Primary physical education (PE): School leader perceptions about classroom teacher quality implementation

Timothy Lynch and Gregory J. Soukup Sr.
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Abstract: Quality physical education (QPE) in primary school optimises children's well-being. However, international research indicates that the preparation of classroom teachers is impeded by systemic barriers, resulting in low-classroom teacher confidence, competence and subsequent interest. This empirical research investigates school principal [headteacher] perceptions of how quality physical education in primary schools is implemented. The 73 principal [headteacher] participants were randomly selected to represent a cross-section of Government Primary School communities, in a region, where PE responsibility lies with classroom teachers; New South Wales (NSW), Australia. Data were gathered using ex-post facto surveys embedded within an interpretivist paradigm. The questionnaire formulated open-ended questions providing principals [headteachers] with the opportunity to express themselves, and closed-ended questions where they chose the category that best described their school. Findings suggest the largest barrier for QPE in primary schools is the qualifications and preparation of teachers. It is recommended that opportunities for developmentally appropriate primary education PE specialisms be

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PUBLIC INTEREST STATEMENT

This research investigates school leader insights into how Quality Physical Education (QPE) is best implemented. The 73 principal [headteacher] participants were randomly selected to represent a cross-section of Government Primary School communities, in a region, where PE responsibility lies with classroom teachers. Data suggest school leaders desire long-term investment in teachers and quality education. This involves advocacy of Quality PE for lifelong well-being with a focus on inclusive “PE in schools”. This requires funding for PE specifically in higher education/teacher preparation and continued professional development. However, large sums of funding are instead being allocated to physical activity alternatives; QPE is being replaced by “physical literacy”, PE in schools by physical activity offered outside of schools, and qualified PE teachers by sports coaches. Subsequently, the important role schools play in QPE, teacher expertise and the teaching profession are devalued, and access for some children are denied.
provided within degrees, allowing every primary school over time to have a sustainable infrastructure of PE expertise and advocacy. This recommendation will in time provide QPE experiences for all children; offering global direction for learning in the physical dimension and consequently, optimise holistic education.

Subjects: Education; Physical Activity and Health; Primary Physical Education; Sport Education; Higher Education; History of Education; Primary/Elementary Education; School Leadership, Management & Administration; Teachers & Teacher Education; Community Health

Keywords: physical education; health education; physical activity; initial teacher training; elementary education; teacher education; well-being; physical literacy; headteacher; principal

1. Introduction

Physical education (PE) is described “as the only curriculum subject whose focus combines the body and physical competence with values-based learning and communication, [which] provides a learning gateway to grow the skills required for success in the 21st Century” (United Nations Educational, Scientific and Cultural Organisation [UNESCO], 2015, p. 6). PE is fundamentally different to physical activity (PA), defined by the New South Wales (NSW) Government as “any movement of the body that results in some expenditure of energy” (2014, p. 1). According to the Australian Curriculum; “physical activity is a broad term that includes playing sport; exercise and fitness activities such as dance, yoga and tai chi; everyday activities such as walking to work, household chores and gardening; and many forms of active recreation”. (Australian Curriculum, Assessment & Reporting Authority [ACARA], 2016). Numerous terms are associated with physical education but as determined by defining PA, they are different to PE. Therefore when investigating PE it is necessary that definitions are clarified.

In the United Kingdom, the Association for Physical Education (AfPE) define PE as:

the planned, progressive learning that takes place in school curriculum timetabled time and which is delivered to all pupils. This involves both “learning to move” (i.e. becoming more physically competent) and “moving to learn” (e.g. learning through movement, a range of skills and understandings beyond physical activity, such as co-operating with others). The context for the learning is physical activity, with children experiencing a broad range of activities, including sport and dance. (AfPE, 2015)

However, the International Council for Health, Physical Education, Recreation, Sport and Dance (ICHPER-SD) suggest that being physically educated is not confined to timetabled time at school (ICHPER-SD, 2016; Lynch & Soukup, 2016). This is similar to UNESCO and the Australian Curriculum, who acknowledge the role PE plays as a “foundation for lifelong physical activity participation and enhanced performance” (ACARA, 2016, p. 1). Specifically, UNESCO defines the term Quality Physical Education (QPE) as:

the planned, progressive, inclusive learning experience that forms part of the curriculum in early years, primary and secondary education. In this respect, QPE acts as the foundation for a lifelong engagement in physical activity and sport. The learning experience offered to children and young people through physical education lessons should be developmentally appropriate to help them acquire the psychomotor skills, cognitive understanding, and social and emotional skills they need to lead a physically active life. (2015, p. 9)

Another term that relates to QPE is physical literacy (PL). However, PL is described as a label and a bandwagon (Lynch & Soukup, 2016). PL has multiple definitions, causing confusion amongst the PE profession (Active Healthy Kids Australia (AHKA), 2016; Corbin, 2016; McKenzie & Lounsbery, 2016). Richards identifies PL common themes as a lifelong process, fundamental movement skills, and that it “embraces knowledge, attitudes and motivations that facilitate confident movement” (Richards, 2016, p. 1).
While, it is recognised that QPE and physical literacy are very similar concepts (Lynch & Soukup, 2016), and that both relate to lifelong well-being, there is a fundamental difference between definitions of the two terms. As evidenced by the UNESCO’s definition, the focus of QPE is “PE in schools”. Whereas, PL does not share the same “PE in school” focus, emphasising PA participation more generally, which often occurs outside of the school curriculum (AHKA, 2016). This helps to explain why physical literacy, rather than QPE, is the preferred term used by non-educationalists (Lynch & Soukup, 2016).

As defined by the NSW Government, it is PA that has first preference in PL; “Physical literacy can be understood as a goal of student participation in and learning through physical activity, School Sport and Physical Education” (2016, p. 1). The connection and preference of PL and physical activity (rather than physical education) is supported by Whitehead’s definition of PL; “Physical literacy can be described as the motivation, confidence, physical competence, knowledge and understanding to maintain physical activity throughout the life course” (2010, p. 11).

As this study has a primary school focus, it is QPE that encapsulates investigation of the PE curriculum. UNESCO designed a national strategy for quality physical education which has five pillars:

1. Teacher education, supply and development
2. Facilities, equipment and resources
3. Curriculum flexibility
4. Community partnerships
5. Monitoring and quality assurance (2015, p. 23).

Global research using a QPE focus has found that in primary schools PE is taught by inadequately trained teachers (Hardman, 2008a). The Second Worldwide Survey of PE in schools involved participants representing all regions of the world; Africa, Asia, Central/Latin America, Europe, Middle East, North America, and Oceania. The study was conducted in response to the United Nations (UN) 2005 Year of Sport and PE, where succeeding recommendations included regular monitoring of developments in school PE. Concerns identified within this survey included:

- insufficient curriculum time allocation, perceived inferior subject status, insufficient competent qualified and/or inadequately trained teachers (particularly in primary schools),
- inadequate provision of facilities and equipment and teaching materials frequently associated with under-funding, large class sizes and funding cuts and, in some countries, inadequate provision or awareness of pathway links to wider community programmes and facilities outside of schools. (Hardman, 2008a, p. 5)

Research investigating Australian Government Primary School Principal [Headteacher] perceptions of how PE is implemented (Lynch, 2013, 2015a) raised awareness of “a growing national demand for university education units on teaching physical education to primary school students” (Australian Capital Territory [ACT] Government, 2016, p. 9). Furthermore, it was identified that “The University of Canberra and La Trobe University have foreshadowed the possible future availability of such courses”. (ACT Government, 2016, p. 9). This provision of generalist (classroom) primary courses with a PE specialism made by the named institutions are consistent with the UNESCO national strategy, recommendations suggested in a University of Canberra course review (Lynch, 2015d) and the Australian Teacher Education Ministerial Advisory Group (TEMAG) “Action Now, Classroom Ready Teachers” Report (2014).

The TEMAG report specifically recommended; “Higher education providers equip all primary pre-service teachers with at least one subject specialisation” (2014, p. XV). Such courses identified by the ACT Government are supplemented by a similar course at the University of Southern Queensland. Such course development has occurred despite reduced funding to education courses within higher
education and specifically primary PE (Lynch, 2016; https://theconversation.com/the-education-budget-report-card-f-for-fail-41746). Furthermore, internationally there have also been courses developed over the last five years in the United States, Ireland and Scotland where teachers can study to be a generalist classroom teacher at elementary (primary) level and also choose a specialism in primary PE (and health).

It can be argued that PE is a significant subject within primary schools and offers powerful connections for other curriculum areas. The physical dimension often increases children's interest in learning through “play”, an essential form of learning in the early years of primary school.

