) explain these differently.

………. [SNIPPET FROM MY REFLECTIONS]……………

Addendum M: Participants' PE-based schedule for sharing with their colleagues what they had learnt

Person presenting/responsible	Reason	Action steps needed
Principal	Discussed the reason behind the presentation and their support for the team	Date, time, and venue to be organised
Sam	Introduce myself, share who I am and what my primary goal for working with the team is, followed by a few collaborative ice breaker games.	Bring along equipment for ice breakers
T8 and T9	Share their passion for why they want to share their journey with their colleagues, and specifically focus on fostering a more collaborative culture at the school.	N/A
T4 and T13	Share their PE journey, starting with where it all began and how difficult it can be to implement, but how this can be problem solved.	N/A
T8 and T9	Share collaborative created video of the action learning cycles with colleagues. Highlight the main factors learnt with their colleagues	Computer, projector, and video organise
T4, T5, T6, T9, T12, T13, T16	All colleagues get ready for some PE, with each team member taking part of a PE lesson plan (i.e. the warm-up, main body, and cool-down)	Lesson plans based on CAPS document Term planner and FMS assessment criteria. Equipment and equipment set up to be organised.
T4 and T9	Colleagues are invited back to the staff room, with the main barriers to the PE being shared with principal and the staff members	N/A
T4 and T9	An opportunity for colleagues to share their thoughts.	N/A
Everyone who is present	A new set of action plans established by the principal and all Foundation Phase/Intermediate Phase	Venue organised for later. Security staff to remain after school.