Play is an activity that is positively valued by the player, self-motivated, freely chosen, and engaging. Children actively involved in play may be engaged in a variety of activities, independently, with a partner or in a group. Play can occur indoors or outdoors. It is closely tied to the cognitive, socio-emotional, and motor development of young children, and is an important part of developmentally appropriate early years learning. (ACARA, 2016)

Hence, play is embedded within the physical dimension and is closely related to the values-based learning and communication of PE. “Play is an extremely beneficial activity where children are learning through their interactions, as well as adapting and working through the rules and values of their own cultural group” (Arthur, Beecher, Death, Dockett, & Farmer, 2015, pp. 99–100). Arthur et al. (2015) refer to play types for children as; physical play, play with objects, symbolic play, pretend play, socio-dramatic play and games with rules. While, all play types occur during PE enabling “the development of imagination and intelligence, language, social skills, and perceptual-motor abilities” (Frost, 1992, p. 48), it is games with rules which are predominant in the PE curriculum.

The Australian curriculum for Health and Physical Education (HPE) lists “Active play and minor games” as a focus area taught from Foundation to Year 10. Also, within the sub-strand of the Australian curriculum “Moving our body”, it states “the content lays the important foundations of play and fundamental movement skills” (ACARA, 2016). Conversely, this connection was confronted during the review of the Australian Curriculum report which recommended that HPE “should be formally introduced at Year 3. It can provide a wealth of resource material for the F-2 Years” (Australian Government, 2014, p. 207).

Morgan and Bourke conducted research in NSW, Australia, using pre-service and in-service primary teacher participants. The findings supported preceding literature which questioned the ability of classroom teachers (non-specialist) to offer quality PE experiences. Findings specifically indicated that the quality of an individual’s school PE experiences directly predicted confidence to teach PE. It was recommended that to “prevent the perpetuation of a non-teaching ideology or the decision by many teachers to avoid teaching PE, teacher educators must look to incorporate biographical analysis and opportunities for PE teaching as part of preservice courses” (Morgan & Bourke, 2008, p. 2). A more recent NSW Auditor-General’s Report (Department of Education and Communities [DEC], 2012) stated that physical activity in government primary schools, which involves PE lessons, necessitated improvement, suggesting that perhaps nothing has changed since Morgan and Bourke’s study.

It has been argued that NSW education policies strongly advocate PE, however requirements do not appear to be consistently enacted. A similar “gap” exists on an international scale (Hardman, 2008a), specifically in Europe, where “the crux of the situation is that there is a gap between promise and the reality” (Hardman, 2008b, p. 5). Curry asserts that within the state of NSW “state governments have standards in place to ensure all children are provided the opportunity to participate in physical education classes, [however] these are rarely met due to the absence of a specialist PE teacher in many public primary schools” (2012, p. 17).

HPE is an essential key learning area that is compulsory within Australian school curriculum. Research suggests that the optimum time for children to learn and refine their motor skills and to be
introduced to positive HPE experiences is during preschool and early primary school years (ACARA, 2012; Branta, Haubenstricker, & Seefeldt, 1984; Commonwealth of Australia, 1992; Espenschade & Eckert, 1980; Kirk, 2005; Lynch, 2015b, 2016). However, as a key learning area PE has had to overcome a number of barriers throughout history that have impeded implementation and curriculum developments, as evidenced by the 1992 Senate Inquiry into Physical and Sport Education (Brooker & Penney, 2009; Lynch, 2014, 2016; Stolz, 2009). It is argued that within NSW many of the barriers identified by Morgan & Bourke and the 1992 Senate Inquiry still exist (Curry, 2012; DEC, 2012; Knijnik & Curry, 2014).

Research was conducted with the purpose of determining whether the problems identified by the 1992 Senate Inquiry into Physical and Sport Education were of concern within three Brisbane Catholic Education (BCE) primary schools in the Australian state of Queensland (Lynch, 2007a). Findings suggested that the three case study schools “appeared to be vulnerable to many of the factors that led to the decline in PE as revealed in the report by the Senate Standing Committee on Environment, Recreation and the Arts” (Lynch, 2007a, p. 22). However, it was acknowledged that the study was only a small-scale sample and that the data were limited by nature. Subsequently, it was “recommended that a large scale research project be conducted to ascertain verisimilitude of findings” (2007a, p. 22).

Morgan and Bourke’s research was conducted in NSW using pre-service and in-service primary teacher participants, however, the scale of the data collected was not clear. Morgan and Bourke’s study gathered data from 386 pre-service teachers representing one course in one NSW tertiary education and 53 in-service teachers from 37 different schools. The participants for this specific research study were 73 principals [headteachers] randomly selected to represent a large-scale cross-section of NSW Government primary schools. This involved schools of various sizes and represented all NSW regions (rural and metropolitan). Morgan and Bourke’s research has been widely read since its publication as it was the first study of its kind in Australia. Hence, the purpose of this research is to supplement Morgan and Bourke’s study with data representing all NSW regions.

This is a sequel research investigating Australian Government Primary School Principal [Headteacher] perceptions of how PE is implemented. The first study, using the same questionnaire, was conducted in Victoria where 72.5% of the 138 schools surveyed had a PE specialist teacher. A key recommendation of this preceding research (within the state of Victoria), was for investigations to continue into other Australian states/territories (Lynch, 2015a). The purpose of the NSW data collection was not to compare education systems (with Victoria), but rather to recognise the strengths of implementation within the context of NSW and similarly, to provide direction for continued improvements.

Hence, for this study, data were deliberately gathered in NSW, the only Australian state more populous than Victoria. However, unlike Victoria, PE in NSW Government primary schools is the full responsibility of generalist classroom teachers. This situation is consistent with many countries in Europe (Hardman, 2008b) where primary school PE has received considerably less attention than secondary, explicitly within the United Kingdom (Griggs, 2012). Hence, the perceptions of the primary school principals’ [headteachers’] advance contextual understanding and direction of what can be described as a global issue (Hardman, 2008a).

The NSW Department of Education (DoE) state that the health of students is relevant to their learning and is important to schools, furthermore on their website they explicitly name principals [headteachers] as having a role to play in the effective support of students’ health needs (https://www.schools.nsw.edu.au/studentsupport/studenthealth/). Hence, primary school principals [headteachers] are acknowledged as key participants for representing school communities. This is supported by the findings of Rainer, Cropley, Jarvis, and Griffiths (2012) whose UK research concluded; “the role of the head teacher in ensuring a specific policy is developed for PE that considers the wider targets of government PE initiatives and that encourages the development of effective, high quality
PE cannot be underestimated” (p. 430). Similarly, other studies have found school-level leadership has an important role for successful implementation of PE programmes (Lynch, 2005, 2015b; Morgan & Hansen, 2007). Adversely, literature implies that a low level of principal [headteacher] support exists in many countries (Barroso, McCullum-Gomez, Hoelscher, Kelder, & Murray, 2005; Hardman & Marshall, 2005, 2009). This does suggest that the data for this study may be underestimated by principal [headteacher] opinions. However, the previous survey collected in the state of Victoria indicated strong principal [headteacher] support for PE in the context of Australia (Lynch, 2015a). The Victorian study found that qualifications and preparation of all teachers for PE implementation remained a modern day barrier, while resources and time allocation had significantly improved. A recent large-scale research project into an Australian state that relies upon generalist classroom teachers to implement PE forms a lacuna, is of international significance and is the aim of this research study.

2. Literature review
The ACARA draft shape paper for HPE, espoused quality experiences for children and the importance of having these from the very beginnings of schooling. The priority for HPE is:

> to provide ongoing, developmentally appropriate opportunities for students to practise and apply the knowledge, understanding and skills necessary to maintain and enhance their own and others’ health and wellbeing. (ACARA, 2012, p. 4)

To enable a deeper understanding surrounding implementation of “developmentally appropriate” HPE in primary schools, the literature reviewed has been organised around three elements:

- International history of concern
- Australian primary schools
- Significance of the NSW context for a global audience

2.1. International history of concern
Much has been written about generalist classroom teacher’s lack of confidence and competence, and subsequent absence of interest and preparation to teach physical education. European PE is, as to be expected considering the continent’s diverse culture, mixed. Some countries are considered as being stable and others are identified as only being in the initial stages of development. Hardman’s research has found that within Europe:

> There are apparent deficiencies in provision, specifically in curriculum time allocation, subject status, financial, material (inadequacies in facility and equipment supply) and human resources, the quality of the physical education curriculum and its delivery as well as the extent of efficacy of beyond school networks. (2008b, p. 5)

In particular, Hardman describes a “widespread perceived decline or marginalisation of physical education in schools” (2008b, p. 5). Furthermore, in the 1990s the European Physical Education Association (EUPEA) survey indicated that in most European countries there was:

1. Insufficient curriculum time for PE, especially for primary age groups.
2. Quality of PE in most countries was not, or was insufficiently controlled, particularly so in primary schools because of PE teacher education programmes with a majority of countries reporting inadequate PE training for primary school teachers.
3. An undervaluing of the primary school phase for motor development and motor learning (Hardman, 2008b, p. 5).

Within the United Kingdom, it has been suggested that “primary physical education is being delivered ineffectively in primary schools” (Griggs, 2012). This is the result of systemic educational
barriers in England which include; a lack of structural similarities and progression between the Early Years Foundation Stage (EYFS) Every Child Matters—Change for Children (Department for Children, Schools and Families, 2008) and the secondary curriculum for England for 14–19 years (Griggs, 2012, p. 4). The EYFS provided the statutory requirements for setting the standards for learning, development and care for children from birth to five. Physical education is represented by Physical Development in the EYFS and is one on the six areas in the learning and development requirements. The other five learning areas include: personal, social and emotional development; communication, language and literacy; problem solving, reasoning and numeracy; knowledge and understanding of the world and creative development (Department for Children, Schools & Families, 2008).

Another systemic educational barrier to be identified in both the UK and Australia is the preparation of primary school teachers to teach physical education (ACT Government, 2016; Caldecott, Warburton, & Waring, 2006; TEMAG, 2014). Specifically in England, “A key aspect underpinning such concerns has been the lack of time given to the subject during teacher training [teacher education]” (Clay, 1999; Warburton, 2001; cited in Griggs, 2012). Subsequently, this negatively affects pupil’s experiences in this vital stage of their learning (Ofsted, 2000, 2004, 2009; Physical Education Association, 1998, 2000; Central Council for Physical Recreation, 2004; cited in Keay & Spence, 2012). Griggs (2012) states that as little as nine hours are often donated on a one year Post-graduate Certificate of Education (PGCE) course and just five hours for those involved with School Centred Initial Teacher Training (SCITT). This is supported by empirical research conducted within a UK Initial Teacher Education (ITE) institution, where an education lecturer described the impediments for PE in the primary school:

I think the main barrier is that the vast majority of primary school teachers don’t understand what physical education is. Generally speaking most primary school teachers will have had between 10–20 h of physical education input during their initial teacher training. And they may have missed some of those sessions, they may have suffered them in silence and they just don’t understand what it is. (Lynch, 2015c, p. 17)

Prospective Initial Teacher Education (ITE) students with a key interest in PE and children, in England, are often faced with a systemic choice; follow their physical passion and become a secondary physical education specialist, or follow their passion for working with children in the 5–11 year age group and become a classroom (generalist) teacher in the primary school. Courses that qualify teachers to specialise in physical education and become a classroom teacher specifically for primary education are rare with only approximately three established courses identified (Lynch, 2015c) and no new courses developed in the last 5 years. This occurrence is surprising as “England, Canada and Wales are listed as having the most established physical literacy initiatives” (Corbin, 2016, p. 15) and Whitehead is regarded by many as “being instrumental in the physical literacy movement and even the pioneer” (Lynch & Soukup, 2016, p. 12). Hence, unlike other similar nations England appears to have not experienced growth in the first of the five UNESCO pillars for quality PE, “Teacher education, supply and development” and this is of particular significance.

Coinciding with the PL stronghold in England, has been the replacement of qualified physical education specialist teachers and generalist teachers with PA “sports coaches”. Sports coaches have traditionally been used in England for only extra-curricular PA but it is now a common occurrence for non-qualified teachers to teach physical education in primary and secondary schools with as many as 100, 000 coaches working in school settings (Blair & Capel, 2013). Carney and Howells (2008) warn that having coaches without teacher education qualifications are not the answer, yet coaches have consistently been used to replace teachers, delivering PE lessons without the presence of qualified teachers (Smith, 2013). Blair and Capel (2013) question why this is allowed to occur in PE but not English, Maths and Science? This does indicate that PE is not of equal professional value when compared with other subjects.
Employing sports coaches for short periods of time in schools is a popular choice for providing “Planning, Preparation and Assessment” (PPA) time. Teachers are entitled to 10% of their teaching time for PPA, which usually equates to approximately two and a half hours (https://www.tesfaq.co.uk/ppa). Paradoxically, in Australian primary schools the provision of release time for classroom teachers contributed to the employment of PE teachers. In the state of Queensland for example it is a popular choice for schools to employ a HPE specialist teacher to implement the PE curriculum and to provide classroom teachers with 120 min of release time.

It would be suffice to suggest that headteachers have been encouraged to employ sports coaches with the UK Government granting primary schools with a PE and sport premium for 2015 and 2016. Primary schools with 17 or more pupils received £8,000 plus £5 per pupil. For example, a school with 300 enrolments was granted £9,500. A sum of money not enough for employing a qualified teacher, but enough to hire much lower paid and less qualified sports coaches, as; “The premium must be used to fund additional and sustainable improvements to the provision of PE and sport, for the benefit of primary-aged pupils” (https://www.gov.uk/government/publications/pe-and-sport-premium-conditions-of-grant-for-2015-to-2016/pe-and-sport-premium-conditions-of-grant-for-the-academic-year-2015-to-2016-for-local-authorities-and-maintained-schools).

A similar situation was experienced in Australia in the early 1990s, when government programmes were used to replace school PE curricula. The Aussie Sport education programme was used by schools to “justify the withdrawal of physical education from schools” (Moore, 1994, p. 26; Tinning, 1994). This funded government programme proved to be detrimental to schools rather than achieve the enhanced health outcomes as originally advocated. Subsequently, Emmel argued that programmes offered by the State and Federal governments should be a “logical and welcome extension to the curriculum, not a replacement for it” (2004, p. 17). This is also voiced by Lynch (2016) who suggests that the future of optimising children’s health, well-being and physical education depends on multi stakeholder partnerships. It is suggested that such partnerships involve interactions between public and private actors, subsequently promoting social justice and creating resources. However, the focus at all times is to implement QPE and to best prepare teachers for this, not to replace quality education.

Australian Government funding since the 1990s, have been used for promoting after school physical activity programmes known as Out of School Hours Care Services (OSHCS). These have included:

- Building a Healthy, Active Australia—$116 million over four years, 2005–2008 for promoting healthy eating and physical activities for primary school children (Howard, 2004, p. 2).
- Active After School Communities—$124 million in 2008–2014, for promoting healthy eating and physical activities for primary schools (https://www.budget.gov.au/2007-08/overview/html/overview_26.htm).
- Sporting Schools Initiative—$100 million in 2015–2016, for delivering sport before, during and after school hours for primary schools (https://www.sportingschools.gov.au/about).

Sporting Schools Initiative provides funding for Sport and PA also during the school day, which suggests a gradual shift returning to the Aussie Sport territory, one which proved to be detrimental to PE in schools. Data emerging from a study by Lynch (2005) suggested that more money, time and professional development should be directed towards school systems to enable the successful implementation of PE during school hours. It was argued that this should be a priority before other avenues of health promotion are explored, for enjoyable physical education in schools is one of the most influential factors contributing to participation in physical activities outside of school (Sallis, Prochaska, Taylor, Hill, & Geraci, 1999). One recommendation of the study was:
The Federal and State Governments allocate a share of Physical Activity program funding to education systems to ensure that continuing support be offered the HPE learning area and specifically to the implementation of the HPE syllabus. This would mandate that systems expend funds in the long term best interest of students’ health and it would also make principals [headteachers] accountable for decisions made in relation to the HPE learning area. (Lynch, 2005, p. 267)

The absence of PE specialist teachers is not only the situation in England and NSW but throughout many parts of the world, where primary school generalist classroom teachers are most often responsible for teaching PE. Furthermore:

Evidence points to deficiencies in teacher supply, particularly of physical education specialists, inadequate preparation of physical education teachers, especially, but not exclusively so, in primary/elementary schools and to negative attitudes and low levels of motivation of some teachers responsible for physical education delivery. Concerns about the quality of physical education teacher training, teaching and teaching resources, inadequate supervision of practice, lack of professionalism and appropriate ethics and impacts on the quality of school pupil experience are also globally evident. (UNESCO, 2014, p. 9)

Within Australia teacher PE preparation has been described in the past as general PA courses: quasi primary HPE courses where pre-service teachers may be able to choose electives in general sport often relating to industry or secondary physical education. While these offer opportunities for enthusiasts to study areas of interest, ideal candidates for primary HPE specialists, unfortunately they lack the primary children “developmentally appropriate” nature that the draft paper emphasised. (Lynch, 2013, p. 9)

Hence, the historical structure of teacher preparation appears to not be meeting the needs of today’s society. “Research suggests that primary schools are, by themselves, unable to deliver quality early experiences, while the contribution of PE specialists in secondary schools may come too late to impact a majority of children in relation to their competence, perceptions and motivation”. (Kirk, 2005, p. 240). More recently, UNESCO published the third Worldwide Survey of school PE (2014) which supported previous findings and statements such as Kirk’s above. One new finding was that “despite official commitment to physical education either through legislation or as a matter of general practice, such provision is far from assured” (p. 7), suggesting that globally the subject of PE is marginalised.

2.2. Australian primary schools

Within Australia, PE in general and specifically developmentally appropriate PE, was a major problem in the late 1980s and early 1990s. During this time the PE school curriculum within Australian schools was considered to have been in crisis (Dinan-Thompson, 2009; Tinning, Kirk, Evans, & Glover, 1994). This concern led to a Senate Inquiry (Commonwealth of Australia, 1992) into the state of PE and sport within Australian Education systems. The Inquiry began on 7 May 1992, through an established committee whose job it was to assess, investigate and report on the state of PE (Commonwealth of Australia, 1992). The committee heard evidence from 51 individuals and groups, and received 219 submissions from a variety of interested parties. One inspection tour was conducted and the Report was published in December 1992 (Swabey, Carlson, & Kirk, 1998). The findings of the Senate Inquiry (Commonwealth of Australia, 1992) supported the in-house discussions of crisis among PE professionals.

Specifically, the Senate Inquiry found that there was in fact a decline in the opportunities for QPE in Australian schools although paradoxically there was unanimous support for the learning area. The problems were mainly with resources and the time allocation to the key learning area which resulted in a drastic decline in children’s skill levels and physical fitness (Tinning et al., 1994). Another major problem was that “suitably qualified physical education teachers are [were] not being employed to teach physical education and school sport to all children” (Commonwealth of Australia, 1992, p. xiv).
There was also no required accreditation or formal training in physical or sport education as a condition of employment for graduating primary school teachers (Moore, 1994).

More so, in primary schools there were specific issues outlined pertaining to facilities and resources. Health and Physical education is a necessary part of the primary curriculum (Australian Government, 2014; Commonwealth of Australia, 1992), however, PE was being squeezed by other key learning areas, resulting in fewer PE resources being allocated (Swabey et al., 1998). “Skills are developed at pre and primary school” (Commonwealth of Australia, 1992, p. 58), hence, the Committee recommended that more resources should be allocated to primary school PE programs (Commonwealth of Australia, 1992).

Another problem within this key learning area is the degree of importance it is afforded by classroom teachers. In many cases, teachers perceive PE as a release from classroom activities rather than an integral aspect of children’s education (Clarke, 2000; Medland & Taggart, 1993). “Teaching ideologies are often affected by teachers’ perceptions of their prior experiences in sport and physical activity” (Morgan, Bourke, & Thompson, 2001, p. 2). For many non-specialist teachers, prior experiences may often have been negative which they then replicate (Downey, 1979; Morgan & Bourke, 2008). Hickey argued that “physical education in the primary school curriculum has been increasingly devalued” (1992, p. 18). This situation, he suggests has resulted from the inability of generalist classroom teachers to provide a meaningful PE programme, and consequently the community questions the necessity for PE in the curriculum.

These issues, according to the Australian Council for Health, Physical Education and Recreation (ACHPER, 2011) still exist today. “It is true that some schools struggle to provide quality HPE and sport, in particular in primary schools”. Furthermore, some graduate teachers are to this day completing teaching degrees without studying any units in HPE and are then responsible for implementing this learning area in schools (Lynch, 2005, 2013). This implies that subsequent curriculum change as a result of the 1992 Senate Inquiry and Morgan and Bourke’s (2008) recommendations may have only been surface level if at all. HPE primary specialist teachers are employed sporadically within primary schools across Australia with, questions often raised about “who is teaching H/PE, and who is deemed competent to teach HPE in schools” (Dinan-Thompson, 2009, p. 48). Hence, the recommendations of a Senate Inquiry made 25 years ago appear to not have found their way into all schools.

The 2014 Active Healthy Kids Australia (AHKA) Physical Activity Report Card for Children and Young people was developed by a team consisting of 26 researchers and representing 12 universities and research groups. The Report Card was “developed using synthesised data from a number of national and state-based surveys” (AHKA, 2014, p. 6). The surveys were all conducted since 2008 and involved more than 33,000 participants (boys and girls) between the ages of 2 and 17 years. In 2016, the second AHKA Report Card was released. The report cards clearly have a PA focus rather than PE, which also appears to have influenced selection of publications used. Confirming the PA broad focus, the second report card explicitly adopted a physical literacy focus (rather than QPE). The 2014 and 2016 AHKA Report Cards assign letter grades across 12 different indicators (Table 1):

Table 1. Letter grade categories

| Grade | Description |
|-------|-------------|
| A     | Australia is succeeding with a majority of children and young people (81–100%) |
| B     | Australia is succeeding with well over half of children and young people (61–80%) |
| C     | Australia is succeeding with about half of children and young people (41–60%) |
| D     | Australia is succeeding with some but less than half of children and young people (21–40%) |
| F     | Australia is succeeding with very few children and young people (0–20%) |
| Inc   | Not enough available evidence to assign a grade to the indicator |
Indicators and grades directly relating to the implementation of PE in Australian primary schools in 2014 and 2016 remained unchanged:

- **Overall Physical Activity Levels (D−)**
- **School—Infrastructure, Policies and Programming (B−)**
- **Physical Education and Physical Activity Participation in Schools (INC)**

PE and PA participation in schools was graded “incomplete”, due to a lack of data relating to PE and PA participation within Australian primary schools. It is axiomatic that primary schools’ play a key role in children’s health and well-being (Lynch, 2016). Therefore, the fact that there were no data to be found for PE or “physical activity” participation in Australian primary schools is both alarming and questionable.

The AHKA report cards articulate that no grades were possible due to a lack of data/research, yet principal [headteacher] surveys regarding PE in schools were ignored. Moreover, general sources such as blogs that are not peer reviewed or have any weighting as valid and reliable research were used to validate the adoption of physical literacy. Such inconsistencies in research quality diminish the value of the rigour involved in developing the report card. This appears to be influenced by government priorities.

Thorpe explains that “physical-education-in-crisis’ is physical education politicised” (2003, p. 147). He warns of “governmentality” and the “declining faith in the institutions responsible for governing education” (2003, p. 147). The question begs to be asked; “is there an ulterior motive for the adoption of the term PL?” And is this an example of governmentality? As “to date there is no evidence that using and promoting the term physical literacy will help. There are currently very few peer review publications on physical literacy and none of these are data based” (Lounsbery & McKenzie, 2015, pp. 143–144).

PE teachers (specialist or generalist classroom) need to be able to deliver quality HPE lessons across all strands, this includes; Movement and Physical activity, Personal, Social and Community Health. “Indeed, Australia is one of only a few countries that combines the strands of health and physical education into one curriculum” (Australian Government, 2014, p. 203). Focus areas that sit within the HPE curriculum include: mental health promotion, sexuality and reproductive health, food and nutrition, safety, drug use, respectful relationships, personal identity and sense of self, physical activity and fitness, games and sports, and aquatics and water-based activities (ACARA, 2012, p. 22). A study into the implementation of HPE curriculum suggests that all teachers in the primary school require professional development in the documents as part of a “whole school” approach (Lynch, 2015b).

### 2.3. Significance of the NSW context for a global audience

The NSW DoE state “the health of students is relevant to their learning and is important to schools” and that “Principals [Headteachers], staff, parents, health professionals and students all have a role to play in the effective support of students’ health needs” (https://www.schools.nsw.edu.au/studentsupport/studenthealth/). Furthermore, Morgan and Bourke found that PE had a “role in the development of positive health behaviours” (2008, p. 21). This outcome sits within, and directly relates to, the HPE learning area for both the early years and primary school curriculum documents:

In Health and Physical Education students develop the knowledge, understanding and skills to support them to be resilient, to develop a strong sense of self, to build and maintain satisfying relationships, to make health-enhancing decisions in relation to their health and physical activity participation, and to develop health literacy competencies in order to enhance their own and others’ health and wellbeing. (ACARA, 2012, p. 2)
Furthermore, the department explicitly lists the Personal Development, Health and Physical Education (PDHPE) key learning area (KLA) as how schools support and develop students’ health, emphasising physical and mental health, as well as academic benefits (DEC, 2012, p. 3).

Specifically within NSW, the implementation of HPE has been associated with constrictions. “In primary school settings, the PDHPE/HPE KLA, incorporating both the practical and the theory components of the HPE syllabus, is most commonly taught by the generalist classroom teacher, who has very little specific training in PE” (Curry, 2012, p. 17). This supports literature from a decade earlier, where within NSW “studies have described the lack of qualifications of classroom teachers to deliver HPE programs, largely as a result of inadequate HPE teacher training, thus failing to develop teacher confidence” (Morgan & Bourke, 2005, p. 7). Webster shared similar sentiments in a thesis study focusing on NSW primary schools teacher perceptions of PDHPE (Webster, 2001). Consequently, it is argued that primary schools in NSW and specifically “physical education is failing to provide children with the opportunity to develop physical competencies and be physically active” (Morgan et al., 2001, p. 1).

Subsequent problems associated with generalist classroom teachers teaching PE in NSW primary schools include minimal time allocation and advocacy. Curry states that PE is “mandated to make up 6–10% of curriculum time, but this allocation is rarely met” (2012, p. 17). Avoidance of physical education is often connected to generalist classroom teachers’ limited confidence and competence, where “teaching ideologies are often affected by teachers’ perceptions of their prior experiences in sport and physical activity” (Morgan et al., 2001, p. 2). Similarly, “many teachers are relying on their own school experiences with PE and sport, hence their own teaching of PE is a reflection of their memories, both good and bad, rather than the knowledge gained in professional pre-service training” (DEC, 2012, p. 19).

The New South Wales Auditor-General’s Report Performance Audit, titled “Physical Activity in Government Primary Schools” (DEC, 2012) “examined how well DEC manages physical activity in NSW Government primary schools, in particular how it achieves compliance” (DEC, 2012, p. 2). The report asserts that “DEC has directed its schools to provide at least two hours of planned physical activity per week” (DEC, 2012, p. 2). It is clarified that guidance is provided for all teachers on fundamental movement skills and participation. Programs are promoted which include “Premier’s Sporting Challenge and School Swimming Scheme and assists with the provision of facilities and sporting equipment” (DEC, 2012, p. 2). The performance audit involved planning, fieldwork and report writing, however, fieldwork was limited to visiting 13 NSW Government primary schools.

DEC does not monitor physical activity in schools, leaving this to school principals [headteachers], supplementing their significance as participants in this study. Based on available evidence Auditor-General’s Report found that:

- Around 30% of government primary schools do not provide two hours of planned physical activity each week.
- Even those schools that provide two hours of planned physical activity are not likely to provide two hours of moderate to vigorous physical activity each week, as planned time usually includes travel to venues, setting up equipment, waiting for a turn. DEC’s minimum requirement for planned physical activity does not stipulate a minimum amount that should be “moderate to vigorous”, unlike some other States.
- The quality of physical activity instruction varies between schools and teachers, with many primary students not able to master the fundamental movement skills required to participate in a full range of physical activities (DEC, 2012, p. 3).

It is of importance to note that the choice of terms used in government documents gives preference to PA rather than PE. This was recently supported by the NSW DoE who in September, 2016 adopted
a Physical Literacy Continuum (K-10), a first within Australia. As previously mentioned PL aligns with PA, whereas the term QPE has PE in schools as its focus for lifelong education.

Explicitly the NSW DoE, “recognises and promotes physical literacy as a capability which can be applied in contexts broader than just PDHPE or School Sport” (https://hpeclic.wordpress.com/2016/09/01/the-nsw-physical-literacy-continuum-k-10/) and in doing so have deliberately adopted PA (and physical literacy) terms for schools rather than PE (and QPE). “The NSW Department of Education identified the need to increase the quality of the learning opportunities for students through enhancing the educative purpose of planned physical activity” (https://hpeclic.wordpress.com/2016/09/01/the-nsw-physical-literacy-continuum-k-10/). Given the contextual similarities between NSW’s preparation of teachers for PE provision and that of England, one does have to question the choice of terms, and specifically ask why they are enhancing the educative purpose of planned physical activity and not PE? The role of qualified teachers, specifically PE specialists and the role and importance of PE within schools does appear to have diminished.

As acknowledged by DEC, school principals [headteachers] “play a major role in the success of the implementation of the H/PE programme as they are directly responsible for supporting the development, implementation and monitoring of the curriculum” (Lynch, 2007b, p. 6). Furthermore, a study using principal [headteacher] participants conducted by Ardzejewska, McMaugh and Coutts concluded that “there is wide support for and use of specialist teachers in NSW government primary schools” (2010, p. 215).

Hence, this research offers findings for a present gap within literature, as there has not been any large-scale investigation into Australian Government primary schools within states/territories, where generalist teachers are responsible for the implementation of PE. Furthermore, regular monitoring of developments was recommended by the UN 2005 Year of Sport and PE and the UNESCO National Strategy for Quality PE (2015).

3. Methodology

3.1. Research design

3.1.1. Theoretical perspective

This study sits within an interpretivist paradigm, as educational leadership and the role of the school principal [headteacher] is socially complex and constructed: “Social realities are constructed by the participants in their social settings” (Glesne, 1999, p. 5). The participants share their experiences and perspectives, hence, their voices can be heard.

3.1.2. Participants

This theoretical framework enables the principal [headteacher] participants to share their stories on how PE is taught and learned within the contexts of their schools, thus providing valuable insights into implementation. A large-scale sample was chosen to represent a cross section of NSW primary schools across each region. My Schools website (ACARA) https://www.myschool.edu.au/, the National Education Directory https://www.education.net.au/ and the Australian Schools Directory https://www.australianschoolsdirectory.com.au/ data bases were used to access a large-scale sample of school and principal [headteacher] contact details. Surveys were sent to 425 principals [headteachers] of government primary schools and 73 were returned (17.2%). This was a significantly less return rate when compared with the previous study in Victoria, where 369 surveys were sent out and 138 returned (37.4%).

3.1.3. Data gathering strategies

Employing the interpretive perspective assumes that there is change, as this perspective portrays an ever-changing world (Glesne, 1999), where emphasis is placed on the change and development of individuals, groups and societies (Sarantakos, 1998). It is envisaged that investigation of the changes
will reveal both positive and negative outcomes in the PE implementation process. This assumption is based on personal experiences of the researcher, who in “qualitative research is often the primary instrument for data collection and analysis” (Merriam, 1998, p. 7). The method most appropriate for this population of study is a questionnaire (Kumar, 2005) due to expense and time, as the geographical distribution of the study population are “scattered over a wide geographical area” (Kumar, 2005, p. 127). Furthermore, this method of gathering data was most suitable as school principals [head-teachers] are articulate in written expression. The survey questionnaire was mailed with a prepaid, self-addressed envelope and was accompanied by a covering letter (Berg & Latin, 2004).

Through this interpretivist paradigm, meaning that already exists was explored (inductive research) therefore the surveys were ex-post facto design (Cohen, Manion, & Morrison, 2007), adopting a mixed methods approach. The questionnaire formulates open-ended questions (qualitative) where the respondent “writes down the answers in his/her words” (Kumar, 2005, p. 132), providing principal [headteachers] with the opportunity to “express themselves freely, resulting in a greater variety of information” (Kumar, 2005, p. 135) and closed-ended (quantitative) questions where “the respondent ticks the category that best describes their answer” (Kumar, 2005, p. 132).

The open-ended and closed-ended questions on the ex-post facto designed survey represented problems identified in the Worldwide Surveys of school PE, Senate Inquiry findings, Morgan and Bourke’s concerns relating to pre-service teacher preparation and the 2012 Auditor-General’s Report. These issues were related specifically to resources, time and teacher qualifications/training:

1. Which teachers are responsible for H/PE in your school (e.g. Classroom, specialist HPE, outsourced)? (teacher qualifications/training)
2. If H/PE is outsourced, please give details of what is outsourced and background/qualifications of the people who take the classes? (teacher qualifications/training and resources)
3. Do you prefer to have specialist H/PE teachers in your school? Yes/No. If so, why/why not? (teacher qualifications/training and resources)
4. If your school does have a H/PE specialist teacher, do they have specific H/PE qualifications? Yes/No (teacher qualifications/training)
5. On average how much time of PE (lesson) engagement do students in your school receive weekly? None/Half an hour/1 h/2 h/3 h or more (time)
6. When employing staff, do you look at the university certificate/testamur of potential staff? Yes/No (teacher qualifications/training)
7. When employing teachers do you peruse university transcripts of results? Yes/No (teacher qualifications/training)
8. As a Principal [Head Teacher], would a course that qualifies teachers to be generalist classroom teachers and H/PE specialists be of value? No/Maybe/Probably/Yes (teacher qualifications/training)
9. Would a testamur/certificate that read “Bachelor of Primary Education (Health and Physical Education)” assist you with the employment of staff? No/Maybe/Probably/Yes (teacher qualifications/training)
10. What are the key attributes of a good H/PE teacher? (resources, time and teacher qualifications/training)
11. Are there any other details you would like to add on the issue of quality HPE experiences for children in schools? (resources, time and teacher qualifications/training)

3.1.4. Verification and ethical issues
There were two ethical clearances that were granted before this survey was conducted. They were an ethical clearance from Monash University Human Research Ethics Committee (MUHREC) and from the NSW Government Department of Education and Communities. Separate approval was granted.
by each of the 73 primary school principals. It was clearly stated in the “Explanatory Letter” that completing the questionnaire was voluntary and principals were under no obligation to consent to participation. Also, that by completing and posting back the questionnaire in the self-addressed, postage paid return envelope granted consent to be a participant.

A conscious effort was made by the researcher to be fair in the generation of data, in the interpretation of data, in the formulation of theories and in the presentation of data. Trustworthiness was achieved through constant peer debriefing where experienced researchers (academic colleagues) critically reflected on the process of data generation and analysis. This took place in the form of discussions and proof reading of detailed research reports.

3.2. Analysis of data

Answers to open-ended questions (1, 2, 3, 10 and 11) and close-ended questions (3, 4, 5, 6, 7, 8 and 9) were grouped according to their NSW region (West, Riverina, South Coast, Central, Sydney, Hunter Valley, North and North Coast), and then by their size of school enrolment (Small—less than 100, Medium—100–300, Large—300–600 and Very Large—more than 600). Open-ended questions were then analysed using Wellington's (2000) simplified version of the “Constant Comparative Method for Analysing Qualitative Data” (Figure 1). Cross analysis for each region was presented at the end of the analysis of each school size category. Repeating the same analysis process, Wellington’s stages (Figure 1) were used to analyse the data according to size across the whole state of NSW and then an overall analysis for the state was described.

Units of meaning were formed, coded, and categorised with other similar units. Table 2 illustrates a copy of coded open-ended question data.

The surveys were completed by 73 government principals [headteachers] from a cross-section of primary schools. Principals [headteachers] surveyed represented schools from all eight NSW regions and schools of various enrolment sizes (Table 3).
4. Presentation of findings

For the purpose of clarity, findings are presented in the same order as they appeared in the survey. Findings are condensed into written paragraphs and when appropriate data are presented using figures (column graphs).

(1) Which teachers are responsible for H/PE in your school (e.g. Classroom, specialist HPE, outsourced)?

Classroom teachers were often solely responsible for the implementation of Health and PE in NSW public schools with 59 (80.8%) principals [headteachers] identifying only their classroom teachers. The second most common answer with 10 (13.7%) was “Classroom teachers & outsourced”. Only 4 (5.5%) principals [headteachers] identified they employed Health/PE specialists in combination with the classroom teacher (see Figure 2).

(2) If HPE is outsourced please give details of what is outsourced and background/qualifications of the people who take the classes?

This question did not apply to 50 (68.5%) of the principals [headteachers]. The most outsourced PE activity was gymnastics with 14 (19.2%) mentions, Dance with 9 (12.3%), 4 (5.5%) principals [headteachers] outsourced specialist coaches (covering golf, tennis, Zumba and gymnastics), Active After School Sport and AFL football had 2 (2.7%) mentions each, and there was 1 mention (1.4%) each for Cricket, Sports in School Australia, and Fundamental Movement Skills (FMS). Outsourcing of health related to 1 mention (1.4%) for a women’s health nurse (see Figure 3).
(3) Do you prefer to have specialist HPE teachers in your school?

There were 10 (13.7%) principals [headteachers] who chose not to answer this question. For those who did answer the data was split in preference with 31 (49.2%) stating “yes” and 32 (50.8%) “no” (see Figure 4).

Summary of comments explaining why

Within small schools (less than 100 children) many principals stated that it was not possible or financially viable to have HPE specialists due to their rural, regional or remote location. One Principal stated that HPE specialist teachers in NSW Government schools has never been an option and
therefore is not possible. While, some comments were not in support of HPE specialists in schools, these were few in number.

There were many comments supporting HPE specialists in primary schools. Principals shared that many generalist teachers were not confident or comfortable with implementing aspects of the HPE curriculum such as gymnastics and dance, which resulted in avoidance. Comments suggested quality HPE was increased by a HPE specialist teacher. This was provided through expertise, interest, consistent/regular lessons and coordination of HPE/sport within the school. Also, it was mentioned that some generalist teachers were not able to take HPE classes due to their senior age, it enabled release from face-to-face (RFF) for classroom teachers and minimised outsourcing costs for parents.

(4) If your school does have a HPE specialist teacher, do they have specific HPE qualifications

No details were offered by 53 (72.6%) principals [headteachers] indicating that this question was not applicable within their context. From the 20 surveys, where this question was completed, 7 (35.0%) suggested that “yes” they do have qualified HPE specialist teachers and 13 (65.0%) indicated “no” (see Figure 5).

(5) On average how much time of PE (lesson) engagement do students in your school receive weekly?

Every principal [headteacher] indicated that their school had PE on average every week. Only 3 (4.1%) had PE on average for 30 min each week. There were 25 (34.3%) who had PE on average for 60 min weekly, 40 (54.8%) who had PE for 120 min each week and 5 (6.8%) who had PE for at least 3 h or more (see Figure 6).

(6) When employing staff, do you look at the university certificate/testamur of potential staff?

There were 38 (53.5%) principals [headteachers] who answered “yes” to this question, 33 (46.5%) who answered “no” and 2 who preferred not to answer (see Figure 7).
(7) When employing teachers do you peruse university transcripts of results?

The surveys indicated that 61 (84.7%) principals [headteachers] do not peruse university transcripts of results when employing teachers and 11 (15.3%) do. There was just the one survey which did not answer this question (see Figure 8).

(8) As a Principal, would a course that qualifies teachers to be generalist classroom teachers and HPE specialists be of value?
There were 52 (71.3%) of the principals [headteachers] who indicated that a course that qualifies teachers to be generalist classroom teachers and HPE specialists would be valuable, with 24 (32.9%) stating “probably” and 28 (38.4%) stating “yes”. There were only 5 (6.8%) who disagreed and stated “no” and 16 (21.9%) stating “maybe” (see Figure 9).

(9) Would a testamur/certificate that read “Bachelor of Primary Education (Health and Physical Education)” assist you with the employment of staff?

Having a testamur with the title “Bachelor of Primary Education (Health and Physical Education)” had mixed reviews from the principals [headteachers]. There were 15 (20.5%) who stated that “no” it would not assist with the employment of staff, 29 (39.7%) said ‘maybe’, 17 (23.3%) said ‘probably’ and 12 (16.5%) said “yes” (see Figure 10).
(10) What are the key attributes of a good HPE teacher?

Key attributes of a good HPE teacher included that they had good subject knowledge (the what) and also understood the best way to deliver through developmentally appropriate pedagogy (the how). They had the qualities of good classroom teachers; such as being organised, flexible, good planners and assessors. Communication and management skills were important, as were their interest in the children, ability to be inclusive and engage the children in a wide variety of physical activities. Table 4 lists all the attributes mentioned by the principles [headteachers].

(11) Are there any other details you would like to add on the issue of quality HPE experiences for children in schools?

The responses to this question have been presented according to school size; small schools (less than 100 children), medium sized schools (100–300 children) and large/very large schools (300+). Small schools (less than 100 children) which are predominantly located in rural, regional or remote locations voiced difficulties in regards to the availability of HPE teachers. Principal [headteacher] participants suggested having “supplementary staffing allocations in small schools to hire a specialist PE teacher to go around schools”. Some participants were concerned as “there are too few of HPE teachers available in schools in NSW (not sure of other states)”. Some principals [headteachers]
shared that they implemented integrated programmes within their school which they found helpful; “We use a program called ‘Play is the way’, we have tweaked it to include Fundamental Movement Skills (FMS). Teaches collaborative skills and resilience”. Principals’ [headteachers’] concern for the lack of movement within curriculum extended beyond their own community; “Choosing to opt out or being allowed to do non-cardio type activities is doing our children no good at all”.

Within medium sized schools (100–300 children) principal [headteacher] participants advocated “emotional literacy” within the Health strand of the HPE curriculum. One Principal [Headteacher] recommended teachers could develop confidence and competence; “Develop rapport with another person committed to a healthy lifestyle as HPE is very important in developing physical and social skills and values”. Time was identified as an issue; “The overcrowded curriculum makes it difficult to have more than 1 h per week for HPE”. There were comments promoting the use of outsourced programmes on offer at no cost to the school. “Many sporting codes have clinics at schools. We tap into those regularly and have been successful i.e. Rugby, League, AFL [Australian Rules football], Netball, Cricket”. One principal [headteacher] commented generally about the gender of the majority of primary school teachers; “Many PE opportunities for Boys are not best provided because of the predominance of female staff in Primary Schools”.

### Table 4. Key attributes of a good HPE teacher.

| Key attributes                                           | Mentions by principals [headteachers] |
|----------------------------------------------------------|---------------------------------------|
| H/PE subject knowledge and dev appropriate pedagogy      | 54                                    |
| Planning/assessment and flexibility (organised)          | 31                                    |
| Rapport/communication and management skills              | 29                                    |
| Passion/interest/enthusiasm (children)                   | 29                                    |
| Cater for all learning needs (empathy and support)       | 15                                    |
| Good teacher/classroom                                   | 15                                    |
| Engage students and fun                                  | 10                                    |
| Introduce a variety of physical activities               | 9                                     |
| Team player/team work/collaboration                      | 5                                     |
| Expertise (specialist training in HPE)                   | 5                                     |
| Athletic/fitness/stamina/active                          | 4                                     |
| Motivational                                             | 3                                     |
| Safety                                                   | 3                                     |
| Physical capabilities—can carry out the skills being taught | 3  |
| Experience in teaching HPE                              | 2                                     |
| Ability to reflect on teaching/student achievement       | 2                                     |
| Advocate and teachers healthy behaviours                 | 2                                     |
| Relationships                                            | 2                                     |
| Commitment to school life                               | 2                                     |
| Role model for healthy living                            | 2                                     |
| Resourceful and creative                                 | 1                                     |
| Ability to work with all children, teachers and families | 1                                     |
| Look the part (if they don’t it doesn’t work)            | 1                                     |
| Hard worker/drive                                        | 1                                     |
| Holistic approach to health and well-being               | 1                                     |
| Sports coaching qualifications                           | 1                                     |
There was support for having good classroom teachers as a priority and then supplementing this strength with PE teaching. “I always look for an outstanding classroom teacher with superior lit/Num [literacy/numeracy] and social science knowledge and commitment but having someone who will organise, encourage and drive sport & PE program is fabulous! They must be excellent classroom teachers first”. This issue appeared to be exacerbated within the smaller school context; “Being a small school I couldn’t have one person doing only HPE/PD. They would have to be an effective classroom teacher FIRST”.

Principals of large schools (300–600 children) and very large schools (larger than 600 children) were advocates for PE; “Fitness and sport are important and we need more qualified teachers”. And “Our school has developed a Fitness Program (supported by live life well) so all teachers take responsibility (K-6) for planning fundamental movement programs. Sport (3–6) further refines these skills”. However, one comment suggested that in country Australia HPE was not necessary; “Sport/HPE isn’t a huge part/focus. Country school-active kids”.

There was again support for having good classroom teachers as a priority and then having a specialism in HPE; “Totally agree but I would be happy if teachers in general primary courses could major in HPE”. Also, “All pre-service teachers need to be provided with greater training in this area—has positive results in the classroom and socially”. Even in the larger schools there were the same issues with smaller schools when in relation to availability and affordability; “I do not have the staffing flexibility to employ a specialist HPE teacher”.

There were schools that prioritised HPE, “In my definition HPE doesn’t include ‘sport’ which has additional time attributed to it”. And others where unfortunately HPE was squeezed from the curriculum; “NAPLAN [National Assessment Program—Literacy & Numeracy] & focus on Literacy and Numeracy is taking emphasis off the other KLAs like PDHPE & Creative Arts—very unfortunate”. There were also comments suggesting how HPE can be optimised in school communities; “Quality experiences for kids come from committed teachers. PD/HPE teachers need to lead other, perhaps less enthusiastic teachers to take part in meaningful activities for kids”. Also, “Specialist HPE teachers are most useful when they can support the curriculum and bring expertise to classroom teachers”.

5. Discussion
Data gathered suggests that the three major problems identified by the 1992 Australian Senate Inquiry and supported internationally by the Second and Third Worldwide Survey of PE; resources, formal training of teachers and time allocation, are still of concern. These three areas were concerns also in the Auditor General’s Report which investigated physical activities more broadly (DEC, 2012). The three major problems will be discussed separately in relation to HPE implementation in primary schools.

5.1. Resources
There were two types of resources that were referred to in the data; human resources (teacher expertise) and HPE equipment. HPE equipment (and facilities) provision was regarded as an area of strength by the NSW Auditor-General’s report (DEC, 2012). This was strongly supported by the data as principals [headteachers] did not identify equipment or facilities as a problem for implementing HPE lessons. Only one out of 73 principals mentioned resources (HPE equipment), and this was for question 10; key attributes of a good HPE teacher is that they are “resourceful and creative”. Another indicator that resources (H/PE equipment), is not a major problem is that only 20 of the 73 principals (27%) of the schools surveyed outsourced PE.

Human resources relating to HPE expertise were an identified problem within the data. Principals [headteachers] shared that many generalist classroom teachers were not confident or comfortable with implementing aspects of the PE curriculum, which resulted in avoidance. This affirmed the literature from the last 20 years (Curry, 2012; Griggs, 2012; Hardman, 2008a, 2008b; Lynch, 2015c,
2016; Morgan & Bourke, 2005, 2008; Morgan et al., 2001; Webster, 2001) and in particular the recent findings from the Auditor-General's Report, “the quality of physical activity instruction varies between schools and teachers, with many primary students not able to master the fundamental movement skills required to participate in a full range of physical activities” (DEC, 2012, p. 3). Also, it was mentioned that some generalist teachers were not able to implement PE classes due to their senior age. Human resources are closely linked with formal training of teachers, which will be discussed in more detail.

5.2. Formal training of teachers

Teacher education [Initial Teacher Training], supply and development are listed as the first priority in the guidelines for policy-makers in enabling quality PE (UNESCO, 2015). Data indicates that qualifications of teachers and teacher preparation to teach PE has been a major problem internationally (Griggs, 2012; Hardman, 2008a, 2008b; UNESCO, 2014) and nationally (Curry, 2012; DEC, 2012; Knijnik & Curry, 2014; Lynch, 2007a, 2015a; Morgan & Bourke, 2008). It is suggested that “Suitably qualified physical education teachers are not being employed to teach physical education and school sport to all children” (Commonwealth of Australia, 1992, p. xiv). Furthermore, with only 15% of principal [headteachers] suggesting they peruse university transcripts of results, it appears there is still no required accreditation or formal training in physical or sport education as a condition of employment for graduating primary school teachers (Moore, 1994). There were only four NSW school principals [headteachers] who employed a primary PE specialist teacher (5.5%), significantly fewer than that of neighbouring state Victoria, where 72.5% of the 138 schools surveyed had a PE specialist teacher. However, there were 52 (71.3%) of the principals [headteachers] who indicated that a course that qualifies teachers to be generalist classroom teachers and HPE specialists would be valuable. This finding is consistent with Ardzejewska, McMaugh and Coutts' study, also using principal [headteacher] participants, which suggested “wide support for and use of specialist teachers in NSW government primary schools” (2010, p. 215).

Both national and international literature questions the quality of PE implemented by classroom teachers (Curry, 2012; Hardman, 2008a; UNESCO, 2014). One principal [headteacher] commented “HPE specialist teachers in NSW Government Schools has never been an option and therefore is not possible”. It appears for this reason that principal [headteacher] preference for a specialist PE teacher was fewer in number when compared with the state of Victoria. In NSW approximately half of the principals answered “yes”, they would prefer a HPE specialist in their school. In Victoria, 120 of the 138 (88.2%) returned surveys answered “yes”, they do prefer HPE specialists in their school.

Some comments suggested that all teachers should be prepared in HPE. “All pre-service teachers need to be provided with greater training in this area—has positive results in the classroom and socially” and “too few of HPE specialists [are] available”. While, one Principal [Headteacher] wrote “we need more qualified teachers” another offered deeper consideration, “I would be happy if teachers in general primary courses could major in HPE”. There were 54 mentions that HPE subject knowledge and developmentally appropriate pedagogy was a key attribute of a good teacher. Also, it is important to note that there were 15 mentions that being a “good teacher/classroom teacher” was a key attribute of being a good H/PE teacher.

This finding supports literature which advocates that the physical dimension increases children’s interest through “play”, an essential form of learning in the early years of primary school. Play is closely related to the values-based learning and communication of PE; an “extremely beneficial activity where children are learning through their interactions, as well as adopting and working through the rules and values of their own cultural group” (Arthur et al., 2015, pp. 99–100).

There was no mention by any principal [headteacher] to replace the teaching of PE by sport coaches, nor was there to any diminishing of the educational value and expertise required for PE in primary schools. Principal [head teacher] comments such as these support all teachers in the primary school receiving professional development in the curriculum documents to enable a “whole school”
approach (Lynch, 2015b). Such insight into principal [headteacher] belief is imperative as studies have found school leadership is vital for the successful implementation of PE (Lynch, 2005, 2015b; Morgan & Hansen, 2007), and cannot be underestimated (Rainer, Cropley, Jarvis & Griffiths, 2012). This is consistent with the recommendations made by Lynch’s study (2005) suggesting that governments allocate PA programme funding to ensure continued support to the implementation of the HPE syllabus.

The data gathered is consistent with UNESCO’s definition of Quality PE, emphasising PE in schools for achieving a lifetime of health and well-being. This requires qualified and thoroughly prepared teachers. Although low level of principal [headteacher] support exists in many countries (Barroso et al., 2005; Hardman & Marshall, 2005, 2009), this did not appear to be the case for the returned NSW surveys, consistent with the previous survey collected in the state of Victoria (Lynch, 2015a).

Principal [headteacher] support for PE suggests that the PL push for PA delivered by sporting coaches outside of the school curriculum, supplement a QPE programme and not replace PE in schools (Emmel, 2004; Lynch, 2016). However, as has been the case in England, the Australian and NSW Government appear to be placing all efforts and funding towards PA (physical literacy) and sport coaches rather than the development of QPE in primary schools and Higher Education. Since 2004, there has been $340 million of government funding for sports coaching, while funding towards Higher Education and preparation of teachers (including PE) has been cut (Lynch, 2016; https://theconversation.com/the-education-budget-report-card-f-for-fail-41746).

Employing the interpretive perspective portrays an ever-changing world (Glesne, 1999), where emphasis is placed on the change and development of individuals, groups and societies (Sarantakos, 1998). The change identified has not witnessed the fruition of recommendations research has made over the last 25 years, what has been actualised is the opposite, where the first pillar of the UNESCO national strategy for QPE has been neglected; Teacher education, supply and development.

The recommendation made by the TEMAG report; “Higher education providers equip all primary pre-service teachers with at least one subject specialisation” (2014, p. XV) was supported by principals [headteachers] with comments suggesting that quality was increased by having a PE specialist teacher. This was provided through expertise, interest, regular lessons and coordination of HPE and sport throughout the school. Offering a specialisation in PE within primary teacher education courses does require a structural major amendment of higher education, but as developed within institutions around the world over the last 5 years, this is very achievable.

Specifically, “there are too few of HPE teachers available in schools in NSW (not sure of other states)”. As established within the literature, there are many nations where similar to NSW, teacher preparation appears to not be meeting the needs of today’s society, in particular the health and well-being needs of children. “Research suggests that primary schools are, by themselves, unable to deliver quality early experiences, while the contribution of PE specialists in secondary schools may come too late to impact a majority of children in relation to their competence, perceptions and motivation” (Kirk, 2005, p. 240). This is where developmentally appropriate preparation of all teachers to be confident and competent in the physical dimension, specifically PE requires urgent international attention.

5.3. Time allocation

Time allocated to the HPE key learning area was identified as a major problem in 1992 and subsequently a drastic decline in children’s skill levels and physical fitness resulted (Tinning et al., 1994). Furthermore, the Auditor-General’s Report stated that approximately 30% of schools do not provide the recommended two hours of planned physical activity per week (DEC, 2012). However, data suggested that time allocated to the HPE learning area is not of major concern. With 95.8% of principals [headteachers] sharing that PE lesson time alone (not including separate Personal, Social and
Community Health lessons and other PA) have at least an hour per week; 54.8% having two hours and 6.8% having 3 h or more.

Data gathered suggests that all three major problems identified by the 1992 Senate Inquiry, do remain in question in NSW today. Data has been scrutinised through a critical lens to investigate the three major problems identified by the 1992 Senate Inquiry, the findings of Morgan and Bourke (2008) and the Auditor General’s Report which investigated physical activities more broadly (DEC, 2012). However, there have also been many positive outcomes. Data suggests two of the three major problems have improved significantly; resources and time allocation. This is consistent with the Victorian principal [headteacher] findings. Surveys completed and comments made suggest principals [headteachers] support QPE in schools. The average PE engagement was very optimistic (question 5) with only 4.1% of schools having less than one hour of PE per week.

The strong principal [headteacher] support for QPE does raise question over why the NSW Government has adopted the physical literacy label. PL is of major change to the value of PE in schools as it accentuates PA rather than QPE, the difference being that PA is often delivered by sporting coaches rather than qualified teachers. Furthermore, such programmes are synonymous with lasting only for a short term (while, funding permits) and history suggests they lead to the PE curriculum being neglected. This was evidenced by the Aussie Sport education programme in the early 1990s, which was used by schools to “justify the withdrawal of physical education from schools” (Moore, 1994, p. 26; Tinning, 1994).

6. Conclusion
The purpose of this study was to conduct a large-scale research project in a region that relies heavily upon generalist classroom teachers to implement PE in primary schools. Generalist classroom teacher implementation is representative of the delivery of PE across many nations (Hardman, 2008a, 2008b; UNESCO, 2014), where the provision of PE is described as being “far from assured” (United Nations Educational, Scientific and Cultural Organization, 2014, p. 7). Specifically, this study investigated whether the problems identified: by the 1992 Senate Inquiry into Physical and Sport Education; Morgan and Bourke (2008); and global trends such as insufficient teacher preparation and qualifications (Hardman, 2008a, 2008b; UNESCO, 2014) remained an area of concern within the state of NSW, Australia. Findings of this large-scale study suggest that they do to various degrees.

This research is of major significance as it provides evidence for the AHKA Physical Activity Report Card for Children and Young people to assign a grade to the indicator “Physical Education and Physical Activity Participation in Schools”, supplementing the data from the previous study in the state of Victoria (Lynch, 2015a). Furthermore, the perceptions of primary school principals [headteachers] advance contextual understanding and offer direction in what can be described as a global issue of major importance.

Data indicated that principals [headteachers] value and support QPE in primary schools.

They believed that PE was an integral part of the curriculum which needs to be taught by well prepared and professional educators who can form relationships with pupils. That is, qualified teachers who have subject knowledge and understand how to best provide developmentally appropriate and progressive PE experiences. Principals [headteachers] valued PE and suggested that it should be
given importance which is paradoxical to the present state of PE, which globally is often marginalised (United Nations Educational, Scientific and Cultural Organization, 2014). HPE equipment (and facilities) and time allocation did not appear to be of concern.

Human resources relating to PE expertise and the formal training of teachers addressed by Morgan and Bourke (2008) and supported by the Second and Third Worldwide Survey of PE in schools (Hardman, 2008a; United Nations Educational, Scientific and Cultural Organization, 2014), remained an identified problem. For many years, literature has questioned the quality of PE experiences in NSW primary schools, which was affirmed by the principals [headteachers]. Participants shared that many generalist teachers were not confident or comfortable with implementing aspects of the HPE curriculum, and subsequently avoidance results. Morgan and Bourke (2008) recommended that strategies be employed at pre-service preparation to increase opportunities to enable mastery and professional development for all classroom teachers, and the UNESCO National Strategy for QPE lists “Teacher education, supply and development” as the first priority (2015).

HPE has had to overcome a number of barriers throughout history which have impeded implementation and curriculum developments (Brooker & Penney, 2009; Lynch, 2014, 2016; Stolz, 2009). The largest modern day barrier seems to be the qualifications and preparation of all teachers for H/PE implementation. This is a requirement for success when adopting the recommended “whole school” approach for curriculum implementation (Lynch, 2015b). If empirical studies such as the AHKA Physical Activity Report Card for Children and Young people is to improve from a D—for Overall Physical Activity Levels (where Australia is succeeding with some but less than half of children and young people—21–40%), then the quality of HPE implemented in schools underpinned by formal training and qualifications of teachers, needs to be prioritised.

It is recommended that opportunities for developmentally appropriate primary education PE specialisms be provided within generalist elementary degrees, offering global direction to optimise children’s holistic education. This is occurring in various parts of the world (Australia, UK, United States, Canada, Ireland and Scotland) and in some nations new courses have been developed over the last five years. While, it is occurring in Australia (University of Canberra, La Trobe University and University of Southern Queensland) there are no courses (at the time of publication) on offer within the state of NSW. Such courses address the findings and recommendations of the 1992 Senate Inquiry, specifically having suitably qualified physical education teachers being employed to teach PE and school sport to all children (Commonwealth of Australia, 1992).

The findings in this study support the local, national and global recommendations of Morgan and Bourke (2008), Lynch (2005), 1992 Senate Inquiry (Commonwealth of Australia, 1992), and the National Strategy for QPE (United Nations Educational, Scientific and Cultural Organization, 2015). All of which involve long term investment in teachers and quality education. This requires advocacy of QPE for lifelong well-being with a focus on “PE in schools”. Instead data suggest that in NSW, and what has occurred in the UK, is what Thorpe refers to as “governmentality”; the “declining faith in the institutions responsible for governing education” (2003, p. 147). This has seen large sums of funding being directed towards other alternatives, rather than higher education and teacher preparation, the frame for QPE in schools.

As a result, there is evidence of the opposite to what principals [headteachers] in NSW want for their schools. QPE is being replaced by physical literacy, PE in schools is being replaced by PA often offered outside of schools, and qualified teachers are being replaced by sports coaches. Subsequently, the important role schools play in QPE, teacher expertise and the teaching profession are devalued. If this continues to happen then PE’s inferior subject status (Hardman, 2008a) will forever remain. Subsequently, the necessity to have qualified educators in the early years of primary schools to facilitate learning through the physical dimension and “play” also falls into question, and is devalued (Australian Government, 2014).
History shares that last time this happened the Aussie Sport education programme was used by schools to “justify the withdrawal of physical education from schools” (Moore, 1994, p. 26; Tinning, 1994). A strong message coming through the principal [headteacher] data are to not give up on the teachers, support them at Higher Education during their Initial Teacher Education [Initial Teacher Training] and continue supporting them throughout their career to be good classroom teachers and strong PE teachers. While literature and data gathered acknowledges that government sporting programmes can supplement and strengthen QPE at school (Emmel, 2004; Lynch, 2016), it is in the best interest of all children being, belonging and becoming physically educated for life, that the government adopts a balanced approach to funding across coaching programmes and teacher education.

Having opportunities for pre-service teachers to become generalist classroom teachers and specialise in PE was supported by many principals [headteachers] surveyed and is in dire need in NSW. Such a course enables teachers passionate in the physical dimension, and who want to specifically teach primary aged children, to teach PE confidently and competently in schools. Such a course will enable pre-service teachers to develop appropriate pedagogy and a holistic understanding of PE and health. Thus, pre-service teachers are fully prepared for teaching PE and leading the subject in schools. The findings of this study suggest that this recommendation is of global significance.

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